TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2640-1
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/19/2013 9:51:40 AM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

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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.

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Job ID: 160-2640-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2640-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 6/10/2013 3:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples 194/195-MSD (160-2640-1) and TRIP BLANK (160-2640-2) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA Method 624. The samples were analyzed on 06/11/2013.

The continuing calibration verification ZCCV8294 for Trichlorofluoromethane associated with batch 55860 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data has been reported.

Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 55860. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

The associated samples were analyzed at a dilution based upon the sample's screened data. For the volatile analysis, dilutions are

Job ID: 160-2640-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

done using a volume correction during sample prep and not as an instrument dilution. The reporting limit has been adjusted for the dilutions. No lesser dilutions were performed due to the sample matrix.

No difficulties were encountered during the VOCs analysis.

All quality control parameters were within the acceptance limits.

Organic Prep
Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 55384. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Emulsion was observed during extraction of samples 160-2640-L-1. Analyst implemented vigorous stirring and centrifugation, yet only about 3-35mL of solvent was extracted. Samples were removed from the nitrogen evaporator after 45 minutes at a final volume of 10mL.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 194/195-MSD (160-2640-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA Method 625. The samples were prepared on 06/11/2013 and analyzed on 06/11/2013 and 06/13/2013.

4-Nitrophenol, Hexachloro-1,3-butadiene, Hexachloroethane and Phenol failed the recovery criteria high for LCS 160-55384/2-A. 1,2,4-Trichlorobenzene, 4-Nitrophenol, Hexachloro-1,3-butadiene, Hexachlorocyclopentadiene, and Hexachloroethane failed the recovery criteria high for LCSD 160-55384/3-A. 2,4-Dimethylphenol exceeded the RPD limit. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples except for Phenol in 160-2640-1; therefore, the data has been reported due to insufficient sample volume available for re-extraction.

Due to the matrix, the following samples could not be concentrated to the final method required volume: 194/195-MSD (160-2640-1). The reporting limits (RLs) are elevated proportionately.

The following samples were diluted to bring the concentration of target analytes within the calibration range: 194/195-MSD (160-2640-1) [5X]. Elevated reporting limits (RLs) are provided.

Several analytes failed the surrogate recovery criteria low for 194/195-MSD (160-2640-1). Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

No other difficulties were encountered during the SVOC analysis.

All other quality control parameters were within the acceptance limits.

ICP Total and Dissolved
Sample 194/195-MSD (160-2640-1) was analyzed for ICP in accordance with EPA Method 200.7, Rev. 4.4. The samples were prepared on 06/12/2013 and analyzed on 06/13/2013.

The following samples were diluted due to the nature of the sample matrix. The sample digestates were dark yellow in color: (160-2640-1 MS), (160-2640-1 MSD), (160-2640-1 SD), 194/195-MSD (160-2640-1)[5X]. Elevated reporting limits (RLs) are provided.

Cobalt was detected in method blank MB 160-55605/1-A at a level that was above the method detection limit but below the reporting limit.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

No other difficulties were encountered during the ICP analysis.

All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)
Sample 194/195-MSD (160-2640-1) was analyzed for dissolved mercury (CVAA) in accordance with EPA Method 245.1. The samples were

Job ID: 160-2640-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

prepared and analyzed on 06/11/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

MERCURY
Sample 194/195-MSD (160-2640-1) was analyzed for mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/11/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

SGT-HEM
Sample 194/195-MSD (160-2640-1) was analyzed for SGT-HEM in accordance with EPA Method 1664A. The samples were prepared and analyzed on 06/13/2013.

No difficulties were encountered during the SGT-HEM analysis.

All quality control parameters were within the acceptance limits.

TOTAL SUSPENDED SOLIDS
Sample 194/195-MSD (160-2640-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 06/12/2013.

Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: 194/195-MSD (160-2640-1). The reporting limits (RLs) have been adjusted proportionately.

No difficulties were encountered during the TSS analysis.

All quality control parameters were within the acceptance limits.

AMMONIA
Sample 194/195-MSD (160-2640-1) was analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/13/2013.

Ammonia failed the recovery criteria low for the MS of sample 480-40013-6 in batch 480-123849.

Sample 194/195-MSD (160-2640-1)[1000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the ammonia analysis.

All other quality control parameters were within the acceptance limits.

CHEMICAL OXYGEN DEMAND
Sample 194/195-MSD (160-2640-1) was analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 06/17/2013.

Sample 194/195-MSD (160-2640-1)[100X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the COD analysis.

All quality control parameters were within the acceptance limits.

Job ID: 160-2640-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

PH

Sample 194/195-MSD (160-2640-1) was analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed on 06/10/2013.

For the analysis of the associated samples in pH batch #55177, this analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 194/195-MSD (160-2640-1)

For the pH analysis of the associated samples in batch #55177, the samples were analyzed using pH indicator strips. pH strips were used due to the samples matrices possibly damaging the pH probe. The lot numbers for the strips used are #HC270245 for the 0-14 range.194/195-MSD (160-2640-1)

No difficulties were encountered during the pH analysis.

All quality control parameters were within the acceptance limits.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY / FEI	6/8/13	197670
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
816-285-8410	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State): BRIDGETON LF / MISSOURI

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.:

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): 624-25m/-VOC	1664A-HEM	5210B-BOD	625-SVOC	200.7 245.1 T	2540D-TSS	410.4 350.1	200.7 245.1 D					Special Instructions/ Conditions of Receipt
194/195-MSD	6/9/13	7:30AM		✓				4	1	1	4				3	1	1	1	1	1	1	1					
TRIP BLANK	—	—		✓							2				2												

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 DAYS

QC Requirements (Specify):

		Date	Time			Date	Time
1. Relinquished By	[signature]	6/10/13	1510	1. Received By	[signature]	6/10/13	1510
2. Relinquished By				2. Received By			
3. Relinquished By				3. Received By			

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2640-1

Login Number: 2640

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	
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?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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.	False	Nitric and sulfuric preserved bottles received with pH higher than 2
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	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2640-1

Login Number: 2640
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/12/13 05:37 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	3.9 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits
*	RPD of the LCS and LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2640-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SL
245.1	Mercury (CVAA)	EPA	TAL SL
1664A	HEM and SGT-HEM	1664A	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
410.4	COD	MCAWW	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL SL

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2640-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2640-1	194/195-MSD	Water	06/09/13 07:30	06/10/13 15:10
160-2640-2	TRIP BLANK	Water	06/09/13 00:00	06/10/13 15:10

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2640-1

Client Sample ID: 194/195-MSD — Lab Sample ID: 160-2640-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	38	J	50	6.0	ug/L	1		624	Total/NA
Anthracene	51	J	100	10	ug/L	1		625	Total/NA
Dimethyl phthalate	28	J	100	10	ug/L	1		625	Total/NA
Naphthalene	48	J	100	10	ug/L	1		625	Total/NA
Phenol - DL	5200	*	500	100	ug/L	5		625	Total/NA
Aluminum	18000		10000	4000	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	640		500	99	ug/L	5		200.7 Rev 4.4	Total/NA
Cobalt	270	J B	2500	200	ug/L	5		200.7 Rev 4.4	Total/NA
Chromium	380	J	500	160	ug/L	5		200.7 Rev 4.4	Total/NA
Iron	990000		5000	800	ug/L	5		200.7 Rev 4.4	Total/NA
Lead	230	J	500	64	ug/L	5		200.7 Rev 4.4	Total/NA
Thallium	120	J	1000	44	ug/L	5		200.7 Rev 4.4	Total/NA
Zinc	16000		1000	260	ug/L	5		200.7 Rev 4.4	Total/NA
Aluminum	4100	J	10000	4000	ug/L	5		200.7 Rev 4.4	Dissolved
Arsenic	500		500	99	ug/L	5		200.7 Rev 4.4	Dissolved
Chromium	300	J	500	160	ug/L	5		200.7 Rev 4.4	Dissolved
Cobalt	490	J B	2500	200	ug/L	5		200.7 Rev 4.4	Dissolved
Iron	850000		5000	800	ug/L	5		200.7 Rev 4.4	Dissolved
Lead	180	J	500	64	ug/L	5		200.7 Rev 4.4	Dissolved
Thallium	70	J	1000	44	ug/L	5		200.7 Rev 4.4	Dissolved
Zinc	14000		1000	260	ug/L	5		200.7 Rev 4.4	Dissolved
Mercury	3.3		2.0	0.50	ug/L	1		245.1	Total/NA
Oil & Grease	120		13	3.5	mg/L	1		1664A	Total/NA
Ammonia	750		20	9.0	mg/L	1000		350.1	Total/NA
Chemical Oxygen Demand	57000		1000	500	mg/L	100		410.4	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
Total Suspended Solids	560		50	50	mg/L	1		SM 2540D	Total/NA
pH	6.00	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 160-2640-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.14	J	1.0	0.13	ug/L	1		624	Total/NA
Trichloroethene	0.57	J	1.0	0.21	ug/L	1		624	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2640-1

Client Sample ID: 194/195-MSD

Date Collected: 06/09/13 07:30
Date Received: 06/10/13 15:10

Lab Sample ID: 160-2640-1

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.5	ug/L			06/11/13 15:09	1
1,1,2,2-Tetrachloroethane	ND		50	5.0	ug/L			06/11/13 15:09	1
1,1,2-Trichloroethane	ND		50	7.5	ug/L			06/11/13 15:09	1
1,1-Dichloroethane	ND		50	3.5	ug/L			06/11/13 15:09	1
1,1-Dichloroethene	ND		50	4.0	ug/L			06/11/13 15:09	1
1,2-Dichlorobenzene	ND		50	3.0	ug/L			06/11/13 15:09	1
1,2-Dichloroethane	ND		50	5.0	ug/L			06/11/13 15:09	1
1,2-Dichloropropane	ND		50	5.0	ug/L			06/11/13 15:09	1
1,3-Dichlorobenzene	ND		50	4.0	ug/L			06/11/13 15:09	1
1,4-Dichlorobenzene	**38**	**J**	50	6.0	ug/L			06/11/13 15:09	1
2-Chloroethyl vinyl ether	ND		100	8.5	ug/L			06/11/13 15:09	1
Benzene	ND		50	3.0	ug/L			06/11/13 15:09	1
Bromodichloromethane	ND		50	4.5	ug/L			06/11/13 15:09	1
Bromoform	ND		50	8.5	ug/L			06/11/13 15:09	1
Bromomethane	ND		100	6.5	ug/L			06/11/13 15:09	1
Carbon tetrachloride	ND		50	6.5	ug/L			06/11/13 15:09	1
Chlorobenzene	ND		50	7.5	ug/L			06/11/13 15:09	1
Chloroethane	ND		100	5.0	ug/L			06/11/13 15:09	1
Chloroform	ND		50	5.0	ug/L			06/11/13 15:09	1
Chloromethane	ND		100	4.0	ug/L			06/11/13 15:09	1
cis-1,2-Dichloroethene	ND		50	4.5	ug/L			06/11/13 15:09	1
cis-1,3-Dichloropropene	ND		50	3.5	ug/L			06/11/13 15:09	1
Dibromochloromethane	ND		50	6.5	ug/L			06/11/13 15:09	1
Ethylbenzene	ND		50	4.5	ug/L			06/11/13 15:09	1
Methylene Chloride	ND		50	5.5	ug/L			06/11/13 15:09	1
Tetrachloroethene	ND		50	9.0	ug/L			06/11/13 15:09	1
Toluene	ND		50	3.5	ug/L			06/11/13 15:09	1
trans-1,2-Dichloroethene	ND		50	4.0	ug/L			06/11/13 15:09	1
trans-1,3-Dichloropropene	ND		50	4.0	ug/L			06/11/13 15:09	1
Trichloroethene	ND		50	11	ug/L			06/11/13 15:09	1
Trichlorofluoromethane	ND		50	5.5	ug/L			06/11/13 15:09	1
Vinyl chloride	ND		100	4.0	ug/L			06/11/13 15:09	1
Xylenes, Total	ND		150	10	ug/L			06/11/13 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*71 - 135*		*06/11/13 15:09*	*1*
4-Bromofluorobenzene (Surr)	*110*		*80 - 122*		*06/11/13 15:09*	*1*
Toluene-d8 (Surr)	*109*		*84 - 122*		*06/11/13 15:09*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND	*	100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
bis (2-chloroisopropyl) ether	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
2,4,6-Trichlorophenol	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
2,4-Dichlorophenol	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
2,4-Dimethylphenol	ND	*	100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
2,4-Dinitrophenol	ND		500	20	ug/L		06/11/13 13:01	06/11/13 22:47	1
2,4-Dinitrotoluene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
2,6-Dinitrotoluene	ND		100	22	ug/L		06/11/13 13:01	06/11/13 22:47	1
2-Chloronaphthalene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2640-1

Client Sample ID: 194/195-MSD

Date Collected: 06/09/13 07:30
Date Received: 06/10/13 15:10

Lab Sample ID: 160-2640-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
2-Nitrophenol	ND		100	15	ug/L		06/11/13 13:01	06/11/13 22:47	1
3,3'-Dichlorobenzidine	ND		500	13	ug/L		06/11/13 13:01	06/11/13 22:47	1
4,6-Dinitro-2-methylphenol	ND		500	13	ug/L		06/11/13 13:01	06/11/13 22:47	1
4-Bromophenyl phenyl ether	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
4-Chloro-3-methylphenol	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
4-Chlorophenyl phenyl ether	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
4-Nitrophenol	ND	*	500	20	ug/L		06/11/13 13:01	06/11/13 22:47	1
Acenaphthene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Acenaphthylene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Anthracene	**51**	**J**	100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Benzidine	ND		1000	200	ug/L		06/11/13 13:01	06/11/13 22:47	1
Benzo[a]anthracene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Benzo[a]pyrene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Benzo[b]fluoranthene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Benzo[g,h,i]perylene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Benzo[k]fluoranthene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Bis(2-chloroethoxy)methane	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Bis(2-chloroethyl)ether	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Bis(2-ethylhexyl) phthalate	ND		100	19	ug/L		06/11/13 13:01	06/11/13 22:47	1
Butyl benzyl phthalate	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Chrysene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Dibenz(a,h)anthracene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Diethyl phthalate	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Dimethyl phthalate	**28**	**J**	100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Di-n-butyl phthalate	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Di-n-octyl phthalate	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Fluoranthene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Fluorene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Hexachloro-1,3-butadiene	ND	*	100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Hexachlorobenzene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Hexachlorocyclopentadiene	ND		500	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Hexachloroethane	ND	*	100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Indeno[1,2,3-cd]pyrene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Isophorone	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Naphthalene	**48**	**J**	100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Nitrobenzene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
N-Nitrosodimethylamine	ND		100	20	ug/L		06/11/13 13:01	06/11/13 22:47	1
N-Nitrosodi-n-propylamine	ND		100	15	ug/L		06/11/13 13:01	06/11/13 22:47	1
N-Nitrosodiphenylamine	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Pentachlorophenol	ND		500	13	ug/L		06/11/13 13:01	06/11/13 22:47	1
Phenanthrene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1
Pyrene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 22:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*X D*	*41 - 109*	*06/11/13 13:01*	*06/11/13 22:47*	*1*
2-Fluorobiphenyl (Surr)	*0*	*X D*	*31 - 103*	*06/11/13 13:01*	*06/11/13 22:47*	*1*
2-Fluorophenol (Surr)	*0*	*X D*	*23 - 82*	*06/11/13 13:01*	*06/11/13 22:47*	*1*
Nitrobenzene-d5 (Surr)	*0*	*X D*	*36 - 98*	*06/11/13 13:01*	*06/11/13 22:47*	*1*
Phenol-d5 (Surr)	*0*	*X D*	*14 - 68*	*06/11/13 13:01*	*06/11/13 22:47*	*1*

Client Sample ID: 194/195-MSD

Lab Sample ID: 160-2640-1

Date Collected: 06/09/13 07:30

Matrix: Water

Date Received: 06/10/13 15:10

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14 (Surr)	0	X D	43 - 107	06/11/13 13:01	06/11/13 22:47	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	5200	*	500	100	ug/L		06/11/13 13:01	06/13/13 01:17	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	0	D X	41 - 109	06/11/13 13:01	06/13/13 01:17	5
2-Fluorobiphenyl (Surr)	0	D X	31 - 103	06/11/13 13:01	06/13/13 01:17	5
2-Fluorophenol (Surr)	0	D X	23 - 82	06/11/13 13:01	06/13/13 01:17	5
Nitrobenzene-d5 (Surr)	0	D X	36 - 98	06/11/13 13:01	06/13/13 01:17	5
Phenol-d5 (Surr)	0	D X	14 - 68	06/11/13 13:01	06/13/13 01:17	5
Terphenyl-d14 (Surr)	0	D X	43 - 107	06/11/13 13:01	06/13/13 01:17	5

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		500	300	ug/L		06/12/13 14:37	06/13/13 11:27	5
Aluminum	18000		10000	4000	ug/L		06/12/13 14:37	06/13/13 11:27	5
Arsenic	640		500	99	ug/L		06/12/13 14:37	06/13/13 11:27	5
Beryllium	ND		250	25	ug/L		06/12/13 14:37	06/13/13 11:27	5
Cadmium	ND		250	23	ug/L		06/12/13 14:37	06/13/13 11:27	5
Cobalt	270	J B	2500	200	ug/L		06/12/13 14:37	06/13/13 11:27	5
Chromium	380	J	500	160	ug/L		06/12/13 14:37	06/13/13 11:27	5
Copper	ND		1300	230	ug/L		06/12/13 14:37	06/13/13 11:27	5
Iron	990000		5000	800	ug/L		06/12/13 14:37	06/13/13 11:27	5
Nickel	ND		2000	670	ug/L		06/12/13 14:37	06/13/13 11:27	5
Lead	230	J	500	64	ug/L		06/12/13 14:37	06/13/13 11:27	5
Antimony	ND		500	200	ug/L		06/12/13 14:37	06/13/13 11:27	5
Selenium	ND		750	130	ug/L		06/12/13 14:37	06/13/13 11:27	5
Thallium	120	J	1000	44	ug/L		06/12/13 14:37	06/13/13 11:27	5
Zinc	16000		1000	260	ug/L		06/12/13 14:37	06/13/13 11:27	5

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4100	J	10000	4000	ug/L		06/12/13 14:37	06/13/13 11:56	5
Antimony	ND		500	200	ug/L		06/12/13 14:37	06/13/13 11:56	5
Arsenic	500		500	99	ug/L		06/12/13 14:37	06/13/13 11:56	5
Beryllium	ND		250	25	ug/L		06/12/13 14:37	06/13/13 11:56	5
Cadmium	ND		250	23	ug/L		06/12/13 14:37	06/13/13 11:56	5
Chromium	300	J	500	160	ug/L		06/12/13 14:37	06/13/13 11:56	5
Cobalt	490	J B	2500	200	ug/L		06/12/13 14:37	06/13/13 11:56	5
Copper	ND		1300	230	ug/L		06/12/13 14:37	06/13/13 11:56	5
Iron	850000		5000	800	ug/L		06/12/13 14:37	06/13/13 11:56	5
Lead	180	J	500	64	ug/L		06/12/13 14:37	06/13/13 11:56	5
Nickel	ND		2000	670	ug/L		06/12/13 14:37	06/13/13 11:56	5
Selenium	ND		750	130	ug/L		06/12/13 14:37	06/13/13 11:56	5
Silver	ND		500	300	ug/L		06/12/13 14:37	06/13/13 11:56	5
Thallium	70	J	1000	44	ug/L		06/12/13 14:37	06/13/13 11:56	5
Zinc	14000		1000	260	ug/L		06/12/13 14:37	06/13/13 11:56	5

Client Sample ID: 194/195-MSD

Lab Sample ID: 160-2640-1
Matrix: Water
Date Collected: 06/09/13 07:30
Date Received: 06/10/13 15:10

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**3.3**		2.0	0.50	ug/L		06/11/13 11:57	06/11/13 13:26	1

Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		2.0	0.50	ug/L		06/11/13 11:50	06/11/13 13:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	**120**		13	3.5	mg/L		06/13/13 09:15	06/13/13 09:15	1
Ammonia	**750**		20	9.0	mg/L			06/13/13 14:36	1000
Chemical Oxygen Demand	**57000**		1000	500	mg/L			06/17/13 20:44	100

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**560**		50	50	mg/L			06/12/13 21:55	1
pH	**6.00**	**HF**	0.100	0.100	SU			06/10/13 17:07	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2640-2
Matrix: Water
Date Collected: 06/09/13 00:00
Date Received: 06/10/13 15:10

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/11/13 14:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/11/13 14:45	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/11/13 14:45	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/11/13 14:45	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/11/13 14:45	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/11/13 14:45	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/11/13 14:45	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/11/13 14:45	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/11/13 14:45	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/11/13 14:45	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/11/13 14:45	1
Benzene	ND		1.0	0.060	ug/L			06/11/13 14:45	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/11/13 14:45	1
Bromoform	ND		1.0	0.17	ug/L			06/11/13 14:45	1
Bromomethane	ND		2.0	0.13	ug/L			06/11/13 14:45	1
Carbon tetrachloride	**0.14**	**J**	1.0	0.13	ug/L			06/11/13 14:45	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/11/13 14:45	1
Chloroethane	ND		2.0	0.10	ug/L			06/11/13 14:45	1
Chloroform	ND		1.0	0.10	ug/L			06/11/13 14:45	1
Chloromethane	ND		2.0	0.080	ug/L			06/11/13 14:45	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/11/13 14:45	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/11/13 14:45	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/11/13 14:45	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/11/13 14:45	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/11/13 14:45	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/11/13 14:45	1
Toluene	ND		1.0	0.070	ug/L			06/11/13 14:45	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/11/13 14:45	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/11/13 14:45	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2640-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2640-2

Date Collected: 06/09/13 00:00

Matrix: Water

Date Received: 06/10/13 15:10

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**0.57**	**J**	1.0	0.21	ug/L			06/11/13 14:45	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/11/13 14:45	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/11/13 14:45	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/11/13 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*71 - 135*		*06/11/13 14:45*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 122*		*06/11/13 14:45*	*1*
Toluene-d8 (Surr)	*107*		*84 - 122*		*06/11/13 14:45*	*1*

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-55860/2
Matrix: Water
Analysis Batch: 55860

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/11/13 10:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/11/13 10:24	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/11/13 10:24	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/11/13 10:24	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/11/13 10:24	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/11/13 10:24	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/11/13 10:24	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/11/13 10:24	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/11/13 10:24	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/11/13 10:24	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/11/13 10:24	1
Benzene	ND		1.0	0.060	ug/L			06/11/13 10:24	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/11/13 10:24	1
Bromoform	ND		1.0	0.17	ug/L			06/11/13 10:24	1
Bromomethane	ND		2.0	0.13	ug/L			06/11/13 10:24	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/11/13 10:24	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/11/13 10:24	1
Chloroethane	ND		2.0	0.10	ug/L			06/11/13 10:24	1
Chloroform	ND		1.0	0.10	ug/L			06/11/13 10:24	1
Chloromethane	ND		2.0	0.080	ug/L			06/11/13 10:24	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/11/13 10:24	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/11/13 10:24	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/11/13 10:24	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/11/13 10:24	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/11/13 10:24	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/11/13 10:24	1
Toluene	ND		1.0	0.070	ug/L			06/11/13 10:24	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/11/13 10:24	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/11/13 10:24	1
Trichloroethene	ND		1.0	0.21	ug/L			06/11/13 10:24	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/11/13 10:24	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/11/13 10:24	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/11/13 10:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*71 - 135*		*06/11/13 10:24*	*1*
4-Bromofluorobenzene (Surr)	*114*		*80 - 122*		*06/11/13 10:24*	*1*
Toluene-d8 (Surr)	*112*		*84 - 122*		*06/11/13 10:24*	*1*

Lab Sample ID: LCS 160-55860/4
Matrix: Water
Analysis Batch: 55860

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	69 - 130
1,1,2-Trichloroethane	10.0	10.6		ug/L		106	78 - 122
1,1-Dichloroethane	10.0	10.1		ug/L		101	82 - 125
1,1-Dichloroethene	10.0	10.5		ug/L		105	77 - 127

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-55860/4
Matrix: Water
Analysis Batch: 55860

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	10.0	10.2		ug/L		102	78 - 127
1,2-Dichloropropane	10.0	10.1		ug/L		101	81 - 124
1,4-Dichlorobenzene	10.0	9.81		ug/L		98	83 - 116
2-Chloroethyl vinyl ether	10.0	9.25		ug/L		92	34 - 140
Benzene	10.0	9.99		ug/L		100	84 - 124
Bromodichloromethane	10.0	10.5		ug/L		105	81 - 127
Bromoform	10.0	10.3		ug/L		103	78 - 138
Bromomethane	10.0	9.32		ug/L		93	48 - 162
Carbon tetrachloride	10.0	11.3		ug/L		113	79 - 132
Chlorobenzene	10.0	10.1		ug/L		101	85 - 118
Chloroethane	10.0	8.78		ug/L		88	71 - 132
Chloromethane	10.0	9.46		ug/L		95	68 - 136
cis-1,2-Dichloroethene	10.0	10.2		ug/L		102	83 - 123
Dibromochloromethane	10.0	10.5		ug/L		105	81 - 129
Ethylbenzene	10.0	10.4		ug/L		104	85 - 125
Toluene	10.0	10.4		ug/L		104	83 - 127
trans-1,2-Dichloroethene	10.0	9.66		ug/L		97	78 - 122
trans-1,3-Dichloropropene	10.0	11.2		ug/L		112	83 - 130
Trichlorofluoromethane	10.0	11.9		ug/L		119	72 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*71 - 135*
4-Bromofluorobenzene (Surr)	*118*		*80 - 122*
Toluene-d8 (Surr)	*112*		*84 - 122*

Lab Sample ID: LCSD 160-55860/5
Matrix: Water
Analysis Batch: 55860

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane	10.0	10.1		ug/L		101	69 - 130	1	20
1,1,2-Trichloroethane	10.0	9.67		ug/L		97	78 - 122	9	20
1,1-Dichloroethane	10.0	9.64		ug/L		96	82 - 125	4	20
1,1-Dichloroethene	10.0	10.1		ug/L		101	77 - 127	4	20
1,2-Dichloroethane	10.0	9.82		ug/L		98	78 - 127	4	20
1,2-Dichloropropane	10.0	9.60		ug/L		96	81 - 124	5	20
1,4-Dichlorobenzene	10.0	9.45		ug/L		95	83 - 116	4	20
2-Chloroethyl vinyl ether	10.0	9.18		ug/L		92	34 - 140	1	20
Benzene	10.0	9.76		ug/L		98	84 - 124	2	20
Bromodichloromethane	10.0	10.1		ug/L		101	81 - 127	4	20
Bromoform	10.0	10.3		ug/L		103	78 - 138	1	20
Bromomethane	10.0	9.03		ug/L		90	48 - 162	3	20
Carbon tetrachloride	10.0	10.5		ug/L		105	79 - 132	7	20
Chlorobenzene	10.0	9.50		ug/L		95	85 - 118	6	20
Chloroethane	10.0	8.51		ug/L		85	71 - 132	3	20
Chloromethane	10.0	9.29		ug/L		93	68 - 136	2	20
cis-1,2-Dichloroethene	10.0	9.86		ug/L		99	83 - 123	3	20
Dibromochloromethane	10.0	10.1		ug/L		101	81 - 129	4	20

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-55860/5
Matrix: Water
Analysis Batch: 55860

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	10.0	9.65		ug/L		96	85 - 125	8	20
Toluene	10.0	9.77		ug/L		98	83 - 127	6	20
trans-1,2-Dichloroethene	10.0	9.50		ug/L		95	78 - 122	2	20
trans-1,3-Dichloropropene	10.0	10.3		ug/L		103	83 - 130	9	20
Trichlorofluoromethane	10.0	11.4		ug/L		114	72 - 135	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*71 - 135*
4-Bromofluorobenzene (Surr)	*115*		*80 - 122*
Toluene-d8 (Surr)	*107*		*84 - 122*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-55384/1-A
Matrix: Water
Analysis Batch: 55694

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 55384

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
bis (2-chloroisopropyl) ether	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
2,4,6-Trichlorophenol	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
2,4-Dichlorophenol	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
2,4-Dimethylphenol	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
2,4-Dinitrophenol	ND		50	2.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
2,4-Dinitrotoluene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
2,6-Dinitrotoluene	ND		10	2.2	ug/L		06/11/13 13:01	06/11/13 16:41	1
2-Chloronaphthalene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
2-Chlorophenol	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
2-Nitrophenol	ND		10	1.5	ug/L		06/11/13 13:01	06/11/13 16:41	1
3,3'-Dichlorobenzidine	ND		50	1.3	ug/L		06/11/13 13:01	06/11/13 16:41	1
4,6-Dinitro-2-methylphenol	ND		50	1.3	ug/L		06/11/13 13:01	06/11/13 16:41	1
4-Bromophenyl phenyl ether	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
4-Chlorophenyl phenyl ether	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
4-Nitrophenol	ND		50	2.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Acenaphthene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Acenaphthylene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Anthracene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Benzidine	ND		100	20	ug/L		06/11/13 13:01	06/11/13 16:41	1
Benzo[a]anthracene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Benzo[a]pyrene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Benzo[b]fluoranthene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Benzo[g,h,i]perylene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Benzo[k]fluoranthene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Bis(2-chloroethoxy)methane	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Bis(2-chloroethyl)ether	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Bis(2-ethylhexyl) phthalate	ND		10	1.9	ug/L		06/11/13 13:01	06/11/13 16:41	1
Butyl benzyl phthalate	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-55384/1-A
Matrix: Water
Analysis Batch: 55694

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 55384

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Dibenz(a,h)anthracene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Diethyl phthalate	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Dimethyl phthalate	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Di-n-butyl phthalate	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Di-n-octyl phthalate	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Fluoranthene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Fluorene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Hexachloro-1,3-butadiene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Hexachlorobenzene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Hexachlorocyclopentadiene	ND		50	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Hexachloroethane	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Indeno[1,2,3-cd]pyrene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Isophorone	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Naphthalene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Nitrobenzene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/L		06/11/13 13:01	06/11/13 16:41	1
N-Nitrosodiphenylamine	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Pentachlorophenol	ND		50	1.3	ug/L		06/11/13 13:01	06/11/13 16:41	1
Phenanthrene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Phenol	ND		10	2.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Pyrene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*81*		*41 - 109*	*06/11/13 13:01*	*06/11/13 16:41*	*1*
2-Fluorobiphenyl (Surr)	*76*		*31 - 103*	*06/11/13 13:01*	*06/11/13 16:41*	*1*
2-Fluorophenol (Surr)	*60*		*23 - 82*	*06/11/13 13:01*	*06/11/13 16:41*	*1*
Nitrobenzene-d5 (Surr)	*77*		*36 - 98*	*06/11/13 13:01*	*06/11/13 16:41*	*1*
Phenol-d5 (Surr)	*44*		*14 - 68*	*06/11/13 13:01*	*06/11/13 16:41*	*1*
Terphenyl-d14 (Surr)	*61*		*43 - 107*	*06/11/13 13:01*	*06/11/13 16:41*	*1*

Lab Sample ID: LCS 160-55384/2-A
Matrix: Water
Analysis Batch: 55694

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 55384

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	99.9	80.6		ug/L		81	44 - 84
bis (2-chloroisopropyl) ether	100	78.3		ug/L		78	42 - 102
2,4,6-Trichlorophenol	100	78.2		ug/L		78	54 - 105
2,4-Dichlorophenol	100	73.6		ug/L		74	46 - 103
2,4-Dimethylphenol	100	71.8		ug/L		72	40 - 105
2,4-Dinitrophenol	100	70.8		ug/L		71	42 - 146
2,4-Dinitrotoluene	100	87.7		ug/L		88	62 - 101
2,6-Dinitrotoluene	100	84.4		ug/L		84	62 - 103
2-Chloronaphthalene	100	83.1		ug/L		83	45 - 95
2-Chlorophenol	100	71.0		ug/L		71	56 - 93
2-Nitrophenol	100	75.7		ug/L		76	51 - 98

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-55384/2-A
Matrix: Water
Analysis Batch: 55694

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 55384

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
3,3'-Dichlorobenzidine	100	60.4		ug/L		60	26 - 77
4,6-Dinitro-2-methylphenol	100	87.4		ug/L		87	61 - 120
4-Bromophenyl phenyl ether	100	90.9		ug/L		91	54 - 111
4-Chloro-3-methylphenol	100	73.9		ug/L		74	45 - 106
4-Chlorophenyl phenyl ether	100	83.4		ug/L		83	53 - 100
4-Nitrophenol	100	49.2	J *	ug/L		49	25 - 45
Acenaphthene	100	80.1		ug/L		80	51 - 89
Acenaphthylene	100	79.8		ug/L		80	46 - 98
Anthracene	100	83.5		ug/L		83	54 - 111
Benzo[a]anthracene	100	94.8		ug/L		95	68 - 108
Benzo[a]pyrene	100	86.4		ug/L		86	55 - 108
Benzo[b]fluoranthene	100	90.1		ug/L		90	57 - 114
Benzo[g,h,i]perylene	100	103		ug/L		103	58 - 120
Benzo[k]fluoranthene	100	94.7		ug/L		95	59 - 112
Bis(2-chloroethoxy)methane	100	75.5		ug/L		76	53 - 99
Bis(2-chloroethyl)ether	100	72.6		ug/L		73	50 - 97
Bis(2-ethylhexyl) phthalate	100	83.1		ug/L		83	54 - 116
Butyl benzyl phthalate	100	85.2		ug/L		85	52 - 126
Chrysene	100	84.0		ug/L		84	58 - 112
Dibenz(a,h)anthracene	100	105		ug/L		105	56 - 122
Diethyl phthalate	100	83.0		ug/L		83	60 - 101
Dimethyl phthalate	100	83.3		ug/L		83	57 - 101
Di-n-butyl phthalate	100	85.0		ug/L		85	57 - 108
Di-n-octyl phthalate	100	82.6		ug/L		83	57 - 118
Fluoranthene	100	87.8		ug/L		88	55 - 114
Fluorene	100	80.8		ug/L		81	59 - 96
Hexachloro-1,3-butadiene	100	84.8	*	ug/L		85	36 - 84
Hexachlorobenzene	100	93.6		ug/L		94	56 - 110
Hexachlorocyclopentadiene	100	81.8		ug/L		82	16 - 86
Hexachloroethane	100	77.9	*	ug/L		78	40 - 77
Indeno[1,2,3-cd]pyrene	100	103		ug/L		103	55 - 124
Isophorone	100	59.8		ug/L		60	50 - 107
Naphthalene	100	76.4		ug/L		76	42 - 82
Nitrobenzene	100	76.6		ug/L		77	48 - 96
N-Nitrosodi-n-propylamine	100	80.0		ug/L		80	57 - 113
Pentachlorophenol	100	85.3		ug/L		85	56 - 126
Phenanthrene	100	85.9		ug/L		86	54 - 110
Phenol	100	43.8	*	ug/L		44	27 - 43
Pyrene	100	83.3		ug/L		83	53 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*96*		*41 - 109*
2-Fluorobiphenyl (Surr)	*80*		*31 - 103*
2-Fluorophenol (Surr)	*62*		*23 - 82*
Nitrobenzene-d5 (Surr)	*79*		*36 - 98*
Phenol-d5 (Surr)	*44*		*14 - 68*
Terphenyl-d14 (Surr)	*63*		*43 - 107*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-55384/3-A
Matrix: Water
Analysis Batch: 55694

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 55384

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	99.9	85.8	*	ug/L		86	44 - 84	6	20
bis (2-chloroisopropyl) ether	100	82.0		ug/L		82	42 - 102	5	20
2,4,6-Trichlorophenol	100	80.2		ug/L		80	54 - 105	3	20
2,4-Dichlorophenol	100	76.8		ug/L		77	46 - 103	4	20
2,4-Dimethylphenol	100	46.6	*	ug/L		47	40 - 105	43	20
2,4-Dinitrophenol	100	75.6		ug/L		76	42 - 146	7	20
2,4-Dinitrotoluene	100	89.2		ug/L		89	62 - 101	2	20
2,6-Dinitrotoluene	100	87.4		ug/L		87	62 - 103	3	20
2-Chloronaphthalene	100	88.1		ug/L		88	45 - 95	6	20
2-Chlorophenol	100	74.4		ug/L		74	56 - 93	5	20
2-Nitrophenol	100	81.4		ug/L		81	51 - 98	7	20
3,3'-Dichlorobenzidine	100	56.0		ug/L		56	26 - 77	7	20
4,6-Dinitro-2-methylphenol	100	90.8		ug/L		91	61 - 120	4	20
4-Bromophenyl phenyl ether	100	94.9		ug/L		95	54 - 111	4	20
4-Chloro-3-methylphenol	100	75.3		ug/L		75	45 - 106	2	20
4-Chlorophenyl phenyl ether	100	87.5		ug/L		87	53 - 100	5	20
4-Nitrophenol	100	47.1	J *	ug/L		47	25 - 45	4	20
Acenaphthene	100	84.6		ug/L		85	51 - 89	5	20
Acenaphthylene	100	82.9		ug/L		83	46 - 98	4	20
Anthracene	100	83.8		ug/L		84	54 - 111	0	20
Benzo[a]anthracene	100	97.5		ug/L		97	68 - 108	3	20
Benzo[a]pyrene	100	86.7		ug/L		87	55 - 108	0	20
Benzo[b]fluoranthene	100	93.3		ug/L		93	57 - 114	4	20
Benzo[g,h,i]perylene	100	105		ug/L		105	58 - 120	2	20
Benzo[k]fluoranthene	100	96.9		ug/L		97	59 - 112	2	20
Bis(2-chloroethoxy)methane	100	79.8		ug/L		80	53 - 99	6	20
Bis(2-chloroethyl)ether	100	75.9		ug/L		76	50 - 97	4	20
Bis(2-ethylhexyl) phthalate	100	84.9		ug/L		85	54 - 116	2	20
Butyl benzyl phthalate	100	87.0		ug/L		87	52 - 126	2	20
Chrysene	100	86.3		ug/L		86	58 - 112	3	20
Dibenz(a,h)anthracene	100	105		ug/L		105	56 - 122	0	20
Diethyl phthalate	100	84.5		ug/L		84	60 - 101	2	20
Dimethyl phthalate	100	86.6		ug/L		87	57 - 101	4	20
Di-n-butyl phthalate	100	86.9		ug/L		87	57 - 108	2	20
Di-n-octyl phthalate	100	84.2		ug/L		84	57 - 118	2	20
Fluoranthene	100	89.4		ug/L		89	55 - 114	2	20
Fluorene	100	83.8		ug/L		84	59 - 96	4	20
Hexachloro-1,3-butadiene	100	90.0	*	ug/L		90	36 - 84	6	20
Hexachlorobenzene	100	96.4		ug/L		96	56 - 110	3	20
Hexachlorocyclopentadiene	100	86.5	*	ug/L		87	16 - 86	6	20
Hexachloroethane	100	83.1	*	ug/L		83	40 - 77	6	20
Indeno[1,2,3-cd]pyrene	100	106		ug/L		106	55 - 124	3	20
Isophorone	100	63.0		ug/L		63	50 - 107	5	20
Naphthalene	100	80.5		ug/L		80	42 - 82	5	20
Nitrobenzene	100	80.6		ug/L		81	48 - 96	5	20
N-Nitrosodi-n-propylamine	100	85.7		ug/L		86	57 - 113	7	20
Pentachlorophenol	100	90.3		ug/L		90	56 - 126	6	20
Phenanthrene	100	87.9		ug/L		88	54 - 110	2	20

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-55384/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55694 — **Prep Batch: 55384**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	100	43.5		ug/L		43	27 - 43	1	20
Pyrene	100	86.5		ug/L		86	53 - 117	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*92*		*41 - 109*
2-Fluorobiphenyl (Surr)	*85*		*31 - 103*
2-Fluorophenol (Surr)	*61*		*23 - 82*
Nitrobenzene-d5 (Surr)	*83*		*36 - 98*
Phenol-d5 (Surr)	*44*		*14 - 68*
Terphenyl-d14 (Surr)	*65*		*43 - 107*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 160-55605/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55703 — **Prep Batch: 55605**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		06/12/13 14:37	06/13/13 11:13	1
Arsenic	ND		10	2.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Beryllium	ND		5.0	0.50	ug/L		06/12/13 14:37	06/13/13 11:13	1
Cadmium	ND		5.0	0.45	ug/L		06/12/13 14:37	06/13/13 11:13	1
Chromium	ND		10	3.1	ug/L		06/12/13 14:37	06/13/13 11:13	1
Cobalt	4.90	J	50	4.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Copper	ND		25	4.6	ug/L		06/12/13 14:37	06/13/13 11:13	1
Iron	ND		100	16	ug/L		06/12/13 14:37	06/13/13 11:13	1
Lead	ND		10	1.3	ug/L		06/12/13 14:37	06/13/13 11:13	1
Nickel	ND		40	13	ug/L		06/12/13 14:37	06/13/13 11:13	1
Antimony	ND		10	4.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Selenium	ND		15	2.7	ug/L		06/12/13 14:37	06/13/13 11:13	1
Silver	ND		10	6.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Thallium	ND		20	0.88	ug/L		06/12/13 14:37	06/13/13 11:13	1
Zinc	ND		20	5.2	ug/L		06/12/13 14:37	06/13/13 11:13	1

Lab Sample ID: LCS 160-55605/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55703 — **Prep Batch: 55605**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	10100		ug/L		101	85 - 115
Arsenic	1000	1030		ug/L		103	85 - 115
Beryllium	1000	1020		ug/L		102	85 - 115
Cadmium	1000	1040		ug/L		104	85 - 115
Chromium	1000	1050		ug/L		105	85 - 115
Cobalt	1000	1080		ug/L		108	85 - 115
Copper	1000	1040		ug/L		104	85 - 115
Iron	10000	10500		ug/L		105	85 - 115
Lead	1000	1070		ug/L		107	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 160-55605/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55703 — **Prep Batch: 55605**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	1000	1070		ug/L		107	85 - 115
Antimony	500	522		ug/L		104	85 - 115
Selenium	1000	1040		ug/L		104	85 - 115
Silver	100	106		ug/L		106	85 - 115
Thallium	200	230		ug/L		115	85 - 115
Zinc	1000	1040		ug/L		104	85 - 115

Lab Sample ID: 160-2640-1 MS — **Client Sample ID: 194/195-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55703 — **Prep Batch: 55605**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	18000		100000	122000		ug/L		104	70 - 130
Arsenic	640		10000	10200		ug/L		96	70 - 130
Beryllium	ND		10000	10200		ug/L		102	70 - 130
Cadmium	ND		10000	9790		ug/L		98	70 - 130
Chromium	380	J	10000	10000		ug/L		97	70 - 130
Cobalt	270	J B	10000	10000		ug/L		98	70 - 130
Copper	ND		10000	9750		ug/L		97	70 - 130
Iron	990000		100000	1090000	4	ug/L		100	70 - 130
Lead	230	J	10000	9950		ug/L		97	70 - 130
Nickel	ND		10000	9900		ug/L		99	70 - 130
Antimony	ND		5000	4960		ug/L		99	70 - 130
Selenium	ND		10000	9960		ug/L		100	70 - 130
Silver	ND		1000	1040		ug/L		104	70 - 130
Thallium	120	J	2000	2190		ug/L		103	70 - 130
Zinc	16000		10000	24900		ug/L		93	70 - 130

Lab Sample ID: 160-2640-1 MSD — **Client Sample ID: 194/195-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55703 — **Prep Batch: 55605**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	18000		100000	123000		ug/L		104	70 - 130	0	20
Arsenic	640		10000	10300		ug/L		96	70 - 130	1	20
Beryllium	ND		10000	10200		ug/L		102	70 - 130	0	20
Cadmium	ND		10000	9870		ug/L		99	70 - 130	1	20
Chromium	380	J	10000	10100		ug/L		97	70 - 130	1	20
Cobalt	270	J B	10000	10200		ug/L		100	70 - 130	2	20
Copper	ND		10000	9780		ug/L		98	70 - 130	0	20
Iron	990000		100000	1100000	4	ug/L		108	70 - 130	1	20
Lead	230	J	10000	9950		ug/L		97	70 - 130	0	20
Nickel	ND		10000	9960		ug/L		100	70 - 130	1	20
Antimony	ND		5000	4950		ug/L		99	70 - 130	0	20
Selenium	ND		10000	9960		ug/L		100	70 - 130	0	20
Silver	ND		1000	1040		ug/L		104	70 - 130	0	20
Thallium	120	J	2000	2240		ug/L		106	70 - 130	2	20
Zinc	16000		10000	25300		ug/L		96	70 - 130	1	20

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2640-1

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 160-55373/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55400 — **Prep Batch: 55373**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		2.0	0.50	ug/L		06/11/13 11:50	06/11/13 13:41	1

Lab Sample ID: LCS 160-55373/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55400 — **Prep Batch: 55373**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	50.0	51.7		ug/L		103	85 - 115

Lab Sample ID: MB 160-55375/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55400 — **Prep Batch: 55375**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		2.0	0.50	ug/L		06/11/13 11:57	06/11/13 13:22	1

Lab Sample ID: LCS 160-55375/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55400 — **Prep Batch: 55375**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	50.0	51.5		ug/L		103	85 - 115

Lab Sample ID: 160-2640-1 MS — **Client Sample ID: 194/195-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55400 — **Prep Batch: 55375**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.3		50.0	48.8		ug/L		91	70 - 130

Lab Sample ID: 160-2640-1 MSD — **Client Sample ID: 194/195-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55400 — **Prep Batch: 55375**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	3.3		50.0	47.0		ug/L		87	70 - 130	4	20

Lab Sample ID: 160-2640-1 MS — **Client Sample ID: 194/195-MSD**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 55400 — **Prep Batch: 55373**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		50.0	47.9		ug/L		96	70 - 130

Lab Sample ID: 160-2640-1 MSD — **Client Sample ID: 194/195-MSD**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 55400 — **Prep Batch: 55373**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		50.0	48.9		ug/L		98	70 - 130	2	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 480-123715/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123718 — **Prep Batch: 123715**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/13/13 09:15	06/13/13 09:15	1

Lab Sample ID: LCS 480-123715/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123718 — **Prep Batch: 123715**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	35.0		mg/L		88	78 - 114

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-123849/75 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123849

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/13/13 14:21	1

Lab Sample ID: MB 480-123849/99 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123849

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/13/13 14:45	1

Lab Sample ID: LCS 480-123849/100 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123849

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.00		mg/L		100	90 - 110

Lab Sample ID: LCS 480-123849/76 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123849

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.01		mg/L		101	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 480-124417/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124417

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			06/17/13 20:44	1

Method: 410.4 - COD (Continued)

Lab Sample ID: LCS 480-124417/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124417

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	188		mg/L		94	90 - 110

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-123616/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123616

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			06/12/13 21:55	1

Lab Sample ID: LCS 480-123616/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123616

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	213	200		mg/L		94	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: 160-2640-1 DU — **Client Sample ID: 194/195-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55177

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	6.00	HF	6.000		SU		0	5

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2640-1

GC/MS VOA

Analysis Batch: 55860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2640-1	194/195-MSD	Total/NA	Water	624	
160-2640-2	TRIP BLANK	Total/NA	Water	624	
LCS 160-55860/4	Lab Control Sample	Total/NA	Water	624	
LCSD 160-55860/5	Lab Control Sample Dup	Total/NA	Water	624	
MB 160-55860/2	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 55384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2640-1	194/195-MSD	Total/NA	Water	625	
160-2640-1 - DL	194/195-MSD	Total/NA	Water	625	
LCS 160-55384/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 160-55384/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 160-55384/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 55694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2640-1	194/195-MSD	Total/NA	Water	625	55384
LCS 160-55384/2-A	Lab Control Sample	Total/NA	Water	625	55384
LCSD 160-55384/3-A	Lab Control Sample Dup	Total/NA	Water	625	55384
MB 160-55384/1-A	Method Blank	Total/NA	Water	625	55384

Analysis Batch: 55734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2640-1 - DL	194/195-MSD	Total/NA	Water	625	55384

Metals

Prep Batch: 55373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2640-1	194/195-MSD	Dissolved	Water	245.1	
160-2640-1 MS	194/195-MSD	Dissolved	Water	245.1	
160-2640-1 MSD	194/195-MSD	Dissolved	Water	245.1	
LCS 160-55373/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 160-55373/1-A	Method Blank	Total/NA	Water	245.1	

Prep Batch: 55375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2640-1	194/195-MSD	Total/NA	Water	245.1	
160-2640-1 MS	194/195-MSD	Total/NA	Water	245.1	
160-2640-1 MSD	194/195-MSD	Total/NA	Water	245.1	
LCS 160-55375/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 160-55375/1-A	Method Blank	Total/NA	Water	245.1	

Analysis Batch: 55400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2640-1	194/195-MSD	Total/NA	Water	245.1	55375
160-2640-1	194/195-MSD	Dissolved	Water	245.1	55373
160-2640-1 MS	194/195-MSD	Dissolved	Water	245.1	55373

Metals (Continued)

Analysis Batch: 55400 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2640-1 MS	194/195-MSD	Total/NA	Water	245.1	55375
160-2640-1 MSD	194/195-MSD	Dissolved	Water	245.1	55373
160-2640-1 MSD	194/195-MSD	Total/NA	Water	245.1	55375
LCS 160-55373/2-A	Lab Control Sample	Total/NA	Water	245.1	55373
LCS 160-55375/2-A	Lab Control Sample	Total/NA	Water	245.1	55375
MB 160-55373/1-A	Method Blank	Total/NA	Water	245.1	55373
MB 160-55375/1-A	Method Blank	Total/NA	Water	245.1	55375

Prep Batch: 55605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2640-1	194/195-MSD	Total/NA	Water	200.7/200.8	
160-2640-1	194/195-MSD	Dissolved	Water	200.7/200.8	
160-2640-1 MS	194/195-MSD	Total/NA	Water	200.7/200.8	
160-2640-1 MSD	194/195-MSD	Total/NA	Water	200.7/200.8	
LCS 160-55605/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
MB 160-55605/1-A	Method Blank	Total/NA	Water	200.7/200.8	

Analysis Batch: 55703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2640-1	194/195-MSD	Total/NA	Water	200.7 Rev 4.4	55605
160-2640-1	194/195-MSD	Dissolved	Water	200.7 Rev 4.4	55605
160-2640-1 MS	194/195-MSD	Total/NA	Water	200.7 Rev 4.4	55605
160-2640-1 MSD	194/195-MSD	Total/NA	Water	200.7 Rev 4.4	55605
LCS 160-55605/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	55605
MB 160-55605/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	55605

General Chemistry

Analysis Batch: 55177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2640-1	194/195-MSD	Total/NA	Water	SM 4500 H+ B	
160-2640-1 DU	194/195-MSD	Total/NA	Water	SM 4500 H+ B	
LCS 160-55177/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 123616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2640-1	194/195-MSD	Total/NA	Water	SM 2540D	
LCS 480-123616/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-123616/1	Method Blank	Total/NA	Water	SM 2540D	

Prep Batch: 123715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2640-1	194/195-MSD	Total/NA	Water	1664A	
LCS 480-123715/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 480-123715/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 123718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2640-1	194/195-MSD	Total/NA	Water	1664A	123715
LCS 480-123715/2-A	Lab Control Sample	Total/NA	Water	1664A	123715

General Chemistry (Continued)

Analysis Batch: 123718 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-123715/1-A	Method Blank	Total/NA	Water	1664A	123715

Analysis Batch: 123849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2640-1	194/195-MSD	Total/NA	Water	350.1	
LCS 480-123849/100	Lab Control Sample	Total/NA	Water	350.1	
LCS 480-123849/76	Lab Control Sample	Total/NA	Water	350.1	
MB 480-123849/75	Method Blank	Total/NA	Water	350.1	
MB 480-123849/99	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 124417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2640-1	194/195-MSD	Total/NA	Water	410.4	
LCS 480-124417/4	Lab Control Sample	Total/NA	Water	410.4	
MB 480-124417/3	Method Blank	Total/NA	Water	410.4	

Surrogate Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2640-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(71-135)	(80-122)	(84-122)
160-2640-1	194/195-MSD	104	110	109
160-2640-2	TRIP BLANK	108	104	107
LCS 160-55860/4	Lab Control Sample	110	118	112
LCSD 160-55860/5	Lab Control Sample Dup	106	115	107
MB 160-55860/2	Method Blank	106	114	112

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(41-109)	(31-103)	(23-82)	(36-98)	(14-68)	(43-107)
160-2640-1	194/195-MSD	0 X D	0 X D	0 X D	0 X D	0 X D	0 X D
160-2640-1 - DL	194/195-MSD	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
LCS 160-55384/2-A	Lab Control Sample	96	80	62	79	44	63
LCSD 160-55384/3-A	Lab Control Sample Dup	92	85	61	83	44	65
MB 160-55384/1-A	Method Blank	81	76	60	77	44	61

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2640-2
Client Project/Site: Bridgeton Landfill
Revision: 1

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/27/2013 8:56:32 AM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

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

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Job ID: 160-2640-2

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2640-2

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

Revision 1 - Client requested estimated value be reported for BOD.

RECEIPT

The samples were received on 6/10/2013 3:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

BIOCHEMICAL OXYGEN DEMAND

Sample 194/195-MSD (160-2640-1) was analyzed for Biochemical oxygen demand in accordance with SM 5210B. The samples were analyzed on 06/10/2013.

Biochemical Oxygen Demand was detected in method blank SCB 160-55946/2 at a level that was above the method detection limit but below the reporting limit..

For BOD Batch 55946, the glucose-glutamic acid standard (LCS 160-55946/3 and CCV) recovered outside the recovery limits specified in the method. Since the hold time is exceeded, reanalysis cannot be performed.

Job ID: 160-2640-2 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

For BOD Batch 55946, the data reported is an estimated value, due to the fact that the seed correction factor was too low to yield enough depletion (>2mg/L) to obtain a method acceptable result at the dilution that worked historically. The sample hold is exceeded and therefore, cannot be reanalyzed. Future analyses will have a higher seed concentration added to the samples to ensure that enough depletion will be observed.

No other difficulties were encountered during the BOD analysis.

All other quality control parameters were within the acceptance limits.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY / FEI	6/8/13	197670
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
816-285-8410	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State): BRIDGETON LF / MISSOURI

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.:

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): 624-25ml-VOC	1664A-HEM	5210B-BOD	625-SVOC	200.7 245.1 T	2540D-TSS	410.4 350.1	200.7 245.1 D					Special Instructions/ Conditions of Receipt
194/195-MSD	6/9/13	7:30AM		✓				4	1	1	4				3	1	1	1	1	1	1	1					
TRIP BLANK	—	—		✓							2				2												

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 DAYS

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	6/10/13	1510	1. Received By: [signature]	6/10/13	1510
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2640-2

Login Number: 2640

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	
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?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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.	False	Nitric and sulfuric preserved bottles received with pH higher than 2
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	

Definitions/Glossary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2640-2

Qualifiers

General Chemistry

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
s	Seeded Control Blank (SCB) Recovery High

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2640-2

Method	Method Description	Protocol	Laboratory
SM 5210B	BOD, 5-Day	SM	TAL SL

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2640-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2640-1	194/195-MSD	Water	06/09/13 07:30	06/10/13 15:10

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2640-2

Client Sample ID: 194/195-MSD

Lab Sample ID: 160-2640-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	20000	J * ^	2.0	0.10	mg/L	1		SM 5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2640-2

Client Sample ID: 194/195-MSD

Lab Sample ID: 160-2640-1

Date Collected: 06/09/13 07:30

Matrix: Water

Date Received: 06/10/13 15:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	20000	J * ^	2.0	0.10	mg/L			06/10/13 19:30	1

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2640-2

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: SCB 160-55946/2 SCB — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55946

Analyte	SCB Result	SCB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	1.24	J s	2.0	0.10	mg/L			06/10/13 19:30	1

Lab Sample ID: USB 160-55946/1 USB — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55946

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	0.10	mg/L			06/10/13 19:30	1

Lab Sample ID: LCS 160-55946/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55946

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			199	122	^ *	mg/L		61	84.6 - 115.4		

Lab Sample ID: 160-2640-1 DU — **Client Sample ID: 194/195-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55946

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Biochemical Oxygen Demand	20000	J * ^		19900	J * ^	mg/L				3	20

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2640-2

General Chemistry

Analysis Batch: 55946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2640-1	194/195-MSD	Total/NA	Water	SM 5210B	
160-2640-1 DU	194/195-MSD	Total/NA	Water	SM 5210B	
LCS 160-55946/3	Lab Control Sample	Total/NA	Water	SM 5210B	
SCB 160-55946/2 SCB	Method Blank	Total/NA	Water	SM 5210B	
USB 160-55946/1 USB	Method Blank	Total/NA	Water	SM 5210B	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2645-1
Client Project/Site: Bridgeton Landfill
Revision: 1

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
7/3/2013 11:53:42 AM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.testamericainc.com

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.

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Job ID: 160-2645-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2645-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

Revision 1 - Inital COD results were over the calibration curve. Samples were re-analyzed and the re-analysis is reported.

RECEIPT

The sample was received on 6/10/2013 3:10 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

Exception: Nitric and sulfuric preserved bottles received with pH higher than 2

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample 199/200-MSD (160-2645-1) was analyzed for volatile organic compounds (GC-MS) in accordance with EPA Method 624. The samples were analyzed on 06/11/2013.

The continuing calibration verification ZCCV8294 for Trichlorofluoromethane associated with batch 55860 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data has been reported.

Job ID: 160-2645-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 55860. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

The associated samples were analyzed at a dilution based upon the sample's screened data. For the volatile analysis, dilutions are done using a volume correction during sample prep and not as an instrument dilution. The reporting limit has been adjusted for the dilutions. No lesser dilutions were performed due to the sample matrix.

No difficulties were encountered during the VOCs analysis.

All quality control parameters were within the acceptance limits.

Organic Prep
Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 55384. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Emulsion was observed during extraction of samples 160-2645-A-1. Analyst implemented vigorous stirring and centrifugation. Samples were removed from the nitrogen evaporator after 45 minutes at a final volume of 10mL.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 199/200-MSD (160-2645-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA Method 625. The samples were prepared on 06/11/2013 and analyzed on 06/11/2013 and 06/13/2013.

Due to the matrix, the following samples could not be concentrated to the final method required volume: 199/200-MSD (160-2645-1). The reporting limits (RLs) are elevated proportionately.

Due to the level of dilution required for the following samples, surrogate recoveries are not reported: 199/200-MSD (160-2645-1). Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 55694 recovered outside control limits for several compounds. The RPD for 2,4-Dimethylphenol is outside the QC limits. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples except for Phenol; therefore, the data has been reported due to insufficient sample volume for re-extraction.

No other difficulties were encountered during the SVOC analysis.

All other quality control parameters were within the acceptance limits.

ICP Total and Dissolved
Sample 199/200-MSD (160-2645-1) was analyzed for ICP in accordance with EPA Method 200.7, Rev. 4.4. The samples were prepared on 06/12/2013 and analyzed on 06/13/2013.

Sample 199/200-MSD (160-2645-1)[5X] required dilution prior to analysis. The sample digestates were dark yellow in color. Elevated reporting limits (RLs) are provided.

Cobalt was detected in method blank MB 160-55605/1-A at a level that was above the method detection limit but below the reporting limit.

No other difficulties were encountered during the ICP analysis.

All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)
Sample 199/200-MSD (160-2645-1) was analyzed for dissolved mercury (CVAA) in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/11/2013.

Job ID: 160-2645-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

MERCURY
Sample 199/200-MSD (160-2645-1) was analyzed for mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/11/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

SGT-HEM
Sample 199/200-MSD (160-2645-1) was analyzed for SGT-HEM in accordance with EPA Method 1664A. The samples were prepared and analyzed on 06/13/2013.

Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: 199/200-MSD (160-2645-1). The reporting limits (RLs) have been adjusted proportionately.

No difficulties were encountered during the SGT-HEM analysis.

All quality control parameters were within the acceptance limits.

TOTAL SUSPENDED SOLIDS
Sample 199/200-MSD (160-2645-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 06/12/2013.

Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: 199/200-MSD (160-2645-1). The reporting limits (RLs) have been adjusted proportionately.

No difficulties were encountered during the TSS analysis.

All quality control parameters were within the acceptance limits.

AMMONIA
Sample 199/200-MSD (160-2645-1) was analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/13/2013.

Sample 199/200-MSD (160-2645-1)[1000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the ammonia analysis.

All other quality control parameters were within the acceptance limits.

CHEMICAL OXYGEN DEMAND
Sample 199/200-MSD (160-2645-1) was analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 06/29/2013.

Sample 199/200-MSD (160-2645-1)[100X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the COD analysis.

All quality control parameters were within the acceptance limits.

PH

Job ID: 160-2645-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Sample 199/200-MSD (160-2645-1) was analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed on 06/10/2013.

For the analysis of the associated samples in pH batch #55177, this analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 199/200-MSD (160-2645-1)

For the pH analysis of the associated samples in batch #55177, the samples were analyzed using pH indicator strips. pH strips were used due to the samples matrices possibly damaging the pH probe. The lot numbers for the strips used are #HC270245 for the 0-14 range.199/200-MSD (160-2645-1)

No difficulties were encountered during the pH analysis.

All quality control parameters were within the acceptance limits.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica
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TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY / FEI	6/8/13	197671
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
816-285-8410	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State)	Carrier/Waybill Number
BRIDGETON LF / MISSOURI	

Contract/Purchase Order/Quote No.

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): 624-25ml-VOC	1664A-HEM	5210B-BOD	625-SVOC	300.7 245.1 T	2540D-TSS	410.4 350.1	300.7 245.1 D					Special Instructions/ Conditions of Receipt
199/200-MSD	6/9/13 ~~6/6/13~~ MLK	10:15AM		✓				4	1	1	4				3	1	1	1	1	1	1	1					
				~~✓~~			~~MLK~~				~~2~~				~~2~~												

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 Days

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
[signature]	6/10/13	1510	[signature]	6/10/13	1510
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2645-1

Login Number: 2645

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	
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?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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.	False	Nitric and sulfuric preserved bottles received with pH higher than 2
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	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2645-1

Login Number: 2645
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/12/13 05:39 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	3.9 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits
*	RPD of the LCS and LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2645-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SL
245.1	Mercury (CVAA)	EPA	TAL SL
1664A	HEM and SGT-HEM	1664A	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
410.4	COD	MCAWW	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL SL

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2645-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2645-1	199/200-MSD	Water	06/09/13 10:15	06/10/13 15:10

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2645-1

Client Sample ID: 199/200-MSD

Lab Sample ID: 160-2645-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	170		50	6.0	ug/L	1		624	Total/NA
Benzene	8.0	J	50	3.0	ug/L	1		624	Total/NA
Ethylbenzene	16	J	50	4.5	ug/L	1		624	Total/NA
Toluene	6.9	J	50	3.5	ug/L	1		624	Total/NA
Xylenes, Total	74	J	150	10	ug/L	1		624	Total/NA
Acenaphthene	12	J	100	10	ug/L	1		625	Total/NA
Anthracene	51	J	100	10	ug/L	1		625	Total/NA
Dimethyl phthalate	22	J	100	10	ug/L	1		625	Total/NA
Naphthalene	93	J	100	10	ug/L	1		625	Total/NA
Phenol - DL	6100	*	500	100	ug/L	5		625	Total/NA
Aluminum	42000		10000	4000	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	590		500	99	ug/L	5		200.7 Rev 4.4	Total/NA
Chromium	390	J	500	160	ug/L	5		200.7 Rev 4.4	Total/NA
Iron	1100000		5000	800	ug/L	5		200.7 Rev 4.4	Total/NA
Lead	270	J	500	64	ug/L	5		200.7 Rev 4.4	Total/NA
Thallium	120	J	1000	44	ug/L	5		200.7 Rev 4.4	Total/NA
Zinc	16000		1000	260	ug/L	5		200.7 Rev 4.4	Total/NA
Aluminum	4800	J	10000	4000	ug/L	5		200.7 Rev 4.4	Dissolved
Arsenic	560		500	99	ug/L	5		200.7 Rev 4.4	Dissolved
Beryllium	25	J	250	25	ug/L	5		200.7 Rev 4.4	Dissolved
Chromium	360	J	500	160	ug/L	5		200.7 Rev 4.4	Dissolved
Iron	840000		5000	800	ug/L	5		200.7 Rev 4.4	Dissolved
Lead	170	J	500	64	ug/L	5		200.7 Rev 4.4	Dissolved
Thallium	140	J	1000	44	ug/L	5		200.7 Rev 4.4	Dissolved
Zinc	15000		1000	260	ug/L	5		200.7 Rev 4.4	Dissolved
Mercury	7.4		2.0	0.50	ug/L	1		245.1	Total/NA
Oil & Grease	120		13	3.5	mg/L	1		1664A	Total/NA
Ammonia	730		20	9.0	mg/L	1000		350.1	Total/NA
Chemical Oxygen Demand	55000		1000	500	mg/L	100		410.4	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	2800		50	50	mg/L	1		SM 2540D	Total/NA
pH	6.00	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2645-1

Client Sample ID: 199/200-MSD

Date Collected: 06/09/13 10:15
Date Received: 06/10/13 15:10

Lab Sample ID: 160-2645-1

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.5	ug/L			06/11/13 15:57	1
1,1,2,2-Tetrachloroethane	ND		50	5.0	ug/L			06/11/13 15:57	1
1,1,2-Trichloroethane	ND		50	7.5	ug/L			06/11/13 15:57	1
1,1-Dichloroethane	ND		50	3.5	ug/L			06/11/13 15:57	1
1,1-Dichloroethene	ND		50	4.0	ug/L			06/11/13 15:57	1
1,2-Dichlorobenzene	ND		50	3.0	ug/L			06/11/13 15:57	1
1,2-Dichloroethane	ND		50	5.0	ug/L			06/11/13 15:57	1
1,2-Dichloropropane	ND		50	5.0	ug/L			06/11/13 15:57	1
1,3-Dichlorobenzene	ND		50	4.0	ug/L			06/11/13 15:57	1
1,4-Dichlorobenzene	**170**		50	6.0	ug/L			06/11/13 15:57	1
2-Chloroethyl vinyl ether	ND		100	8.5	ug/L			06/11/13 15:57	1
Benzene	**8.0**	**J**	50	3.0	ug/L			06/11/13 15:57	1
Bromodichloromethane	ND		50	4.5	ug/L			06/11/13 15:57	1
Bromoform	ND		50	8.5	ug/L			06/11/13 15:57	1
Bromomethane	ND		100	6.5	ug/L			06/11/13 15:57	1
Carbon tetrachloride	ND		50	6.5	ug/L			06/11/13 15:57	1
Chlorobenzene	ND		50	7.5	ug/L			06/11/13 15:57	1
Chloroethane	ND		100	5.0	ug/L			06/11/13 15:57	1
Chloroform	ND		50	5.0	ug/L			06/11/13 15:57	1
Chloromethane	ND		100	4.0	ug/L			06/11/13 15:57	1
cis-1,2-Dichloroethene	ND		50	4.5	ug/L			06/11/13 15:57	1
cis-1,3-Dichloropropene	ND		50	3.5	ug/L			06/11/13 15:57	1
Dibromochloromethane	ND		50	6.5	ug/L			06/11/13 15:57	1
Ethylbenzene	**16**	**J**	50	4.5	ug/L			06/11/13 15:57	1
Methylene Chloride	ND		50	5.5	ug/L			06/11/13 15:57	1
Tetrachloroethene	ND		50	9.0	ug/L			06/11/13 15:57	1
Toluene	**6.9**	**J**	50	3.5	ug/L			06/11/13 15:57	1
trans-1,2-Dichloroethene	ND		50	4.0	ug/L			06/11/13 15:57	1
trans-1,3-Dichloropropene	ND		50	4.0	ug/L			06/11/13 15:57	1
Trichloroethene	ND		50	11	ug/L			06/11/13 15:57	1
Trichlorofluoromethane	ND		50	5.5	ug/L			06/11/13 15:57	1
Vinyl chloride	ND		100	4.0	ug/L			06/11/13 15:57	1
Xylenes, Total	**74**	**J**	150	10	ug/L			06/11/13 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*71 - 135*		*06/11/13 15:57*	*1*
4-Bromofluorobenzene (Surr)	*110*		*80 - 122*		*06/11/13 15:57*	*1*
Toluene-d8 (Surr)	*108*		*84 - 122*		*06/11/13 15:57*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND	*	100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
bis (2-chloroisopropyl) ether	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
2,4,6-Trichlorophenol	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
2,4-Dichlorophenol	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
2,4-Dimethylphenol	ND	*	100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
2,4-Dinitrophenol	ND		500	20	ug/L		06/11/13 13:01	06/11/13 23:52	1
2,4-Dinitrotoluene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
2,6-Dinitrotoluene	ND		100	22	ug/L		06/11/13 13:01	06/11/13 23:52	1
2-Chloronaphthalene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2645-1

Client Sample ID: 199/200-MSD

Date Collected: 06/09/13 10:15
Date Received: 06/10/13 15:10

Lab Sample ID: 160-2645-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
2-Nitrophenol	ND		100	15	ug/L		06/11/13 13:01	06/11/13 23:52	1
3,3'-Dichlorobenzidine	ND		500	13	ug/L		06/11/13 13:01	06/11/13 23:52	1
4,6-Dinitro-2-methylphenol	ND		500	13	ug/L		06/11/13 13:01	06/11/13 23:52	1
4-Bromophenyl phenyl ether	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
4-Chloro-3-methylphenol	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
4-Chlorophenyl phenyl ether	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
4-Nitrophenol	ND	*	500	20	ug/L		06/11/13 13:01	06/11/13 23:52	1
Acenaphthene	**12**	**J**	100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Acenaphthylene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Anthracene	**51**	**J**	100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Benzidine	ND		1000	200	ug/L		06/11/13 13:01	06/11/13 23:52	1
Benzo[a]anthracene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Benzo[a]pyrene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Benzo[b]fluoranthene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Benzo[g,h,i]perylene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Benzo[k]fluoranthene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Bis(2-chloroethoxy)methane	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Bis(2-chloroethyl)ether	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Bis(2-ethylhexyl) phthalate	ND		100	19	ug/L		06/11/13 13:01	06/11/13 23:52	1
Butyl benzyl phthalate	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Chrysene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Dibenz(a,h)anthracene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Diethyl phthalate	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Dimethyl phthalate	**22**	**J**	100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Di-n-butyl phthalate	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Di-n-octyl phthalate	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Fluoranthene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Fluorene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Hexachloro-1,3-butadiene	ND	*	100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Hexachlorobenzene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Hexachlorocyclopentadiene	ND	*	500	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Hexachloroethane	ND	*	100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Indeno[1,2,3-cd]pyrene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Isophorone	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Naphthalene	**93**	**J**	100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Nitrobenzene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
N-Nitrosodimethylamine	ND		100	20	ug/L		06/11/13 13:01	06/11/13 23:52	1
N-Nitrosodi-n-propylamine	ND		100	15	ug/L		06/11/13 13:01	06/11/13 23:52	1
N-Nitrosodiphenylamine	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Pentachlorophenol	ND		500	13	ug/L		06/11/13 13:01	06/11/13 23:52	1
Phenanthrene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1
Pyrene	ND		100	10	ug/L		06/11/13 13:01	06/11/13 23:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*D X*	*41 - 109*	*06/11/13 13:01*	*06/11/13 23:52*	*1*
2-Fluorobiphenyl (Surr)	*0*	*D X*	*31 - 103*	*06/11/13 13:01*	*06/11/13 23:52*	*1*
2-Fluorophenol (Surr)	*0*	*D X*	*23 - 82*	*06/11/13 13:01*	*06/11/13 23:52*	*1*
Nitrobenzene-d5 (Surr)	*0*	*D X*	*36 - 98*	*06/11/13 13:01*	*06/11/13 23:52*	*1*
Phenol-d5 (Surr)	*0*	*D X*	*14 - 68*	*06/11/13 13:01*	*06/11/13 23:52*	*1*

Client Sample ID: 199/200-MSD

Lab Sample ID: 160-2645-1

Date Collected: 06/09/13 10:15

Matrix: Water

Date Received: 06/10/13 15:10

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14 (Surr)	0	D X	43 - 107	06/11/13 13:01	06/11/13 23:52	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	6100	*	500	100	ug/L		06/11/13 13:01	06/13/13 02:57	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	0	D X	41 - 109	06/11/13 13:01	06/13/13 02:57	5
2-Fluorobiphenyl (Surr)	0	D X	31 - 103	06/11/13 13:01	06/13/13 02:57	5
2-Fluorophenol (Surr)	0	D X	23 - 82	06/11/13 13:01	06/13/13 02:57	5
Nitrobenzene-d5 (Surr)	0	D X	36 - 98	06/11/13 13:01	06/13/13 02:57	5
Phenol-d5 (Surr)	0	D X	14 - 68	06/11/13 13:01	06/13/13 02:57	5
Terphenyl-d14 (Surr)	0	D X	43 - 107	06/11/13 13:01	06/13/13 02:57	5

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		500	300	ug/L		06/12/13 14:37	06/13/13 11:42	5
Aluminum	42000		10000	4000	ug/L		06/12/13 14:37	06/13/13 11:42	5
Arsenic	590		500	99	ug/L		06/12/13 14:37	06/13/13 11:42	5
Beryllium	ND		250	25	ug/L		06/12/13 14:37	06/13/13 11:42	5
Cadmium	ND		250	23	ug/L		06/12/13 14:37	06/13/13 11:42	5
Cobalt	ND		2500	200	ug/L		06/12/13 14:37	06/13/13 11:42	5
Chromium	390	J	500	160	ug/L		06/12/13 14:37	06/13/13 11:42	5
Copper	ND		1300	230	ug/L		06/12/13 14:37	06/13/13 11:42	5
Iron	1100000		5000	800	ug/L		06/12/13 14:37	06/13/13 11:42	5
Nickel	ND		2000	670	ug/L		06/12/13 14:37	06/13/13 11:42	5
Lead	270	J	500	64	ug/L		06/12/13 14:37	06/13/13 11:42	5
Antimony	ND		500	200	ug/L		06/12/13 14:37	06/13/13 11:42	5
Selenium	ND		750	130	ug/L		06/12/13 14:37	06/13/13 11:42	5
Thallium	120	J	1000	44	ug/L		06/12/13 14:37	06/13/13 11:42	5
Zinc	16000		1000	260	ug/L		06/12/13 14:37	06/13/13 11:42	5

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4800	J	10000	4000	ug/L		06/12/13 14:37	06/13/13 12:07	5
Antimony	ND		500	200	ug/L		06/12/13 14:37	06/13/13 12:07	5
Arsenic	560		500	99	ug/L		06/12/13 14:37	06/13/13 12:07	5
Beryllium	25	J	250	25	ug/L		06/12/13 14:37	06/13/13 12:07	5
Cadmium	ND		250	23	ug/L		06/12/13 14:37	06/13/13 12:07	5
Chromium	360	J	500	160	ug/L		06/12/13 14:37	06/13/13 12:07	5
Cobalt	ND		2500	200	ug/L		06/12/13 14:37	06/13/13 12:07	5
Copper	ND		1300	230	ug/L		06/12/13 14:37	06/13/13 12:07	5
Iron	840000		5000	800	ug/L		06/12/13 14:37	06/13/13 12:07	5
Lead	170	J	500	64	ug/L		06/12/13 14:37	06/13/13 12:07	5
Nickel	ND		2000	670	ug/L		06/12/13 14:37	06/13/13 12:07	5
Selenium	ND		750	130	ug/L		06/12/13 14:37	06/13/13 12:07	5
Silver	ND		500	300	ug/L		06/12/13 14:37	06/13/13 12:07	5
Thallium	140	J	1000	44	ug/L		06/12/13 14:37	06/13/13 12:07	5
Zinc	15000		1000	260	ug/L		06/12/13 14:37	06/13/13 12:07	5

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2645-1

Client Sample ID: 199/200-MSD

Lab Sample ID: 160-2645-1

Date Collected: 06/09/13 10:15

Matrix: Water

Date Received: 06/10/13 15:10

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	7.4		2.0	0.50	ug/L		06/11/13 11:57	06/11/13 13:39	1

Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		2.0	0.50	ug/L		06/11/13 11:50	06/11/13 13:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	120		13	3.5	mg/L		06/13/13 09:15	06/13/13 09:15	1
Ammonia	730		20	9.0	mg/L			06/13/13 14:37	1000
Chemical Oxygen Demand	55000		1000	500	mg/L			06/29/13 13:20	100

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	2800		50	50	mg/L			06/12/13 21:55	1
pH	6.00	HF	0.100	0.100	SU			06/10/13 17:07	1

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-55860/2
Matrix: Water
Analysis Batch: 55860

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/11/13 10:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/11/13 10:24	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/11/13 10:24	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/11/13 10:24	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/11/13 10:24	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/11/13 10:24	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/11/13 10:24	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/11/13 10:24	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/11/13 10:24	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/11/13 10:24	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/11/13 10:24	1
Benzene	ND		1.0	0.060	ug/L			06/11/13 10:24	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/11/13 10:24	1
Bromoform	ND		1.0	0.17	ug/L			06/11/13 10:24	1
Bromomethane	ND		2.0	0.13	ug/L			06/11/13 10:24	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/11/13 10:24	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/11/13 10:24	1
Chloroethane	ND		2.0	0.10	ug/L			06/11/13 10:24	1
Chloroform	ND		1.0	0.10	ug/L			06/11/13 10:24	1
Chloromethane	ND		2.0	0.080	ug/L			06/11/13 10:24	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/11/13 10:24	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/11/13 10:24	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/11/13 10:24	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/11/13 10:24	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/11/13 10:24	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/11/13 10:24	1
Toluene	ND		1.0	0.070	ug/L			06/11/13 10:24	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/11/13 10:24	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/11/13 10:24	1
Trichloroethene	ND		1.0	0.21	ug/L			06/11/13 10:24	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/11/13 10:24	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/11/13 10:24	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/11/13 10:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*71 - 135*		*06/11/13 10:24*	*1*
4-Bromofluorobenzene (Surr)	*114*		*80 - 122*		*06/11/13 10:24*	*1*
Toluene-d8 (Surr)	*112*		*84 - 122*		*06/11/13 10:24*	*1*

Lab Sample ID: LCS 160-55860/4
Matrix: Water
Analysis Batch: 55860

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	69 - 130
1,1,2-Trichloroethane	10.0	10.6		ug/L		106	78 - 122
1,1-Dichloroethane	10.0	10.1		ug/L		101	82 - 125
1,1-Dichloroethene	10.0	10.5		ug/L		105	77 - 127

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-55860/4
Matrix: Water
Analysis Batch: 55860

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	10.0	10.2		ug/L		102	78 - 127
1,2-Dichloropropane	10.0	10.1		ug/L		101	81 - 124
1,4-Dichlorobenzene	10.0	9.81		ug/L		98	83 - 116
2-Chloroethyl vinyl ether	10.0	9.25		ug/L		92	34 - 140
Benzene	10.0	9.99		ug/L		100	84 - 124
Bromodichloromethane	10.0	10.5		ug/L		105	81 - 127
Bromoform	10.0	10.3		ug/L		103	78 - 138
Bromomethane	10.0	9.32		ug/L		93	48 - 162
Carbon tetrachloride	10.0	11.3		ug/L		113	79 - 132
Chlorobenzene	10.0	10.1		ug/L		101	85 - 118
Chloroethane	10.0	8.78		ug/L		88	71 - 132
Chloromethane	10.0	9.46		ug/L		95	68 - 136
cis-1,2-Dichloroethene	10.0	10.2		ug/L		102	83 - 123
Dibromochloromethane	10.0	10.5		ug/L		105	81 - 129
Ethylbenzene	10.0	10.4		ug/L		104	85 - 125
Toluene	10.0	10.4		ug/L		104	83 - 127
trans-1,2-Dichloroethene	10.0	9.66		ug/L		97	78 - 122
trans-1,3-Dichloropropene	10.0	11.2		ug/L		112	83 - 130
Trichlorofluoromethane	10.0	11.9		ug/L		119	72 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*71 - 135*
4-Bromofluorobenzene (Surr)	*118*		*80 - 122*
Toluene-d8 (Surr)	*112*		*84 - 122*

Lab Sample ID: LCSD 160-55860/5
Matrix: Water
Analysis Batch: 55860

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane	10.0	10.1		ug/L		101	69 - 130	1	20
1,1,2-Trichloroethane	10.0	9.67		ug/L		97	78 - 122	9	20
1,1-Dichloroethane	10.0	9.64		ug/L		96	82 - 125	4	20
1,1-Dichloroethene	10.0	10.1		ug/L		101	77 - 127	4	20
1,2-Dichloroethane	10.0	9.82		ug/L		98	78 - 127	4	20
1,2-Dichloropropane	10.0	9.60		ug/L		96	81 - 124	5	20
1,4-Dichlorobenzene	10.0	9.45		ug/L		95	83 - 116	4	20
2-Chloroethyl vinyl ether	10.0	9.18		ug/L		92	34 - 140	1	20
Benzene	10.0	9.76		ug/L		98	84 - 124	2	20
Bromodichloromethane	10.0	10.1		ug/L		101	81 - 127	4	20
Bromoform	10.0	10.3		ug/L		103	78 - 138	1	20
Bromomethane	10.0	9.03		ug/L		90	48 - 162	3	20
Carbon tetrachloride	10.0	10.5		ug/L		105	79 - 132	7	20
Chlorobenzene	10.0	9.50		ug/L		95	85 - 118	6	20
Chloroethane	10.0	8.51		ug/L		85	71 - 132	3	20
Chloromethane	10.0	9.29		ug/L		93	68 - 136	2	20
cis-1,2-Dichloroethene	10.0	9.86		ug/L		99	83 - 123	3	20
Dibromochloromethane	10.0	10.1		ug/L		101	81 - 129	4	20

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-55860/5
Matrix: Water
Analysis Batch: 55860

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	10.0	9.65		ug/L		96	85 - 125	8	20
Toluene	10.0	9.77		ug/L		98	83 - 127	6	20
trans-1,2-Dichloroethene	10.0	9.50		ug/L		95	78 - 122	2	20
trans-1,3-Dichloropropene	10.0	10.3		ug/L		103	83 - 130	9	20
Trichlorofluoromethane	10.0	11.4		ug/L		114	72 - 135	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*71 - 135*
4-Bromofluorobenzene (Surr)	*115*		*80 - 122*
Toluene-d8 (Surr)	*107*		*84 - 122*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-55384/1-A
Matrix: Water
Analysis Batch: 55694

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 55384

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
bis (2-chloroisopropyl) ether	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
2,4,6-Trichlorophenol	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
2,4-Dichlorophenol	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
2,4-Dimethylphenol	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
2,4-Dinitrophenol	ND		50	2.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
2,4-Dinitrotoluene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
2,6-Dinitrotoluene	ND		10	2.2	ug/L		06/11/13 13:01	06/11/13 16:41	1
2-Chloronaphthalene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
2-Chlorophenol	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
2-Nitrophenol	ND		10	1.5	ug/L		06/11/13 13:01	06/11/13 16:41	1
3,3'-Dichlorobenzidine	ND		50	1.3	ug/L		06/11/13 13:01	06/11/13 16:41	1
4,6-Dinitro-2-methylphenol	ND		50	1.3	ug/L		06/11/13 13:01	06/11/13 16:41	1
4-Bromophenyl phenyl ether	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
4-Chlorophenyl phenyl ether	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
4-Nitrophenol	ND		50	2.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Acenaphthene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Acenaphthylene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Anthracene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Benzidine	ND		100	20	ug/L		06/11/13 13:01	06/11/13 16:41	1
Benzo[a]anthracene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Benzo[a]pyrene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Benzo[b]fluoranthene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Benzo[g,h,i]perylene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Benzo[k]fluoranthene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Bis(2-chloroethoxy)methane	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Bis(2-chloroethyl)ether	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Bis(2-ethylhexyl) phthalate	ND		10	1.9	ug/L		06/11/13 13:01	06/11/13 16:41	1
Butyl benzyl phthalate	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-55384/1-A
Matrix: Water
Analysis Batch: 55694

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 55384

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Dibenz(a,h)anthracene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Diethyl phthalate	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Dimethyl phthalate	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Di-n-butyl phthalate	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Di-n-octyl phthalate	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Fluoranthene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Fluorene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Hexachloro-1,3-butadiene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Hexachlorobenzene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Hexachlorocyclopentadiene	ND		50	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Hexachloroethane	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Indeno[1,2,3-cd]pyrene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Isophorone	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Naphthalene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Nitrobenzene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/L		06/11/13 13:01	06/11/13 16:41	1
N-Nitrosodiphenylamine	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Pentachlorophenol	ND		50	1.3	ug/L		06/11/13 13:01	06/11/13 16:41	1
Phenanthrene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Phenol	ND		10	2.0	ug/L		06/11/13 13:01	06/11/13 16:41	1
Pyrene	ND		10	1.0	ug/L		06/11/13 13:01	06/11/13 16:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*81*		*41 - 109*	*06/11/13 13:01*	*06/11/13 16:41*	*1*
2-Fluorobiphenyl (Surr)	*76*		*31 - 103*	*06/11/13 13:01*	*06/11/13 16:41*	*1*
2-Fluorophenol (Surr)	*60*		*23 - 82*	*06/11/13 13:01*	*06/11/13 16:41*	*1*
Nitrobenzene-d5 (Surr)	*77*		*36 - 98*	*06/11/13 13:01*	*06/11/13 16:41*	*1*
Phenol-d5 (Surr)	*44*		*14 - 68*	*06/11/13 13:01*	*06/11/13 16:41*	*1*
Terphenyl-d14 (Surr)	*61*		*43 - 107*	*06/11/13 13:01*	*06/11/13 16:41*	*1*

Lab Sample ID: LCS 160-55384/2-A
Matrix: Water
Analysis Batch: 55694

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 55384

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	99.9	80.6		ug/L		81	44 - 84
bis (2-chloroisopropyl) ether	100	78.3		ug/L		78	42 - 102
2,4,6-Trichlorophenol	100	78.2		ug/L		78	54 - 105
2,4-Dichlorophenol	100	73.6		ug/L		74	46 - 103
2,4-Dimethylphenol	100	71.8		ug/L		72	40 - 105
2,4-Dinitrophenol	100	70.8		ug/L		71	42 - 146
2,4-Dinitrotoluene	100	87.7		ug/L		88	62 - 101
2,6-Dinitrotoluene	100	84.4		ug/L		84	62 - 103
2-Chloronaphthalene	100	83.1		ug/L		83	45 - 95
2-Chlorophenol	100	71.0		ug/L		71	56 - 93
2-Nitrophenol	100	75.7		ug/L		76	51 - 98

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-55384/2-A
Matrix: Water
Analysis Batch: 55694

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 55384

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
3,3'-Dichlorobenzidine	100	60.4		ug/L		60	26 - 77
4,6-Dinitro-2-methylphenol	100	87.4		ug/L		87	61 - 120
4-Bromophenyl phenyl ether	100	90.9		ug/L		91	54 - 111
4-Chloro-3-methylphenol	100	73.9		ug/L		74	45 - 106
4-Chlorophenyl phenyl ether	100	83.4		ug/L		83	53 - 100
4-Nitrophenol	100	49.2	J *	ug/L		49	25 - 45
Acenaphthene	100	80.1		ug/L		80	51 - 89
Acenaphthylene	100	79.8		ug/L		80	46 - 98
Anthracene	100	83.5		ug/L		83	54 - 111
Benzo[a]anthracene	100	94.8		ug/L		95	68 - 108
Benzo[a]pyrene	100	86.4		ug/L		86	55 - 108
Benzo[b]fluoranthene	100	90.1		ug/L		90	57 - 114
Benzo[g,h,i]perylene	100	103		ug/L		103	58 - 120
Benzo[k]fluoranthene	100	94.7		ug/L		95	59 - 112
Bis(2-chloroethoxy)methane	100	75.5		ug/L		76	53 - 99
Bis(2-chloroethyl)ether	100	72.6		ug/L		73	50 - 97
Bis(2-ethylhexyl) phthalate	100	83.1		ug/L		83	54 - 116
Butyl benzyl phthalate	100	85.2		ug/L		85	52 - 126
Chrysene	100	84.0		ug/L		84	58 - 112
Dibenz(a,h)anthracene	100	105		ug/L		105	56 - 122
Diethyl phthalate	100	83.0		ug/L		83	60 - 101
Dimethyl phthalate	100	83.3		ug/L		83	57 - 101
Di-n-butyl phthalate	100	85.0		ug/L		85	57 - 108
Di-n-octyl phthalate	100	82.6		ug/L		83	57 - 118
Fluoranthene	100	87.8		ug/L		88	55 - 114
Fluorene	100	80.8		ug/L		81	59 - 96
Hexachloro-1,3-butadiene	100	84.8	*	ug/L		85	36 - 84
Hexachlorobenzene	100	93.6		ug/L		94	56 - 110
Hexachlorocyclopentadiene	100	81.8		ug/L		82	16 - 86
Hexachloroethane	100	77.9	*	ug/L		78	40 - 77
Indeno[1,2,3-cd]pyrene	100	103		ug/L		103	55 - 124
Isophorone	100	59.8		ug/L		60	50 - 107
Naphthalene	100	76.4		ug/L		76	42 - 82
Nitrobenzene	100	76.6		ug/L		77	48 - 96
N-Nitrosodi-n-propylamine	100	80.0		ug/L		80	57 - 113
Pentachlorophenol	100	85.3		ug/L		85	56 - 126
Phenanthrene	100	85.9		ug/L		86	54 - 110
Phenol	100	43.8	*	ug/L		44	27 - 43
Pyrene	100	83.3		ug/L		83	53 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*96*		*41 - 109*
2-Fluorobiphenyl (Surr)	*80*		*31 - 103*
2-Fluorophenol (Surr)	*62*		*23 - 82*
Nitrobenzene-d5 (Surr)	*79*		*36 - 98*
Phenol-d5 (Surr)	*44*		*14 - 68*
Terphenyl-d14 (Surr)	*63*		*43 - 107*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-55384/3-A
Matrix: Water
Analysis Batch: 55694

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 55384

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	99.9	85.8	*	ug/L		86	44 - 84	6	20
bis (2-chloroisopropyl) ether	100	82.0		ug/L		82	42 - 102	5	20
2,4,6-Trichlorophenol	100	80.2		ug/L		80	54 - 105	3	20
2,4-Dichlorophenol	100	76.8		ug/L		77	46 - 103	4	20
2,4-Dimethylphenol	100	46.6	*	ug/L		47	40 - 105	43	20
2,4-Dinitrophenol	100	75.6		ug/L		76	42 - 146	7	20
2,4-Dinitrotoluene	100	89.2		ug/L		89	62 - 101	2	20
2,6-Dinitrotoluene	100	87.4		ug/L		87	62 - 103	3	20
2-Chloronaphthalene	100	88.1		ug/L		88	45 - 95	6	20
2-Chlorophenol	100	74.4		ug/L		74	56 - 93	5	20
2-Nitrophenol	100	81.4		ug/L		81	51 - 98	7	20
3,3'-Dichlorobenzidine	100	56.0		ug/L		56	26 - 77	7	20
4,6-Dinitro-2-methylphenol	100	90.8		ug/L		91	61 - 120	4	20
4-Bromophenyl phenyl ether	100	94.9		ug/L		95	54 - 111	4	20
4-Chloro-3-methylphenol	100	75.3		ug/L		75	45 - 106	2	20
4-Chlorophenyl phenyl ether	100	87.5		ug/L		87	53 - 100	5	20
4-Nitrophenol	100	47.1	J *	ug/L		47	25 - 45	4	20
Acenaphthene	100	84.6		ug/L		85	51 - 89	5	20
Acenaphthylene	100	82.9		ug/L		83	46 - 98	4	20
Anthracene	100	83.8		ug/L		84	54 - 111	0	20
Benzo[a]anthracene	100	97.5		ug/L		97	68 - 108	3	20
Benzo[a]pyrene	100	86.7		ug/L		87	55 - 108	0	20
Benzo[b]fluoranthene	100	93.3		ug/L		93	57 - 114	4	20
Benzo[g,h,i]perylene	100	105		ug/L		105	58 - 120	2	20
Benzo[k]fluoranthene	100	96.9		ug/L		97	59 - 112	2	20
Bis(2-chloroethoxy)methane	100	79.8		ug/L		80	53 - 99	6	20
Bis(2-chloroethyl)ether	100	75.9		ug/L		76	50 - 97	4	20
Bis(2-ethylhexyl) phthalate	100	84.9		ug/L		85	54 - 116	2	20
Butyl benzyl phthalate	100	87.0		ug/L		87	52 - 126	2	20
Chrysene	100	86.3		ug/L		86	58 - 112	3	20
Dibenz(a,h)anthracene	100	105		ug/L		105	56 - 122	0	20
Diethyl phthalate	100	84.5		ug/L		84	60 - 101	2	20
Dimethyl phthalate	100	86.6		ug/L		87	57 - 101	4	20
Di-n-butyl phthalate	100	86.9		ug/L		87	57 - 108	2	20
Di-n-octyl phthalate	100	84.2		ug/L		84	57 - 118	2	20
Fluoranthene	100	89.4		ug/L		89	55 - 114	2	20
Fluorene	100	83.8		ug/L		84	59 - 96	4	20
Hexachloro-1,3-butadiene	100	90.0	*	ug/L		90	36 - 84	6	20
Hexachlorobenzene	100	96.4		ug/L		96	56 - 110	3	20
Hexachlorocyclopentadiene	100	86.5	*	ug/L		87	16 - 86	6	20
Hexachloroethane	100	83.1	*	ug/L		83	40 - 77	6	20
Indeno[1,2,3-cd]pyrene	100	106		ug/L		106	55 - 124	3	20
Isophorone	100	63.0		ug/L		63	50 - 107	5	20
Naphthalene	100	80.5		ug/L		80	42 - 82	5	20
Nitrobenzene	100	80.6		ug/L		81	48 - 96	5	20
N-Nitrosodi-n-propylamine	100	85.7		ug/L		86	57 - 113	7	20
Pentachlorophenol	100	90.3		ug/L		90	56 - 126	6	20
Phenanthrene	100	87.9		ug/L		88	54 - 110	2	20

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-55384/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55694 — **Prep Batch: 55384**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	100	43.5		ug/L		43	27 - 43	1	20
Pyrene	100	86.5		ug/L		86	53 - 117	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*92*		*41 - 109*
2-Fluorobiphenyl (Surr)	*85*		*31 - 103*
2-Fluorophenol (Surr)	*61*		*23 - 82*
Nitrobenzene-d5 (Surr)	*83*		*36 - 98*
Phenol-d5 (Surr)	*44*		*14 - 68*
Terphenyl-d14 (Surr)	*65*		*43 - 107*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 160-55605/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55703 — **Prep Batch: 55605**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		06/12/13 14:37	06/13/13 11:13	1
Arsenic	ND		10	2.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Beryllium	ND		5.0	0.50	ug/L		06/12/13 14:37	06/13/13 11:13	1
Cadmium	ND		5.0	0.45	ug/L		06/12/13 14:37	06/13/13 11:13	1
Chromium	ND		10	3.1	ug/L		06/12/13 14:37	06/13/13 11:13	1
Cobalt	4.90	J	50	4.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Copper	ND		25	4.6	ug/L		06/12/13 14:37	06/13/13 11:13	1
Iron	ND		100	16	ug/L		06/12/13 14:37	06/13/13 11:13	1
Lead	ND		10	1.3	ug/L		06/12/13 14:37	06/13/13 11:13	1
Nickel	ND		40	13	ug/L		06/12/13 14:37	06/13/13 11:13	1
Antimony	ND		10	4.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Selenium	ND		15	2.7	ug/L		06/12/13 14:37	06/13/13 11:13	1
Silver	ND		10	6.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Thallium	ND		20	0.88	ug/L		06/12/13 14:37	06/13/13 11:13	1
Zinc	ND		20	5.2	ug/L		06/12/13 14:37	06/13/13 11:13	1

Lab Sample ID: LCS 160-55605/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55703 — **Prep Batch: 55605**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	10100		ug/L		101	85 - 115
Arsenic	1000	1030		ug/L		103	85 - 115
Beryllium	1000	1020		ug/L		102	85 - 115
Cadmium	1000	1040		ug/L		104	85 - 115
Chromium	1000	1050		ug/L		105	85 - 115
Cobalt	1000	1080		ug/L		108	85 - 115
Copper	1000	1040		ug/L		104	85 - 115
Iron	10000	10500		ug/L		105	85 - 115
Lead	1000	1070		ug/L		107	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 160-55605/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55703 — **Prep Batch: 55605**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	1000	1070		ug/L		107	85 - 115
Antimony	500	522		ug/L		104	85 - 115
Selenium	1000	1040		ug/L		104	85 - 115
Silver	100	106		ug/L		106	85 - 115
Thallium	200	230		ug/L		115	85 - 115
Zinc	1000	1040		ug/L		104	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 160-55373/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55400 — **Prep Batch: 55373**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		2.0	0.50	ug/L		06/11/13 11:50	06/11/13 13:41	1

Lab Sample ID: LCS 160-55373/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55400 — **Prep Batch: 55373**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	50.0	51.7		ug/L		103	85 - 115

Lab Sample ID: MB 160-55375/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55400 — **Prep Batch: 55375**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		2.0	0.50	ug/L		06/11/13 11:57	06/11/13 13:22	1

Lab Sample ID: LCS 160-55375/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55400 — **Prep Batch: 55375**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	50.0	51.5		ug/L		103	85 - 115

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 480-123715/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123718 — **Prep Batch: 123715**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/13/13 09:15	06/13/13 09:15	1

Method: 1664A - HEM and SGT-HEM (Continued)

Lab Sample ID: LCS 480-123715/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123718 — **Prep Batch: 123715**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	35.0		mg/L		88	78 - 114

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-123849/75 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123849

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/13/13 14:21	1

Lab Sample ID: LCS 480-123849/76 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123849

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.01		mg/L		101	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 480-126828/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126828

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			06/29/13 13:20	1

Lab Sample ID: LCS 480-126828/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126828

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	188		mg/L		94	90 - 110

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-123616/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123616

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			06/12/13 21:55	1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 480-123616/2
Matrix: Water
Analysis Batch: 123616

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	213	200		mg/L		94	88 - 110

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2645-1

GC/MS VOA

Analysis Batch: 55860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2645-1	199/200-MSD	Total/NA	Water	624	
LCS 160-55860/4	Lab Control Sample	Total/NA	Water	624	
LCSD 160-55860/5	Lab Control Sample Dup	Total/NA	Water	624	
MB 160-55860/2	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 55384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2645-1	199/200-MSD	Total/NA	Water	625	
160-2645-1 - DL	199/200-MSD	Total/NA	Water	625	
LCS 160-55384/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 160-55384/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 160-55384/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 55694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2645-1	199/200-MSD	Total/NA	Water	625	55384
LCS 160-55384/2-A	Lab Control Sample	Total/NA	Water	625	55384
LCSD 160-55384/3-A	Lab Control Sample Dup	Total/NA	Water	625	55384
MB 160-55384/1-A	Method Blank	Total/NA	Water	625	55384

Analysis Batch: 55734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2645-1 - DL	199/200-MSD	Total/NA	Water	625	55384

Metals

Prep Batch: 55373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2645-1	199/200-MSD	Dissolved	Water	245.1	
LCS 160-55373/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 160-55373/1-A	Method Blank	Total/NA	Water	245.1	

Prep Batch: 55375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2645-1	199/200-MSD	Total/NA	Water	245.1	
LCS 160-55375/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 160-55375/1-A	Method Blank	Total/NA	Water	245.1	

Analysis Batch: 55400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2645-1	199/200-MSD	Total/NA	Water	245.1	55375
160-2645-1	199/200-MSD	Dissolved	Water	245.1	55373
LCS 160-55373/2-A	Lab Control Sample	Total/NA	Water	245.1	55373
LCS 160-55375/2-A	Lab Control Sample	Total/NA	Water	245.1	55375
MB 160-55373/1-A	Method Blank	Total/NA	Water	245.1	55373
MB 160-55375/1-A	Method Blank	Total/NA	Water	245.1	55375

Metals (Continued)

Prep Batch: 55605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2645-1	199/200-MSD	Total/NA	Water	200.7/200.8	
160-2645-1	199/200-MSD	Dissolved	Water	200.7/200.8	
LCS 160-55605/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
MB 160-55605/1-A	Method Blank	Total/NA	Water	200.7/200.8	

Analysis Batch: 55703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2645-1	199/200-MSD	Total/NA	Water	200.7 Rev 4.4	55605
160-2645-1	199/200-MSD	Dissolved	Water	200.7 Rev 4.4	55605
LCS 160-55605/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	55605
MB 160-55605/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	55605

General Chemistry

Analysis Batch: 55177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2645-1	199/200-MSD	Total/NA	Water	SM 4500 H+ B	
LCS 160-55177/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 123616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2645-1	199/200-MSD	Total/NA	Water	SM 2540D	
LCS 480-123616/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-123616/1	Method Blank	Total/NA	Water	SM 2540D	

Prep Batch: 123715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2645-1	199/200-MSD	Total/NA	Water	1664A	
LCS 480-123715/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 480-123715/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 123718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2645-1	199/200-MSD	Total/NA	Water	1664A	123715
LCS 480-123715/2-A	Lab Control Sample	Total/NA	Water	1664A	123715
MB 480-123715/1-A	Method Blank	Total/NA	Water	1664A	123715

Analysis Batch: 123849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2645-1	199/200-MSD	Total/NA	Water	350.1	
LCS 480-123849/76	Lab Control Sample	Total/NA	Water	350.1	
MB 480-123849/75	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 126828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2645-1	199/200-MSD	Total/NA	Water	410.4	
LCS 480-126828/4	Lab Control Sample	Total/NA	Water	410.4	
MB 480-126828/3	Method Blank	Total/NA	Water	410.4	

Surrogate Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2645-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(71-135)	(80-122)	(84-122)
160-2645-1	199/200-MSD	105	110	108
LCS 160-55860/4	Lab Control Sample	110	118	112
LCSD 160-55860/5	Lab Control Sample Dup	106	115	107
MB 160-55860/2	Method Blank	106	114	112

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(41-109)	(31-103)	(23-82)	(36-98)	(14-68)	(43-107)
160-2645-1	199/200-MSD	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
160-2645-1 - DL	199/200-MSD	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
LCS 160-55384/2-A	Lab Control Sample	96	80	62	79	44	63
LCSD 160-55384/3-A	Lab Control Sample Dup	92	85	61	83	44	65
MB 160-55384/1-A	Method Blank	81	76	60	77	44	61

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2645-2
Client Project/Site: Bridgeton Landfill
Revision: 1

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/27/2013 9:13:36 AM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

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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.

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Job ID: 160-2645-2

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2645-2

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

Revision 1 - Client requested estimated value be reported for BOD.

RECEIPT

The sample was received on 6/10/2013 3:10 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

BIOCHEMICAL OXYGEN DEMAND

Sample 199/200-MSD (160-2645-1) was analyzed for Biochemical oxygen demand in accordance with SM 5210B. The samples were analyzed on 06/10/2013.

Biochemical Oxygen Demand was detected in method blank SCB 160-55946/2 at a level that was above the method detection limit but below the reporting limit.

For BOD Batch 55946, the glucose-glutamic acid standard (LCS 160-55946/3 and CCV) recovered outside the recovery limits specified in the method. Since the hold time is exceeded, reanalysis cannot be performed.

Job ID: 160-2645-2 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

For BOD Batch 55946, the data reported is an estimated value, due to the fact that the seed correction factor was too low to yield enough depletion (>2mg/L) to obtain a method acceptable result at the dilution that worked historically. The sample hold is exceeded and therefore, cannot be reanalyzed. Future analyses will have a higher seed concentration added to the samples to ensure that enough depletion will be observed.

No other difficulties were encountered during the BOD analysis.

All other quality control parameters were within the acceptance limits.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY / FEI	6/8/13	197671
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
816-285-8410	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State): BRIDGETON LF / MISSOURI

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.:

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		624-35ml-VOC	1664A-HEM	5210B-BOD	625-SVOC	300.7 845.1 T	2540D-TSS	410.4 350.1	300.7 845.1 D					Special Instructions/ Conditions of Receipt
			Matrix					Containers & Preservatives							Analysis (Attach list if more space is needed)												
199/200-MSD	6/9/13 ~~6/6/13~~ MLK	10:15AM		✓				4	1	1	4				3	1	1	1	1	1	1	1					
											2				2												

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 Days

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By	6/10/13	1510	1. Received By	6/10/13	1510
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2645-2

Login Number: 2645

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	
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?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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.	False	Nitric and sulfuric preserved bottles received with pH higher than 2
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	

Definitions/Glossary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2645-2

Qualifiers

General Chemistry

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
s	Seeded Control Blank (SCB) Recovery High

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2645-2

Method	Method Description	Protocol	Laboratory
SM 5210B	BOD, 5-Day	SM	TAL SL

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2645-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2645-1	199/200-MSD	Water	06/09/13 10:15	06/10/13 15:10

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2645-2

Client Sample ID: 199/200-MSD

Lab Sample ID: 160-2645-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	20000	J * ^	2.0	0.10	mg/L	1		SM 5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2645-2

Client Sample ID: 199/200-MSD

Lab Sample ID: 160-2645-1

Date Collected: 06/09/13 10:15

Matrix: Water

Date Received: 06/10/13 15:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	20000	J * ^	2.0	0.10	mg/L			06/10/13 19:30	1

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2645-2

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: SCB 160-55946/2 SCB
Matrix: Water
Analysis Batch: 55946

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

Analyte	SCB Result	SCB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	1.24	J s	2.0	0.10	mg/L			06/10/13 19:30	1

Lab Sample ID: USB 160-55946/1 USB
Matrix: Water
Analysis Batch: 55946

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	0.10	mg/L			06/10/13 19:30	1

Lab Sample ID: LCS 160-55946/3
Matrix: Water
Analysis Batch: 55946

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biochemical Oxygen Demand	199	122	^ *	mg/L		61	84.6 - 115.4

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2645-2

General Chemistry

Analysis Batch: 55946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2645-1	199/200-MSD	Total/NA	Water	SM 5210B	
LCS 160-55946/3	Lab Control Sample	Total/NA	Water	SM 5210B	
SCB 160-55946/2 SCB	Method Blank	Total/NA	Water	SM 5210B	
USB 160-55946/1 USB	Method Blank	Total/NA	Water	SM 5210B	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2660-1
Client Project/Site: Bridgeton Landfill
Revision: 1

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/27/2013 4:03:50 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.testamericainc.com

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.

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Job ID: 160-2660-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2660-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

Revision 1 - LCS/LCSD list updated to report all analytes from the reported list.

RECEIPT

The samples were received on 6/11/2013 4:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples 203/204-MSD (160-2660-1) and TRIP BLANK (160-2660-2) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA Method 624. The samples were analyzed on 06/12/2013.

The following samples were diluted due to the abundance of non-target analytes: 203/204-MSD (160-2660-1). Elevated reporting limits (RLs) are provided.

Methylene Chloride was detected in method blank MB 160-56201/2 at a level exceeding the reporting limit. None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not

Job ID: 160-2660-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

performed.

Chloroethane, Chloromethane, Vinyl chloride and Trichlorofluoromethane failed the recovery criteria low for LCS 160-56201/4. Bromomethane, Chloroethane, Chloromethane, Vinyl chloride and Trichlorofluoromethane exceeded the RPD limit for LCSD 160-56201/5. The laboratory control sample duplicate (LCSD) for batch 56201 recovered within QC limits indicating a poor purge for the LCS. Since the failed target analytes had passing QC for the CCV and LCSD, re-analysis was not warranted.

For batch 56201 and as determined by sample screening, the associated samples did not have a MS/MSD analyzed. The associated samples were all either tripblanks, which do not warrant a MS/MSD analysis, or diluted at 50x. A LCS/LCSD were analyzed and the LCSD had passing QC.

In batch 56201, the following samples had pH <2 even with HCl preservation. The samples were all analyzed within the 7 day hold time allowable for unpresreved samples.

No other difficulties were encountered during the VOCs analysis.

All other quality control parameters were within the acceptance limits.

Organic Prep
Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 55558. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch. Also, a reduced aliquot (100mL) was extracted due to the nature of the matrix. Emulsion was observed during extraction requiring vigorous stirring and/or centrifugation.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 203/204-MSD (160-2660-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA Method 625. The samples were prepared on 06/12/2013 and analyzed on 06/12/2013 and 06/13/2013.

The following samples were diluted to bring the concentration of target analytes within the calibration range: 203/204-MSD (160-2660-1) [20X]. Elevated reporting limits (RLs) are provided.

Butyl benzyl phthalate, Di-n-butyl phthalate and Phenanthrene were detected in method blank MB 160-55558/1-A at levels that were above the method detection limit but below the reporting limit.

4-Nitrophenol and Phenol failed the recovery criteria high for LCS 160-55558/2-A and LCSD 160-55558/3-A. Phenol being slightly (2%) outside the upper lab statistical limits is well within the method stated limits of 5-112; therefore, the data will be reported along with the dilution.

Several analytes failed the surrogate recovery criteria low for 203/204-MSD (160-2660-1). Due to the level of dilution, surrogates were diluted out. Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required. Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No other difficulties were encountered during the SVOC analysis.

All other quality control parameters were within the acceptance limits.

ICP total and dissolved
Sample 203/204-MSD (160-2660-1) was analyzed for ICP in accordance with EPA Method 200.7, Rev. 4.4. The samples were prepared on 06/12/2013 and analyzed on 06/13/2013.

The following samples were diluted due to the nature of the sample matrix. The sample digestates were dark yellow in color: 203/204-MSD (160-2660-1)[5X]. Elevated reporting limits (RLs) are provided.

Cobalt was detected in method blank MB 160-55605/1-A at a level that was above the method detection limit but below the reporting limit.

Job ID: 160-2660-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

No other difficulties were encountered during the ICP analysis.

All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)
Sample 203/204-MSD (160-2660-1) was analyzed for dissolved mercury (CVAA) in accordance with EPA Method 245.1. The samples were prepared on 06/17/2013 and analyzed on 06/18/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

MERCURY
Sample 203/204-MSD (160-2660-1) was analyzed for mercury in accordance with EPA Method 245.1. The samples were prepared on 06/17/2013 and analyzed on 06/18/2013.

Mercury was detected in method blank MB 160-56207/1-A at a level that was above the method detection limit but below the reporting limit.

No other difficulties were encountered during the mercury analysis.

All other quality control parameters were within the acceptance limits.

SGT-HEM
Sample 203/204-MSD (160-2660-1) was analyzed for SGT-HEM in accordance with EPA Method 1664A. The samples were prepared and analyzed on 06/13/2013.

Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: 203/204-MSD (160-2660-1). The reporting limits (RLs) have been adjusted proportionately.

No difficulties were encountered during the SGT-HEM analysis.

All quality control parameters were within the acceptance limits.

TOTAL SUSPENDED SOLIDS
Sample 203/204-MSD (160-2660-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 06/12/2013.

Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: 203/204-MSD (160-2660-1). The reporting limits (RLs) have been adjusted proportionately.

No difficulties were encountered during the TSS analysis.

All quality control parameters were within the acceptance limits.

AMMONIA
Sample 203/204-MSD (160-2660-1) was analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/13/2013.

Sample 203/204-MSD (160-2660-1)[1000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the ammonia analysis.

All other quality control parameters were within the acceptance limits.

CHEMICAL OXYGEN DEMAND

Job ID: 160-2660-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Sample 203/204-MSD (160-2660-1) was analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 06/17/2013.

Sample 203/204-MSD (160-2660-1)[100X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the COD analysis.

All quality control parameters were within the acceptance limits.

PH

Sample 203/204-MSD (160-2660-1) was analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed on 06/11/2013.

The associated sample in pH batch #55414 was analyzed using pH indicator strips, due to the sample's matrix possibly damaging the pH probe. pH strips used were range 0-14 (lot number #HC270245).203/204-MSD (160-2660-1)

For pH analysis in batch 55414, this analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 203/204-MSD (160-2660-1)

No difficulties were encountered during the pH analysis.

All quality control parameters were within the acceptance limits.

Chain of Custody Record

TAL-4124 (1007)

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client: BARR ENGINEERING/ED GALBRAITH	Project Manager: BILL ABERNATHY/FEI	Date: 6/10/13	Chain of Custody Number: 197672
Address: 816-285-8410	Telephone Number (Area Code)/Fax Number: 314-502-1299	Lab Number:	Page 1 of 1
City:	State:	Zip Code:	Site Contact:
Lab Contact:	Project Name and Location (State): BRIDGETON LF/MISSOURI	Carrier/Waybill Number:	Contract/Purchase Order/Quote No.:

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	624-VOC	1664A-HEM	5210B-BOD	625-SVOC	300.0 245.1 T	200.7 245.1 D	2540D-TSS	410.4 350.1	pH				Special Instructions/ Conditions of Receipt
203/204-MSD	6/10/13	1739		✓			4	1	1	4			3	1	1	1	1	1	1	1	✓				
TRIP BLANK	—	—		✓						2															

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 Days

QC Requirements (Specify)

1. Relinquished By: Da R Fey	Date: 6/11/13	Time: 1630	1. Received By: [signature]	Date: 6/11/13	Time: 1630
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Phone (314) 298-8566 Fax (314) 298-8757

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)
Client Contact: Shipping/Receiving
Company: TestAmerica Laboratories, Inc.
Address: 10 Hazelwood Drive, ,
City: Amherst
State, Zip: NY, 14228-2298
Phone: 716-691-2600(Tel) 716-691-7991(Fax)
Email:
Project Name: Bridgeton Landfill
Site:

Sampler:
Phone:
Lab PM: Starman, Erika K
E-Mail: erika.starman@testamericainc.com
Carrier Tracking No(s):
COC No: 160-11203.1
Page: Page 1 of 1
Job #: 160-2660-1

Due Date Requested: 6/17/2013
TAT Requested (days):
PO #:
WO #:
Project #: 16002458
SSOW#:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastefoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540D	350.1/ (MOD) Local Method	410.4	5210B/ (MOD) Local Method	1664A_Calc/1664A_SPE	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
203/204-MSD (160-2660-1)	6/10/13	17:39 Central		Water			X	X	X	X	X	4	

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2SO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - ph 4-5
Z - other (specify)
Other:

Possible Hazard Identification
Unconfirmed
Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	6/11/13 1700	TA	[signature]	6/12/13 0900	TA BUFFALO
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: #1 3.9

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2660-1

Login Number: 2660

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
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	
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?	False	Not requested on COC.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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.	False	Nitric and sulfuric bottles received with pH above 2
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").	False	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2660-1

Login Number: 2660
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/12/13 05:43 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	3.9 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SL
245.1	Mercury (CVAA)	EPA	TAL SL
1664A	HEM and SGT-HEM	1664A	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
410.4	COD	MCAWW	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL SL

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2660-1	203/204-MSD	Water	06/10/13 17:39	06/11/13 16:30
160-2660-2	TRIP BLANK	Water	06/11/13 00:00	06/11/13 16:30

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-1

Client Sample ID: 203/204-MSD — Lab Sample ID: 160-2660-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	44	J	50	9.0	ug/L	1		624	Total/NA
Acenaphthene	37	J	96	9.6	ug/L	1		625	Total/NA
Dimethyl phthalate	140		96	9.6	ug/L	1		625	Total/NA
Fluoranthene	13	J	96	9.6	ug/L	1		625	Total/NA
Naphthalene	120		96	9.6	ug/L	1		625	Total/NA
Phenanthrene	65	J B	96	9.6	ug/L	1		625	Total/NA
Phenol - DL	10000	*	1900	380	ug/L	20		625	Total/NA
Aluminum	20000		10000	4000	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	610		500	99	ug/L	5		200.7 Rev 4.4	Total/NA
Cobalt	250	J B	2500	200	ug/L	5		200.7 Rev 4.4	Total/NA
Chromium	350	J	500	160	ug/L	5		200.7 Rev 4.4	Total/NA
Iron	1100000		5000	800	ug/L	5		200.7 Rev 4.4	Total/NA
Lead	250	J	500	64	ug/L	5		200.7 Rev 4.4	Total/NA
Thallium	110	J	1000	44	ug/L	5		200.7 Rev 4.4	Total/NA
Zinc	15000		1000	260	ug/L	5		200.7 Rev 4.4	Total/NA
Aluminum	4100	J	10000	4000	ug/L	5		200.7 Rev 4.4	Dissolved
Arsenic	610		500	99	ug/L	5		200.7 Rev 4.4	Dissolved
Chromium	310	J	500	160	ug/L	5		200.7 Rev 4.4	Dissolved
Cobalt	240	J B	2500	200	ug/L	5		200.7 Rev 4.4	Dissolved
Iron	780000		5000	800	ug/L	5		200.7 Rev 4.4	Dissolved
Lead	180	J	500	64	ug/L	5		200.7 Rev 4.4	Dissolved
Thallium	130	J	1000	44	ug/L	5		200.7 Rev 4.4	Dissolved
Zinc	14000		1000	260	ug/L	5		200.7 Rev 4.4	Dissolved
Mercury	2.5	J B	6.0	1.5	ug/L	1		245.1	Total/NA
Mercury	3.7	J B	6.0	1.5	ug/L	1		245.1	Dissolved
Oil & Grease	60		13	3.5	mg/L	1		1664A	Total/NA
Ammonia	750		20	9.0	mg/L	1000		350.1	Total/NA
Chemical Oxygen Demand	51000		1000	500	mg/L	100		410.4	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	2300		50	50	mg/L	1		SM 2540D	Total/NA
pH	6.00	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 160-2660-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-1

Client Sample ID: 203/204-MSD

Lab Sample ID: 160-2660-1

Date Collected: 06/10/13 17:39
Matrix: Water
Date Received: 06/11/13 16:30

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.5	ug/L			06/12/13 22:37	1
1,1,2,2-Tetrachloroethane	ND		50	5.0	ug/L			06/12/13 22:37	1
1,1,2-Trichloroethane	ND		50	7.5	ug/L			06/12/13 22:37	1
1,1-Dichloroethane	ND		50	3.5	ug/L			06/12/13 22:37	1
1,1-Dichloroethene	ND		50	4.0	ug/L			06/12/13 22:37	1
1,2-Dichlorobenzene	ND		50	3.0	ug/L			06/12/13 22:37	1
1,2-Dichloroethane	ND		50	5.0	ug/L			06/12/13 22:37	1
1,2-Dichloropropane	ND		50	5.0	ug/L			06/12/13 22:37	1
1,3-Dichlorobenzene	ND		50	4.0	ug/L			06/12/13 22:37	1
1,4-Dichlorobenzene	ND		50	6.0	ug/L			06/12/13 22:37	1
2-Chloroethyl vinyl ether	ND		100	8.5	ug/L			06/12/13 22:37	1
Benzene	ND		50	3.0	ug/L			06/12/13 22:37	1
Bromodichloromethane	ND		50	4.5	ug/L			06/12/13 22:37	1
Bromoform	ND		50	8.5	ug/L			06/12/13 22:37	1
Bromomethane	ND	*	100	6.5	ug/L			06/12/13 22:37	1
Carbon tetrachloride	ND		50	6.5	ug/L			06/12/13 22:37	1
Chlorobenzene	ND		50	7.5	ug/L			06/12/13 22:37	1
Chloroethane	ND	*	100	5.0	ug/L			06/12/13 22:37	1
Chloroform	ND		50	5.0	ug/L			06/12/13 22:37	1
Chloromethane	ND	*	100	4.0	ug/L			06/12/13 22:37	1
cis-1,2-Dichloroethene	ND		50	4.5	ug/L			06/12/13 22:37	1
cis-1,3-Dichloropropene	ND		50	3.5	ug/L			06/12/13 22:37	1
Dibromochloromethane	ND		50	6.5	ug/L			06/12/13 22:37	1
Ethylbenzene	ND		50	4.5	ug/L			06/12/13 22:37	1
Methylene Chloride	ND		50	5.5	ug/L			06/12/13 22:37	1
Tetrachloroethene	**44**	**J**	50	9.0	ug/L			06/12/13 22:37	1
Toluene	ND		50	3.5	ug/L			06/12/13 22:37	1
trans-1,2-Dichloroethene	ND		50	4.0	ug/L			06/12/13 22:37	1
trans-1,3-Dichloropropene	ND		50	4.0	ug/L			06/12/13 22:37	1
Trichloroethene	ND		50	11	ug/L			06/12/13 22:37	1
Trichlorofluoromethane	ND	*	50	5.5	ug/L			06/12/13 22:37	1
Vinyl chloride	ND	*	100	4.0	ug/L			06/12/13 22:37	1
Xylenes, Total	ND		150	10	ug/L			06/12/13 22:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*71 - 135*		*06/12/13 22:37*	*1*
4-Bromofluorobenzene (Surr)	*108*		*80 - 122*		*06/12/13 22:37*	*1*
Toluene-d8 (Surr)	*108*		*84 - 122*		*06/12/13 22:37*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
bis (2-chloroisopropyl) ether	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
2,4,6-Trichlorophenol	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
2,4-Dichlorophenol	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
2,4-Dimethylphenol	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
2,4-Dinitrophenol	ND		480	19	ug/L		06/12/13 10:54	06/12/13 23:04	1
2,4-Dinitrotoluene	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
2,6-Dinitrotoluene	ND		96	21	ug/L		06/12/13 10:54	06/12/13 23:04	1
2-Chloronaphthalene	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-1

Client Sample ID: 203/204-MSD

Date Collected: 06/10/13 17:39
Date Received: 06/11/13 16:30

Lab Sample ID: 160-2660-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
2-Nitrophenol	ND		96	15	ug/L		06/12/13 10:54	06/12/13 23:04	1
3,3'-Dichlorobenzidine	ND		480	12	ug/L		06/12/13 10:54	06/12/13 23:04	1
4,6-Dinitro-2-methylphenol	ND		480	12	ug/L		06/12/13 10:54	06/12/13 23:04	1
4-Bromophenyl phenyl ether	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
4-Chloro-3-methylphenol	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
4-Chlorophenyl phenyl ether	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
4-Nitrophenol	ND	*	480	19	ug/L		06/12/13 10:54	06/12/13 23:04	1
Acenaphthene	**37**	**J**	96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Acenaphthylene	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Anthracene	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Benzidine	ND		960	190	ug/L		06/12/13 10:54	06/12/13 23:04	1
Benzo[a]anthracene	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Benzo[a]pyrene	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Benzo[b]fluoranthene	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Benzo[g,h,i]perylene	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Benzo[k]fluoranthene	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Bis(2-chloroethoxy)methane	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Bis(2-chloroethyl)ether	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Bis(2-ethylhexyl) phthalate	ND		96	18	ug/L		06/12/13 10:54	06/12/13 23:04	1
Butyl benzyl phthalate	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Chrysene	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Dibenz(a,h)anthracene	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Diethyl phthalate	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Dimethyl phthalate	**140**		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Di-n-butyl phthalate	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Di-n-octyl phthalate	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Fluoranthene	**13**	**J**	96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Fluorene	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Hexachloro-1,3-butadiene	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Hexachlorobenzene	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Hexachlorocyclopentadiene	ND		480	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Hexachloroethane	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Indeno[1,2,3-cd]pyrene	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Isophorone	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Naphthalene	**120**		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Nitrobenzene	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
N-Nitrosodimethylamine	ND		96	19	ug/L		06/12/13 10:54	06/12/13 23:04	1
N-Nitrosodi-n-propylamine	ND		96	14	ug/L		06/12/13 10:54	06/12/13 23:04	1
N-Nitrosodiphenylamine	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Pentachlorophenol	ND		480	12	ug/L		06/12/13 10:54	06/12/13 23:04	1
Phenanthrene	**65**	**J B**	96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1
Pyrene	ND		96	9.6	ug/L		06/12/13 10:54	06/12/13 23:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*84*		*41 - 109*	*06/12/13 10:54*	*06/12/13 23:04*	*1*
2-Fluorobiphenyl (Surr)	*71*		*31 - 103*	*06/12/13 10:54*	*06/12/13 23:04*	*1*
2-Fluorophenol (Surr)	*0*	*X*	*23 - 82*	*06/12/13 10:54*	*06/12/13 23:04*	*1*
Nitrobenzene-d5 (Surr)	*71*		*36 - 98*	*06/12/13 10:54*	*06/12/13 23:04*	*1*
Phenol-d5 (Surr)	*0*	*X*	*14 - 68*	*06/12/13 10:54*	*06/12/13 23:04*	*1*

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-1

Client Sample ID: 203/204-MSD

Date Collected: 06/10/13 17:39
Date Received: 06/11/13 16:30

Lab Sample ID: 160-2660-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14 (Surr)	37	X	43 - 107	06/12/13 10:54	06/12/13 23:04	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	10000	*	1900	380	ug/L		06/12/13 10:54	06/13/13 20:10	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	0	X D	41 - 109	06/12/13 10:54	06/13/13 20:10	20
2-Fluorobiphenyl (Surr)	0	X D	31 - 103	06/12/13 10:54	06/13/13 20:10	20
2-Fluorophenol (Surr)	0	X D	23 - 82	06/12/13 10:54	06/13/13 20:10	20
Nitrobenzene-d5 (Surr)	0	X D	36 - 98	06/12/13 10:54	06/13/13 20:10	20
Phenol-d5 (Surr)	0	X D	14 - 68	06/12/13 10:54	06/13/13 20:10	20
Terphenyl-d14 (Surr)	0	X D	43 - 107	06/12/13 10:54	06/13/13 20:10	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		500	300	ug/L		06/12/13 14:37	06/13/13 11:45	5
Aluminum	20000		10000	4000	ug/L		06/12/13 14:37	06/13/13 11:45	5
Arsenic	610		500	99	ug/L		06/12/13 14:37	06/13/13 11:45	5
Beryllium	ND		250	25	ug/L		06/12/13 14:37	06/13/13 11:45	5
Cadmium	ND		250	23	ug/L		06/12/13 14:37	06/13/13 11:45	5
Cobalt	250	J B	2500	200	ug/L		06/12/13 14:37	06/13/13 11:45	5
Chromium	350	J	500	160	ug/L		06/12/13 14:37	06/13/13 11:45	5
Copper	ND		1300	230	ug/L		06/12/13 14:37	06/13/13 11:45	5
Iron	1100000		5000	800	ug/L		06/12/13 14:37	06/13/13 11:45	5
Nickel	ND		2000	670	ug/L		06/12/13 14:37	06/13/13 11:45	5
Lead	250	J	500	64	ug/L		06/12/13 14:37	06/13/13 11:45	5
Antimony	ND		500	200	ug/L		06/12/13 14:37	06/13/13 11:45	5
Selenium	ND		750	130	ug/L		06/12/13 14:37	06/13/13 11:45	5
Thallium	110	J	1000	44	ug/L		06/12/13 14:37	06/13/13 11:45	5
Zinc	15000		1000	260	ug/L		06/12/13 14:37	06/13/13 11:45	5

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4100	J	10000	4000	ug/L		06/12/13 14:37	06/13/13 12:11	5
Antimony	ND		500	200	ug/L		06/12/13 14:37	06/13/13 12:11	5
Arsenic	610		500	99	ug/L		06/12/13 14:37	06/13/13 12:11	5
Beryllium	ND		250	25	ug/L		06/12/13 14:37	06/13/13 12:11	5
Cadmium	ND		250	23	ug/L		06/12/13 14:37	06/13/13 12:11	5
Chromium	310	J	500	160	ug/L		06/12/13 14:37	06/13/13 12:11	5
Cobalt	240	J B	2500	200	ug/L		06/12/13 14:37	06/13/13 12:11	5
Copper	ND		1300	230	ug/L		06/12/13 14:37	06/13/13 12:11	5
Iron	780000		5000	800	ug/L		06/12/13 14:37	06/13/13 12:11	5
Lead	180	J	500	64	ug/L		06/12/13 14:37	06/13/13 12:11	5
Nickel	ND		2000	670	ug/L		06/12/13 14:37	06/13/13 12:11	5
Selenium	ND		750	130	ug/L		06/12/13 14:37	06/13/13 12:11	5
Silver	ND		500	300	ug/L		06/12/13 14:37	06/13/13 12:11	5
Thallium	130	J	1000	44	ug/L		06/12/13 14:37	06/13/13 12:11	5
Zinc	14000		1000	260	ug/L		06/12/13 14:37	06/13/13 12:11	5

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-1

Client Sample ID: 203/204-MSD

Lab Sample ID: 160-2660-1
Matrix: Water
Date Collected: 06/10/13 17:39
Date Received: 06/11/13 16:30

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.5	J B	6.0	1.5	ug/L		06/17/13 07:34	06/18/13 21:45	1

Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.7	J B	6.0	1.5	ug/L		06/17/13 07:34	06/18/13 22:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	60		13	3.5	mg/L		06/13/13 09:15	06/13/13 09:15	1
Ammonia	750		20	9.0	mg/L			06/13/13 14:38	1000
Chemical Oxygen Demand	51000		1000	500	mg/L			06/17/13 20:44	100

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	2300		50	50	mg/L			06/12/13 21:55	1
pH	6.00	HF	0.100	0.100	SU			06/11/13 16:49	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2660-2
Matrix: Water
Date Collected: 06/11/13 00:00
Date Received: 06/11/13 16:30

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/12/13 21:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/12/13 21:17	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/12/13 21:17	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/12/13 21:17	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/12/13 21:17	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/12/13 21:17	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/12/13 21:17	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/12/13 21:17	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/12/13 21:17	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/12/13 21:17	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/12/13 21:17	1
Benzene	ND		1.0	0.060	ug/L			06/12/13 21:17	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/12/13 21:17	1
Bromoform	ND		1.0	0.17	ug/L			06/12/13 21:17	1
Bromomethane	ND	*	2.0	0.13	ug/L			06/12/13 21:17	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/12/13 21:17	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/12/13 21:17	1
Chloroethane	ND	*	2.0	0.10	ug/L			06/12/13 21:17	1
Chloroform	ND		1.0	0.10	ug/L			06/12/13 21:17	1
Chloromethane	ND	*	2.0	0.080	ug/L			06/12/13 21:17	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/12/13 21:17	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/12/13 21:17	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/12/13 21:17	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/12/13 21:17	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/12/13 21:17	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/12/13 21:17	1
Toluene	ND		1.0	0.070	ug/L			06/12/13 21:17	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/12/13 21:17	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/12/13 21:17	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2660-2

Date Collected: 06/11/13 00:00

Matrix: Water

Date Received: 06/11/13 16:30

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		1.0	0.21	ug/L			06/12/13 21:17	1
Trichlorofluoromethane	ND	*	1.0	0.11	ug/L			06/12/13 21:17	1
Vinyl chloride	ND	*	2.0	0.080	ug/L			06/12/13 21:17	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/12/13 21:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*71 - 135*		*06/12/13 21:17*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 122*		*06/12/13 21:17*	*1*
Toluene-d8 (Surr)	*109*		*84 - 122*		*06/12/13 21:17*	*1*

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-56201/2
Matrix: Water
Analysis Batch: 56201

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/12/13 19:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/12/13 19:30	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/12/13 19:30	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/12/13 19:30	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/12/13 19:30	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/12/13 19:30	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/12/13 19:30	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/12/13 19:30	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/12/13 19:30	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/12/13 19:30	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/12/13 19:30	1
Benzene	ND		1.0	0.060	ug/L			06/12/13 19:30	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/12/13 19:30	1
Bromoform	ND		1.0	0.17	ug/L			06/12/13 19:30	1
Bromomethane	ND		2.0	0.13	ug/L			06/12/13 19:30	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/12/13 19:30	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/12/13 19:30	1
Chloroethane	ND		2.0	0.10	ug/L			06/12/13 19:30	1
Chloroform	ND		1.0	0.10	ug/L			06/12/13 19:30	1
Chloromethane	ND		2.0	0.080	ug/L			06/12/13 19:30	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/12/13 19:30	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/12/13 19:30	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/12/13 19:30	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/12/13 19:30	1
Methylene Chloride	2.42		1.0	0.11	ug/L			06/12/13 19:30	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/12/13 19:30	1
Toluene	ND		1.0	0.070	ug/L			06/12/13 19:30	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/12/13 19:30	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/12/13 19:30	1
Trichloroethene	ND		1.0	0.21	ug/L			06/12/13 19:30	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/12/13 19:30	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/12/13 19:30	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/12/13 19:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 135*		*06/12/13 19:30*	*1*
4-Bromofluorobenzene (Surr)	*107*		*80 - 122*		*06/12/13 19:30*	*1*
Toluene-d8 (Surr)	*115*		*84 - 122*		*06/12/13 19:30*	*1*

Lab Sample ID: LCS 160-56201/4
Matrix: Water
Analysis Batch: 56201

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	11.0		ug/L		110	82 - 127
1,1,2,2-Tetrachloroethane	10.0	9.31		ug/L		93	69 - 130
1,1,2-Trichloroethane	10.0	10.5		ug/L		105	78 - 122
1,1-Dichloroethane	10.0	11.3		ug/L		113	82 - 125

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-56201/4
Matrix: Water
Analysis Batch: 56201

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	10.9		ug/L		109	77 - 127
1,2-Dichlorobenzene	10.0	9.85		ug/L		98	83 - 121
1,2-Dichloroethane	10.0	11.0		ug/L		110	78 - 127
1,2-Dichloropropane	10.0	9.48		ug/L		95	81 - 124
1,3-Dichlorobenzene	10.0	9.58		ug/L		96	85 - 121
1,4-Dichlorobenzene	10.0	9.64		ug/L		96	83 - 116
2-Chloroethyl vinyl ether	10.0	9.11		ug/L		91	34 - 140
Benzene	10.0	9.78		ug/L		98	84 - 124
Bromodichloromethane	10.0	10.0		ug/L		100	81 - 127
Bromoform	10.0	9.68		ug/L		97	78 - 138
Bromomethane	10.0	5.65		ug/L		57	48 - 162
Carbon tetrachloride	10.0	11.0		ug/L		110	79 - 132
Chlorobenzene	10.0	9.63		ug/L		96	85 - 118
Chloroethane	10.0	5.64	*	ug/L		56	71 - 132
Chloroform	10.0	10.5		ug/L		105	82 - 124
Chloromethane	10.0	5.45	*	ug/L		54	68 - 136
cis-1,2-Dichloroethene	10.0	10.4		ug/L		104	83 - 123
cis-1,3-Dichloropropene	10.0	9.06		ug/L		91	79 - 132
Dibromochloromethane	10.0	10.5		ug/L		105	81 - 129
Ethylbenzene	10.0	9.55		ug/L		95	85 - 125
Methylene Chloride	10.0	12.6		ug/L		126	70 - 127
Tetrachloroethene	10.0	10.5		ug/L		105	76 - 129
Toluene	10.0	10.1		ug/L		101	83 - 127
trans-1,2-Dichloroethene	10.0	11.4		ug/L		114	78 - 122
trans-1,3-Dichloropropene	10.0	9.76		ug/L		98	83 - 130
Trichloroethene	10.0	9.61		ug/L		96	81 - 123
Trichlorofluoromethane	10.0	5.68	*	ug/L		57	72 - 135
Vinyl chloride	10.0	5.82	*	ug/L		58	72 - 132
Xylenes, Total	30.0	25.8		ug/L		86	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*114*		*71 - 135*
4-Bromofluorobenzene (Surr)	*95*		*80 - 122*
Toluene-d8 (Surr)	*102*		*84 - 122*

Lab Sample ID: LCSD 160-56201/5
Matrix: Water
Analysis Batch: 56201

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	10.0	9.84		ug/L		98	82 - 127	11	20
1,1,2,2-Tetrachloroethane	10.0	9.73		ug/L		97	69 - 130	4	20
1,1,2-Trichloroethane	10.0	9.90		ug/L		99	78 - 122	6	20
1,1-Dichloroethane	10.0	9.68		ug/L		97	82 - 125	15	20
1,1-Dichloroethene	10.0	9.41		ug/L		94	77 - 127	15	20
1,2-Dichlorobenzene	10.0	10.0		ug/L		100	83 - 121	2	20
1,2-Dichloroethane	10.0	10.3		ug/L		103	78 - 127	6	20
1,2-Dichloropropane	10.0	9.88		ug/L		99	81 - 124	4	20

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-56201/5
Matrix: Water
Analysis Batch: 56201

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	10.0	9.97		ug/L		100	85 - 121	4	20
1,4-Dichlorobenzene	10.0	10.0		ug/L		100	83 - 116	4	20
2-Chloroethyl vinyl ether	10.0	9.12		ug/L		91	34 - 140	0	20
Benzene	10.0	9.88		ug/L		99	84 - 124	1	20
Bromodichloromethane	10.0	10.1		ug/L		101	81 - 127	1	20
Bromoform	10.0	9.75		ug/L		98	78 - 138	1	20
Bromomethane	10.0	10.2	*	ug/L		102	48 - 162	58	20
Carbon tetrachloride	10.0	9.88		ug/L		99	79 - 132	11	20
Chlorobenzene	10.0	9.90		ug/L		99	85 - 118	3	20
Chloroethane	10.0	9.57	*	ug/L		96	71 - 132	52	20
Chloroform	10.0	9.76		ug/L		98	82 - 124	7	20
Chloromethane	10.0	9.54	*	ug/L		95	68 - 136	55	20
cis-1,2-Dichloroethene	10.0	9.67		ug/L		97	83 - 123	7	20
cis-1,3-Dichloropropene	10.0	9.46		ug/L		95	79 - 132	4	20
Dibromochloromethane	10.0	10.1		ug/L		101	81 - 129	4	20
Ethylbenzene	10.0	10.1		ug/L		101	85 - 125	5	20
Methylene Chloride	10.0	10.6		ug/L		106	70 - 127	17	20
Tetrachloroethene	10.0	10.1		ug/L		101	76 - 129	4	20
Toluene	10.0	9.71		ug/L		97	83 - 127	4	20
trans-1,2-Dichloroethene	10.0	9.58		ug/L		96	78 - 122	17	20
trans-1,3-Dichloropropene	10.0	9.24		ug/L		92	83 - 130	5	20
Trichloroethene	10.0	9.94		ug/L		99	81 - 123	3	20
Trichlorofluoromethane	10.0	9.67	*	ug/L		97	72 - 135	52	20
Vinyl chloride	10.0	10.0	*	ug/L		100	72 - 132	53	20
Xylenes, Total	30.0	31.3		ug/L		104	70 - 130	19	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 135*
4-Bromofluorobenzene (Surr)	*98*		*80 - 122*
Toluene-d8 (Surr)	*95*		*84 - 122*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-55558/1-A
Matrix: Water
Analysis Batch: 55734

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 55558

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
bis (2-chloroisopropyl) ether	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
2,4,6-Trichlorophenol	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
2,4-Dichlorophenol	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
2,4-Dimethylphenol	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
2,4-Dinitrophenol	ND		50	2.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
2,4-Dinitrotoluene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
2,6-Dinitrotoluene	ND		10	2.2	ug/L		06/12/13 10:54	06/12/13 18:04	1
2-Chloronaphthalene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
2-Chlorophenol	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-55558/1-A
Matrix: Water
Analysis Batch: 55734

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 55558

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		10	1.5	ug/L		06/12/13 10:54	06/12/13 18:04	1
3,3'-Dichlorobenzidine	ND		50	1.3	ug/L		06/12/13 10:54	06/12/13 18:04	1
4,6-Dinitro-2-methylphenol	ND		50	1.3	ug/L		06/12/13 10:54	06/12/13 18:04	1
4-Bromophenyl phenyl ether	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
4-Chlorophenyl phenyl ether	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
4-Nitrophenol	ND		50	2.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Acenaphthene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Acenaphthylene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Anthracene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Benzidine	ND		100	20	ug/L		06/12/13 10:54	06/12/13 18:04	1
Benzo[a]anthracene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Benzo[a]pyrene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Benzo[b]fluoranthene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Benzo[g,h,i]perylene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Benzo[k]fluoranthene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Bis(2-chloroethoxy)methane	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Bis(2-chloroethyl)ether	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Bis(2-ethylhexyl) phthalate	ND		10	1.9	ug/L		06/12/13 10:54	06/12/13 18:04	1
Butyl benzyl phthalate	1.95	J	10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Chrysene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Dibenz(a,h)anthracene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Diethyl phthalate	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Dimethyl phthalate	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Di-n-butyl phthalate	1.44	J	10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Di-n-octyl phthalate	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Fluoranthene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Fluorene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Hexachloro-1,3-butadiene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Hexachlorobenzene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Hexachlorocyclopentadiene	ND		50	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Hexachloroethane	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Indeno[1,2,3-cd]pyrene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Isophorone	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Naphthalene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Nitrobenzene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/L		06/12/13 10:54	06/12/13 18:04	1
N-Nitrosodiphenylamine	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Pentachlorophenol	ND		50	1.3	ug/L		06/12/13 10:54	06/12/13 18:04	1
Phenanthrene	1.27	J	10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Phenol	ND		10	2.0	ug/L		06/12/13 10:54	06/12/13 18:04	1
Pyrene	ND		10	1.0	ug/L		06/12/13 10:54	06/12/13 18:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*73*		*41 - 109*	*06/12/13 10:54*	*06/12/13 18:04*	*1*
2-Fluorobiphenyl (Surr)	*71*		*31 - 103*	*06/12/13 10:54*	*06/12/13 18:04*	*1*
2-Fluorophenol (Surr)	*62*		*23 - 82*	*06/12/13 10:54*	*06/12/13 18:04*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-55558/1-A
Matrix: Water
Analysis Batch: 55734

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 55558

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	71		36 - 98	06/12/13 10:54	06/12/13 18:04	1
Phenol-d5 (Surr)	50		14 - 68	06/12/13 10:54	06/12/13 18:04	1
Terphenyl-d14 (Surr)	76		43 - 107	06/12/13 10:54	06/12/13 18:04	1

Lab Sample ID: LCS 160-55558/2-A
Matrix: Water
Analysis Batch: 55734

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 55558

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	99.9	74.1		ug/L		74	44 - 84
bis (2-chloroisopropyl) ether	100	69.7		ug/L		70	42 - 102
2,4,6-Trichlorophenol	100	75.2		ug/L		75	54 - 105
2,4-Dichlorophenol	100	66.9		ug/L		67	46 - 103
2,4-Dimethylphenol	100	53.9		ug/L		54	40 - 105
2,4-Dinitrophenol	100	70.3		ug/L		70	42 - 146
2,4-Dinitrotoluene	100	84.0		ug/L		84	62 - 101
2,6-Dinitrotoluene	100	80.2		ug/L		80	62 - 103
2-Chloronaphthalene	100	78.0		ug/L		78	45 - 95
2-Chlorophenol	100	64.8		ug/L		65	56 - 93
2-Nitrophenol	100	70.9		ug/L		71	51 - 98
3,3'-Dichlorobenzidine	100	55.4		ug/L		55	26 - 77
4,6-Dinitro-2-methylphenol	100	88.3		ug/L		88	61 - 120
4-Bromophenyl phenyl ether	100	88.8		ug/L		89	54 - 111
4-Chloro-3-methylphenol	100	67.1		ug/L		67	45 - 106
4-Chlorophenyl phenyl ether	100	80.0		ug/L		80	53 - 100
4-Nitrophenol	100	54.4	*	ug/L		54	25 - 45
Acenaphthene	100	76.1		ug/L		76	51 - 89
Acenaphthylene	100	75.3		ug/L		75	46 - 98
Anthracene	100	79.8		ug/L		80	54 - 111
Benzo[a]anthracene	100	92.8		ug/L		93	68 - 108
Benzo[a]pyrene	100	81.8		ug/L		82	55 - 108
Benzo[b]fluoranthene	100	85.8		ug/L		86	57 - 114
Benzo[g,h,i]perylene	100	98.9		ug/L		99	58 - 120
Benzo[k]fluoranthene	100	89.3		ug/L		89	59 - 112
Bis(2-chloroethoxy)methane	100	68.4		ug/L		68	53 - 99
Bis(2-chloroethyl)ether	100	65.4		ug/L		65	50 - 97
Bis(2-ethylhexyl) phthalate	100	79.6		ug/L		80	54 - 116
Butyl benzyl phthalate	100	82.0		ug/L		82	52 - 126
Chrysene	100	80.7		ug/L		81	58 - 112
Dibenz(a,h)anthracene	100	100		ug/L		100	56 - 122
Diethyl phthalate	100	78.4		ug/L		78	60 - 101
Dimethyl phthalate	100	80.3		ug/L		80	57 - 101
Di-n-butyl phthalate	100	82.1		ug/L		82	57 - 108
Di-n-octyl phthalate	100	79.0		ug/L		79	57 - 118
Fluoranthene	100	84.4		ug/L		84	55 - 114
Fluorene	100	77.3		ug/L		77	59 - 96
Hexachloro-1,3-butadiene	100	76.0		ug/L		76	36 - 84
Hexachlorobenzene	100	92.1		ug/L		92	56 - 110

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-55558/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55734 — **Prep Batch: 55558**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	100	76.0		ug/L		76	16 - 86
Hexachloroethane	100	67.6		ug/L		68	40 - 77
Indeno[1,2,3-cd]pyrene	100	100		ug/L		100	55 - 124
Isophorone	100	54.2		ug/L		54	50 - 107
Naphthalene	100	69.8		ug/L		70	42 - 82
Nitrobenzene	100	71.0		ug/L		71	48 - 96
N-Nitrosodi-n-propylamine	100	70.6		ug/L		71	57 - 113
Pentachlorophenol	100	79.6		ug/L		80	56 - 126
Phenanthrene	100	84.3		ug/L		84	54 - 110
Phenol	100	45.0	*	ug/L		45	27 - 43
Pyrene	100	80.8		ug/L		81	53 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*92*		*41 - 109*
2-Fluorobiphenyl (Surr)	*79*		*31 - 103*
2-Fluorophenol (Surr)	*62*		*23 - 82*
Nitrobenzene-d5 (Surr)	*75*		*36 - 98*
Phenol-d5 (Surr)	*48*		*14 - 68*
Terphenyl-d14 (Surr)	*90*		*43 - 107*

Lab Sample ID: LCSD 160-55558/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55734 — **Prep Batch: 55558**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	99.9	77.2		ug/L		77	44 - 84	4	20
bis (2-chloroisopropyl) ether	100	72.3		ug/L		72	42 - 102	4	20
2,4,6-Trichlorophenol	100	75.0		ug/L		75	54 - 105	0	20
2,4-Dichlorophenol	100	68.0		ug/L		68	46 - 103	2	20
2,4-Dimethylphenol	100	50.2		ug/L		50	40 - 105	7	20
2,4-Dinitrophenol	100	72.9		ug/L		73	42 - 146	4	20
2,4-Dinitrotoluene	100	83.9		ug/L		84	62 - 101	0	20
2,6-Dinitrotoluene	100	79.7		ug/L		80	62 - 103	1	20
2-Chloronaphthalene	100	80.0		ug/L		80	45 - 95	3	20
2-Chlorophenol	100	66.7		ug/L		67	56 - 93	3	20
2-Nitrophenol	100	73.6		ug/L		74	51 - 98	4	20
3,3'-Dichlorobenzidine	100	58.9		ug/L		59	26 - 77	6	20
4,6-Dinitro-2-methylphenol	100	89.5		ug/L		90	61 - 120	1	20
4-Bromophenyl phenyl ether	100	89.7		ug/L		90	54 - 111	1	20
4-Chloro-3-methylphenol	100	66.4		ug/L		66	45 - 106	1	20
4-Chlorophenyl phenyl ether	100	80.3		ug/L		80	53 - 100	0	20
4-Nitrophenol	100	57.5	*	ug/L		58	25 - 45	6	20
Acenaphthene	100	77.4		ug/L		77	51 - 89	2	20
Acenaphthylene	100	76.6		ug/L		77	46 - 98	2	20
Anthracene	100	80.4		ug/L		80	54 - 111	1	20
Benzo[a]anthracene	100	92.9		ug/L		93	68 - 108	0	20
Benzo[a]pyrene	100	82.9		ug/L		83	55 - 108	1	20
Benzo[b]fluoranthene	100	83.7		ug/L		84	57 - 114	2	20

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-55558/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55734 — **Prep Batch: 55558**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[g,h,i]perylene	100	98.6		ug/L		99	58 - 120	0	20
Benzo[k]fluoranthene	100	93.4		ug/L		93	59 - 112	5	20
Bis(2-chloroethoxy)methane	100	70.2		ug/L		70	53 - 99	3	20
Bis(2-chloroethyl)ether	100	67.8		ug/L		68	50 - 97	4	20
Bis(2-ethylhexyl) phthalate	100	79.8		ug/L		80	54 - 116	0	20
Butyl benzyl phthalate	100	81.1		ug/L		81	52 - 126	1	20
Chrysene	100	81.3		ug/L		81	58 - 112	1	20
Dibenz(a,h)anthracene	100	99.3		ug/L		99	56 - 122	1	20
Diethyl phthalate	100	77.1		ug/L		77	60 - 101	2	20
Dimethyl phthalate	100	79.5		ug/L		80	57 - 101	1	20
Di-n-butyl phthalate	100	81.3		ug/L		81	57 - 108	1	20
Di-n-octyl phthalate	100	79.6		ug/L		80	57 - 118	1	20
Fluoranthene	100	84.3		ug/L		84	55 - 114	0	20
Fluorene	100	77.8		ug/L		78	59 - 96	1	20
Hexachloro-1,3-butadiene	100	80.2		ug/L		80	36 - 84	5	20
Hexachlorobenzene	100	91.4		ug/L		91	56 - 110	1	20
Hexachlorocyclopentadiene	100	80.6		ug/L		81	16 - 86	6	20
Hexachloroethane	100	72.3		ug/L		72	40 - 77	7	20
Indeno[1,2,3-cd]pyrene	100	98.8		ug/L		99	55 - 124	1	20
Isophorone	100	55.6		ug/L		56	50 - 107	3	20
Naphthalene	100	71.9		ug/L		72	42 - 82	3	20
Nitrobenzene	100	73.0		ug/L		73	48 - 96	3	20
N-Nitrosodi-n-propylamine	100	73.1		ug/L		73	57 - 113	4	20
Pentachlorophenol	100	80.4		ug/L		80	56 - 126	1	20
Phenanthrene	100	83.1		ug/L		83	54 - 110	1	20
Phenol	100	48.7	*	ug/L		49	27 - 43	8	20
Pyrene	100	82.0		ug/L		82	53 - 117	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*92*		*41 - 109*
2-Fluorobiphenyl (Surr)	*81*		*31 - 103*
2-Fluorophenol (Surr)	*66*		*23 - 82*
Nitrobenzene-d5 (Surr)	*77*		*36 - 98*
Phenol-d5 (Surr)	*52*		*14 - 68*
Terphenyl-d14 (Surr)	*81*		*43 - 107*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 160-55605/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55703 — **Prep Batch: 55605**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		06/12/13 14:37	06/13/13 11:13	1
Arsenic	ND		10	2.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Beryllium	ND		5.0	0.50	ug/L		06/12/13 14:37	06/13/13 11:13	1
Cadmium	ND		5.0	0.45	ug/L		06/12/13 14:37	06/13/13 11:13	1
Chromium	ND		10	3.1	ug/L		06/12/13 14:37	06/13/13 11:13	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 160-55605/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55703 — **Prep Batch: 55605**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	4.90	J	50	4.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Copper	ND		25	4.6	ug/L		06/12/13 14:37	06/13/13 11:13	1
Iron	ND		100	16	ug/L		06/12/13 14:37	06/13/13 11:13	1
Lead	ND		10	1.3	ug/L		06/12/13 14:37	06/13/13 11:13	1
Nickel	ND		40	13	ug/L		06/12/13 14:37	06/13/13 11:13	1
Antimony	ND		10	4.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Selenium	ND		15	2.7	ug/L		06/12/13 14:37	06/13/13 11:13	1
Silver	ND		10	6.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Thallium	ND		20	0.88	ug/L		06/12/13 14:37	06/13/13 11:13	1
Zinc	ND		20	5.2	ug/L		06/12/13 14:37	06/13/13 11:13	1

Lab Sample ID: LCS 160-55605/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55703 — **Prep Batch: 55605**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	10100		ug/L		101	85 - 115
Arsenic	1000	1030		ug/L		103	85 - 115
Beryllium	1000	1020		ug/L		102	85 - 115
Cadmium	1000	1040		ug/L		104	85 - 115
Chromium	1000	1050		ug/L		105	85 - 115
Cobalt	1000	1080		ug/L		108	85 - 115
Copper	1000	1040		ug/L		104	85 - 115
Iron	10000	10500		ug/L		105	85 - 115
Lead	1000	1070		ug/L		107	85 - 115
Nickel	1000	1070		ug/L		107	85 - 115
Antimony	500	522		ug/L		104	85 - 115
Selenium	1000	1040		ug/L		104	85 - 115
Silver	100	106		ug/L		106	85 - 115
Thallium	200	230		ug/L		115	85 - 115
Zinc	1000	1040		ug/L		104	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 160-56207/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56516 — **Prep Batch: 56207**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	4.40	J	6.0	1.5	ug/L		06/17/13 07:34	06/18/13 21:42	1

Lab Sample ID: LCS 160-56207/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56516 — **Prep Batch: 56207**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	150	157		ug/L		105	85 - 115

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 160-2660-1 MS — **Client Sample ID: 203/204-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56516 — **Prep Batch: 56207**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.5	J B	150	152		ug/L		100	70 - 130

Lab Sample ID: 160-2660-1 MSD — **Client Sample ID: 203/204-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56516 — **Prep Batch: 56207**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	2.5	J B	150	154		ug/L		101	70 - 130	1	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 480-123715/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123718 — **Prep Batch: 123715**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/13/13 09:15	06/13/13 09:15	1

Lab Sample ID: LCS 480-123715/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123718 — **Prep Batch: 123715**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	35.0		mg/L		88	78 - 114

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-123849/75 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123849

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/13/13 14:21	1

Lab Sample ID: LCS 480-123849/76 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123849

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.01		mg/L		101	90 - 110

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-1

Method: 410.4 - COD

Lab Sample ID: MB 480-124417/3
Matrix: Water
Analysis Batch: 124417

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			06/17/13 20:44	1

Lab Sample ID: LCS 480-124417/4
Matrix: Water
Analysis Batch: 124417

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	188		mg/L		94	90 - 110

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-123616/1
Matrix: Water
Analysis Batch: 123616

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			06/12/13 21:55	1

Lab Sample ID: LCS 480-123616/2
Matrix: Water
Analysis Batch: 123616

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	213	200		mg/L		94	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: 160-2660-1 DU
Matrix: Water
Analysis Batch: 55414

Client Sample ID: 203/204-MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	6.00	HF	6.000		SU		0	5

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-1

GC/MS VOA

Analysis Batch: 56201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2660-1	203/204-MSD	Total/NA	Water	624	
160-2660-2	TRIP BLANK	Total/NA	Water	624	
LCS 160-56201/4	Lab Control Sample	Total/NA	Water	624	
LCSD 160-56201/5	Lab Control Sample Dup	Total/NA	Water	624	
MB 160-56201/2	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 55558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2660-1	203/204-MSD	Total/NA	Water	625	
160-2660-1 - DL	203/204-MSD	Total/NA	Water	625	
LCS 160-55558/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 160-55558/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 160-55558/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 55734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2660-1	203/204-MSD	Total/NA	Water	625	55558
LCS 160-55558/2-A	Lab Control Sample	Total/NA	Water	625	55558
LCSD 160-55558/3-A	Lab Control Sample Dup	Total/NA	Water	625	55558
MB 160-55558/1-A	Method Blank	Total/NA	Water	625	55558

Analysis Batch: 55953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2660-1 - DL	203/204-MSD	Total/NA	Water	625	55558

Metals

Prep Batch: 55605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2660-1	203/204-MSD	Total/NA	Water	200.7/200.8	
160-2660-1	203/204-MSD	Dissolved	Water	200.7/200.8	
LCS 160-55605/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
MB 160-55605/1-A	Method Blank	Total/NA	Water	200.7/200.8	

Analysis Batch: 55703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2660-1	203/204-MSD	Total/NA	Water	200.7 Rev 4.4	55605
160-2660-1	203/204-MSD	Dissolved	Water	200.7 Rev 4.4	55605
LCS 160-55605/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	55605
MB 160-55605/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	55605

Prep Batch: 56207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2660-1	203/204-MSD	Total/NA	Water	245.1	
160-2660-1	203/204-MSD	Dissolved	Water	245.1	
160-2660-1 MS	203/204-MSD	Total/NA	Water	245.1	
160-2660-1 MSD	203/204-MSD	Total/NA	Water	245.1	
LCS 160-56207/2-A	Lab Control Sample	Total/NA	Water	245.1	

Metals (Continued)

Prep Batch: 56207 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 160-56207/1-A	Method Blank	Total/NA	Water	245.1	

Analysis Batch: 56516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2660-1	203/204-MSD	Total/NA	Water	245.1	56207
160-2660-1	203/204-MSD	Dissolved	Water	245.1	56207
160-2660-1 MS	203/204-MSD	Total/NA	Water	245.1	56207
160-2660-1 MSD	203/204-MSD	Total/NA	Water	245.1	56207
LCS 160-56207/2-A	Lab Control Sample	Total/NA	Water	245.1	56207
MB 160-56207/1-A	Method Blank	Total/NA	Water	245.1	56207

General Chemistry

Analysis Batch: 55414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2660-1	203/204-MSD	Total/NA	Water	SM 4500 H+ B	
160-2660-1 DU	203/204-MSD	Total/NA	Water	SM 4500 H+ B	
LCS 160-55414/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 123616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2660-1	203/204-MSD	Total/NA	Water	SM 2540D	
LCS 480-123616/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-123616/1	Method Blank	Total/NA	Water	SM 2540D	

Prep Batch: 123715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2660-1	203/204-MSD	Total/NA	Water	1664A	
LCS 480-123715/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 480-123715/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 123718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2660-1	203/204-MSD	Total/NA	Water	1664A	123715
LCS 480-123715/2-A	Lab Control Sample	Total/NA	Water	1664A	123715
MB 480-123715/1-A	Method Blank	Total/NA	Water	1664A	123715

Analysis Batch: 123849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2660-1	203/204-MSD	Total/NA	Water	350.1	
LCS 480-123849/76	Lab Control Sample	Total/NA	Water	350.1	
MB 480-123849/75	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 124417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2660-1	203/204-MSD	Total/NA	Water	410.4	
LCS 480-124417/4	Lab Control Sample	Total/NA	Water	410.4	
MB 480-124417/3	Method Blank	Total/NA	Water	410.4	

Surrogate Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(71-135)	(80-122)	(84-122)
160-2660-1	203/204-MSD	97	108	108
160-2660-2	TRIP BLANK	98	102	109
LCS 160-56201/4	Lab Control Sample	114	95	102
LCSD 160-56201/5	Lab Control Sample Dup	100	98	95
MB 160-56201/2	Method Blank	100	107	115

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(41-109)	(31-103)	(23-82)	(36-98)	(14-68)	(43-107)
160-2660-1	203/204-MSD	84	71	0 X	71	0 X	37 X
160-2660-1 - DL	203/204-MSD	0 X D	0 X D	0 X D	0 X D	0 X D	0 X D
LCS 160-55558/2-A	Lab Control Sample	92	79	62	75	48	90
LCSD 160-55558/3-A	Lab Control Sample Dup	92	81	66	77	52	81
MB 160-55558/1-A	Method Blank	73	71	62	71	50	76

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2660-2
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/19/2013 3:17:24 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

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www.testamericainc.com

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.

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Case Narrative

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-2

Job ID: 160-2660-2

Laboratory: TestAmerica St. Louis

Narrative

Job Narrative
160-2660-2

Comments
No additional comments.

Receipt
The samples were received on 6/11/2013 4:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0º C.

General Chemistry
Method(s) SM 5210B: The following sample(s) was received outside of holding time: 203/204-MSD (160-2660-1).

Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results are reported. (USB 480-123611/1)

Method(s) SM 5210B: All of the dilutions overdepleted for the following sample(s): 203/204-MSD (160-2660-1). Only a "greater than" result could be calculated from the most dilute preparation.

No other analytical or quality issues were noted.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING/ED GALBRAITH	BILL ABERNATHY/FEI	6/10/13	197672
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	
816-285-8410	314-502-1299		Page 1 of 1

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State): BRIDGETON LF/MISSOURI

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.:

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	624-VOC	1664A-HEM	5210B-BOD	625-SVOC	300.7 245.1 T	200.7 245.1 D	2540D-TSS	410.4 350.1	pH				Special Instructions/ Conditions of Receipt
203/204-MSD	6/10/13	1739		✓			4	1	1	4			3	1	1	1	1	1	1	1	✓				
TRIP BLANK	—	—		✓						2															

Analysis (Attach list if more space is needed)

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 Days

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Da R Fey	6/11/13	16:30	1. Received By: [signature]	6/11/13	1630
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Phone (314) 298-8566 Fax (314) 298-8757

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)
Client Contact: Shipping/Receiving
Company: TestAmerica Laboratories, Inc.
Address: 10 Hazelwood Drive, ,
City: Amherst
State, Zip: NY, 14228-2298
Phone: 716-691-2600(Tel) 716-691-7991(Fax)
Email:
Project Name: Bridgeton Landfill
Site:

Sampler:
Phone:
Due Date Requested: 6/17/2013
TAT Requested (days):
PO #:
WO #:
Project #: 16002458
SSOW#:

Lab PM: Starman, Erika K
E-Mail: erika.starman@testamericainc.com
Carrier Tracking No(s):
COC No: 160-11203.1
Page: Page 1 of 1
Job #: 160-2660-1

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastefoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540D	350.1/ (MOD) Local Method	410.4	5210B/ (MOD) Local Method	1664A_Calc/1664A_SPE	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
203/204-MSD (160-2660-1)	6/10/13	17:39 Central		Water			X	X	X	X	X	4	

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2SO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - ph 4-5
Z - other (specify)
Other:

Possible Hazard Identification
Unconfirmed
Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	6/11/13 1700	TA	[signature]	6/12/13 0900	TA BUFFALO

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: #1 3.9

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2660-2

Login Number: 2660

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
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	
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?	False	Not requested on COC.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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.	False	Nitric and sulfuric bottles received with pH above 2
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").	False	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2660-2

Login Number: 2660
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/12/13 05:43 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	3.9 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Definitions/Glossary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-2

Qualifiers

General Chemistry

Qualifier	Qualifier Description
b	Result Detected in the Unseeded Control blank (USB).
H	Sample was prepped or analyzed beyond the specified holding time

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-2

Method	Method Description	Protocol	Laboratory
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2660-1	203/204-MSD	Water	06/10/13 17:39	06/11/13 16:30

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-2

Client Sample ID: 203/204-MSD

Lab Sample ID: 160-2660-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	>2333.40	H b	2.0	2.0	mg/L	1		SM 5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-2

Client Sample ID: 203/204-MSD

Lab Sample ID: 160-2660-1

Date Collected: 06/10/13 17:39

Matrix: Water

Date Received: 06/11/13 16:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	>2333.40	H b	2.0	2.0	mg/L			06/12/13 20:01	1

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-2

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-123611/1 USB
Matrix: Water
Analysis Batch: 123611

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			06/12/13 20:01	1

Lab Sample ID: LCS 480-123611/2
Matrix: Water
Analysis Batch: 123611

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	200		mg/L		101	85 - 115		

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2660-2

General Chemistry

Analysis Batch: 123611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2660-1	203/204-MSD	Total/NA	Water	SM 5210B	
LCS 480-123611/2	Lab Control Sample	Total/NA	Water	SM 5210B	
USB 480-123611/1 USB	Method Blank	Total/NA	Water	SM 5210B	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2671-1
Client Project/Site: Bridgeton Landfill
Revision: 1

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/27/2013 4:03:04 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

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Job ID: 160-2671-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2671-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

Revision 1 - LCS/LCSD list updated to report all analytes from the reported list.

RECEIPT

The samples were received on 6/12/2013 1:27 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples 207/208 MSD (160-2671-1) and TRIP BLANK (160-2671-2) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA Method 624. The samples were analyzed on 06/12/2013.

Methylene Chloride was detected in method blank MB 160-56201/2 at a level exceeding the reporting limit. None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed

Chloroethane, Chloromethane, Vinyl chloride and Trichlorofluoromethane failed the recovery criteria low for LCS 160-56201/4.

Job ID: 160-2671-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Bromomethane, Chloroethane, Chloromethane, Vinyl chloride and Trichlorofluoromethane exceeded the RPD limit for LCSD 160-56201/5. The laboratory control sample duplicate (LCSD) for batch 56201 recovered within QC limits indicating a poor purge for the LCS. Since the failed target analytes had passing QC for the CCV and LCSD, re-analysis was not warranted.

For batch 56201 and as determined by sample screening, the associated samples did not have a MS/MSD analyzed. The associated samples were all either tripblanks, which do not warrant a MS/MSD analysis, or diluted at 50x. A LCS/LCSD were analyzed and the LCSD had passing QC.

In batch 56201, the following samples had pH <2 even with HCl preservation. The samples were all analyzed within the 7 day hold time allowable for unpresreved samples.

The following samples were diluted due to the abundance of non-target analytes: 207/208 MSD (160-2671-1). Elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the VOCs analysis.

All other quality control parameters were within the acceptance limits.

Organic Prep
Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 56272. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Due to the matrix, the following sample(s) could not be concentrated to the final method required volume: 207/208 MSD (160-2671-1). The reporting limits (RLs) are elevated proportionately.

The following samples formed emulsions during the extraction procedure: 207/208 MSD (160-2671-1). The emulsions were broken up using centrifuge.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 207/208 MSD (160-2671-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA Method 625. The samples were prepared on 06/17/2013 and analyzed on 06/18/2013.

2-Chlorophenol, 4-Nitrophenol, Isophorone and Phenol failed the recovery criteria low for LCS 160-56272/2-A and LCSD 160-56272/3-A. There was insufficient sample to perform a re-extraction or re-analysis; therefore, the data have been reported.

The following samples were diluted to bring the concentration of target analytes within the calibration range: 207/208 MSD (160-2671-1) [20X. Elevated reporting limits (RLs) are provided.

Due to the level of dilution required for the following sample(s), surrogate recoveries are not reported: 207/208 MSD (160-2671-1). Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required. The samples shows evidence of matrix interference; therefore, re-extraction and/or re-analysis was not performed.

No other difficulties were encountered during the SVOC analysis.

All other quality control parameters were within the acceptance limits.

ICP total and dissolved
Sample 207/208 MSD (160-2671-1) was analyzed for ICP in accordance with EPA Method 200.7, Rev. 4.4. The samples were prepared on 06/12/2013 and analyzed on 06/13/2013.

Cobalt was detected in method blank MB 160-55605/1-A at a level that was above the method detection limit but below the reporting limit.

The following samples were diluted due to the nature of the sample matrix. The sample digestates were dark yellow in color: 207/208 MSD (160-2671-1)[5X]. Elevated reporting limits (RLs) are provided.

Job ID: 160-2671-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

No other difficulties were encountered during the ICP analysis.

All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)
Sample 207/208 MSD (160-2671-1) was analyzed for dissolved mercury (CVAA) in accordance with EPA Method 245.1. The samples were prepared on 06/17/2013 and analyzed on 06/18/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

MERCURY
Sample 207/208 MSD (160-2671-1) was analyzed for mercury in accordance with EPA Method 245.1. The samples were prepared on 06/17/2013 and analyzed on 06/18/2013.

Mercury was detected in method blank MB 160-56207/1-A at a level that was above the method detection limit but below the reporting limit.

No other difficulties were encountered during the mercury analysis.

All other quality control parameters were within the acceptance limits.

SGT-HEM
Sample 207/208 MSD (160-2671-1) was analyzed for SGT-HEM in accordance with EPA Method 1664A. The samples were prepared and analyzed on 06/14/2013.

No difficulties were encountered during the SGT-HEM analysis.

All quality control parameters were within the acceptance limits.

TOTAL SUSPENDED SOLIDS
Sample 207/208 MSD (160-2671-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 06/13/2013.

Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: 207/208 MSD (160-2671-1). The reporting limits (RLs) have been adjusted proportionately.

No difficulties were encountered during the TSS analysis.

All quality control parameters were within the acceptance limits.

AMMONIA
Sample 207/208 MSD (160-2671-1) was analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/14/2013.

Sample 207/208 MSD (160-2671-1)[1000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the ammonia analysis.

All other quality control parameters were within the acceptance limits.

CHEMICAL OXYGEN DEMAND
Sample 207/208 MSD (160-2671-1) was analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 06/17/2013.

Job ID: 160-2671-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Sample 207/208 MSD (160-2671-1)[100X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the COD analysis.

All quality control parameters were within the acceptance limits.

PH

Sample 207/208 MSD (160-2671-1) was analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed on 06/12/2013.

For the analysis of the associated samples in pH batch #55596, this analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 207/208 MSD (160-2671-1)

For the analysis of the associated samples in pH batch #55596, the samples were analyzed using ph indicator strips due the the samples matrices possibly damaging the pH probe. The indicator strips used were range 0-14 (Lot HC270245).207/208 MSD (160-2671-1)

No difficulties were encountered during the pH analysis.

All quality control parameters were within the acceptance limits.

[redacted]

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CR 351

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	~~BARR~~ DEP BILL ABERNATHY / FEJ	6/11/13	197601
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
816-~~8~~285-8410	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State)	Carrier/Waybill Number
BRIDGETON LF / MISSOURI	

Contract/Purchase Order/Quote No.

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): 624-25ml-VOC	1664A-HEM	5210B-BOD	625-SVOC	200.7 245.1	2540D-TSS	410.4 350.1	200.7 245.1 D	pH				Special Instructions/ Conditions of Receipt
207/208 MSD	6/11/13	17:30		✓				4	1	1	4				3	1	1	1	1	1	1	1	✓				
Trip Blank 6.12.13				✓							2				✓												

Possible Hazard Identification

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

Sample Disposal

☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 DAYS

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
[signature]	6/12/13	12:35	[signature]	6/12/13	1239
2. Relinquished By	**Date**	**Time**	**2. Received By**	**Date**	**Time**
3. Relinquished By	**Date**	**Time**	**3. Received By**	**Date**	**Time**

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2671-1

Login Number: 2671

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
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	
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.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2671-1

Login Number: 2671
List Number: 1
Creator: Janish, Carl

List Source: TestAmerica Buffalo
List Creation: 06/13/13 03:13 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2671-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SL
245.1	Mercury (CVAA)	EPA	TAL SL
1664A	HEM and SGT-HEM	1664A	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
410.4	COD	MCAWW	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL SL

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2671-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2671-1	207/208 MSD	Water	06/11/13 17:30	06/12/13 13:27
160-2671-2	TRIP BLANK	Water	06/11/13 00:00	06/12/13 13:27

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2671-1

Client Sample ID: 207/208 MSD — Lab Sample ID: 160-2671-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	75		50	6.0	ug/L	1		624	Total/NA
Benzene	39	J	50	3.0	ug/L	1		624	Total/NA
Xylenes, Total	34	J	150	10	ug/L	1		624	Total/NA
Naphthalene	180		55	5.5	ug/L	1		625	Total/NA
Phenanthrene	18	J	55	5.5	ug/L	1		625	Total/NA
Phenol - DL	8900	*	1100	220	ug/L	20		625	Total/NA
Aluminum	20000		10000	4000	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	530		500	99	ug/L	5		200.7 Rev 4.4	Total/NA
Chromium	310	J	500	160	ug/L	5		200.7 Rev 4.4	Total/NA
Iron	990000		5000	800	ug/L	5		200.7 Rev 4.4	Total/NA
Lead	240	J	500	64	ug/L	5		200.7 Rev 4.4	Total/NA
Thallium	110	J	1000	44	ug/L	5		200.7 Rev 4.4	Total/NA
Zinc	15000		1000	260	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	440	J	500	99	ug/L	5		200.7 Rev 4.4	Dissolved
Chromium	280	J	500	160	ug/L	5		200.7 Rev 4.4	Dissolved
Cobalt	340	J B	2500	200	ug/L	5		200.7 Rev 4.4	Dissolved
Iron	760000		5000	800	ug/L	5		200.7 Rev 4.4	Dissolved
Lead	170	J	500	64	ug/L	5		200.7 Rev 4.4	Dissolved
Thallium	130	J	1000	44	ug/L	5		200.7 Rev 4.4	Dissolved
Zinc	13000		1000	260	ug/L	5		200.7 Rev 4.4	Dissolved
Mercury	3.7	J B	6.0	1.5	ug/L	1		245.1	Total/NA
Mercury	5.1	J B	6.0	1.5	ug/L	1		245.1	Dissolved
Oil & Grease	12	J	18	5.0	mg/L	1		1664A	Total/NA
Ammonia	710		20	9.0	mg/L	1000		350.1	Total/NA
Chemical Oxygen Demand	47000		1000	500	mg/L	100		410.4	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	920		40	40	mg/L	1		SM 2540D	Total/NA
pH	6.00	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 160-2671-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2671-1

Client Sample ID: 207/208 MSD

Lab Sample ID: 160-2671-1

Date Collected: 06/11/13 17:30

Matrix: Water

Date Received: 06/12/13 13:27

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.5	ug/L			06/12/13 23:03	1
1,1,2,2-Tetrachloroethane	ND		50	5.0	ug/L			06/12/13 23:03	1
1,1,2-Trichloroethane	ND		50	7.5	ug/L			06/12/13 23:03	1
1,1-Dichloroethane	ND		50	3.5	ug/L			06/12/13 23:03	1
1,1-Dichloroethene	ND		50	4.0	ug/L			06/12/13 23:03	1
1,2-Dichlorobenzene	ND		50	3.0	ug/L			06/12/13 23:03	1
1,2-Dichloroethane	ND		50	5.0	ug/L			06/12/13 23:03	1
1,2-Dichloropropane	ND		50	5.0	ug/L			06/12/13 23:03	1
1,3-Dichlorobenzene	ND		50	4.0	ug/L			06/12/13 23:03	1
1,4-Dichlorobenzene	**75**		50	6.0	ug/L			06/12/13 23:03	1
2-Chloroethyl vinyl ether	ND		100	8.5	ug/L			06/12/13 23:03	1
Benzene	**39**	**J**	50	3.0	ug/L			06/12/13 23:03	1
Bromodichloromethane	ND		50	4.5	ug/L			06/12/13 23:03	1
Bromoform	ND		50	8.5	ug/L			06/12/13 23:03	1
Bromomethane	ND	*	100	6.5	ug/L			06/12/13 23:03	1
Carbon tetrachloride	ND		50	6.5	ug/L			06/12/13 23:03	1
Chlorobenzene	ND		50	7.5	ug/L			06/12/13 23:03	1
Chloroethane	ND	*	100	5.0	ug/L			06/12/13 23:03	1
Chloroform	ND		50	5.0	ug/L			06/12/13 23:03	1
Chloromethane	ND	*	100	4.0	ug/L			06/12/13 23:03	1
cis-1,2-Dichloroethene	ND		50	4.5	ug/L			06/12/13 23:03	1
cis-1,3-Dichloropropene	ND		50	3.5	ug/L			06/12/13 23:03	1
Dibromochloromethane	ND		50	6.5	ug/L			06/12/13 23:03	1
Ethylbenzene	ND		50	4.5	ug/L			06/12/13 23:03	1
Methylene Chloride	ND		50	5.5	ug/L			06/12/13 23:03	1
Tetrachloroethene	ND		50	9.0	ug/L			06/12/13 23:03	1
Toluene	ND		50	3.5	ug/L			06/12/13 23:03	1
trans-1,2-Dichloroethene	ND		50	4.0	ug/L			06/12/13 23:03	1
trans-1,3-Dichloropropene	ND		50	4.0	ug/L			06/12/13 23:03	1
Trichloroethene	ND		50	11	ug/L			06/12/13 23:03	1
Trichlorofluoromethane	ND	*	50	5.5	ug/L			06/12/13 23:03	1
Vinyl chloride	ND	*	100	4.0	ug/L			06/12/13 23:03	1
Xylenes, Total	**34**	**J**	150	10	ug/L			06/12/13 23:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*71 - 135*		*06/12/13 23:03*	*1*
4-Bromofluorobenzene (Surr)	*114*		*80 - 122*		*06/12/13 23:03*	*1*
Toluene-d8 (Surr)	*111*		*84 - 122*		*06/12/13 23:03*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
bis (2-chloroisopropyl) ether	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
2,4,6-Trichlorophenol	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
2,4-Dichlorophenol	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
2,4-Dimethylphenol	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
2,4-Dinitrophenol	ND		280	11	ug/L		06/17/13 14:56	06/18/13 18:04	1
2,4-Dinitrotoluene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
2,6-Dinitrotoluene	ND		55	12	ug/L		06/17/13 14:56	06/18/13 18:04	1
2-Chloronaphthalene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2671-1

Client Sample ID: 207/208 MSD

Date Collected: 06/11/13 17:30
Date Received: 06/12/13 13:27

Lab Sample ID: 160-2671-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND	*	55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
2-Nitrophenol	ND		55	8.4	ug/L		06/17/13 14:56	06/18/13 18:04	1
3,3'-Dichlorobenzidine	ND		280	7.1	ug/L		06/17/13 14:56	06/18/13 18:04	1
4,6-Dinitro-2-methylphenol	ND		280	7.0	ug/L		06/17/13 14:56	06/18/13 18:04	1
4-Bromophenyl phenyl ether	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
4-Chloro-3-methylphenol	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
4-Chlorophenyl phenyl ether	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
4-Nitrophenol	ND	*	280	11	ug/L		06/17/13 14:56	06/18/13 18:04	1
Acenaphthene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Acenaphthylene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Anthracene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Benzidine	ND		550	110	ug/L		06/17/13 14:56	06/18/13 18:04	1
Benzo[a]anthracene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Benzo[a]pyrene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Benzo[b]fluoranthene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Benzo[g,h,i]perylene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Benzo[k]fluoranthene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Bis(2-chloroethoxy)methane	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Bis(2-chloroethyl)ether	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Bis(2-ethylhexyl) phthalate	ND		55	10	ug/L		06/17/13 14:56	06/18/13 18:04	1
Butyl benzyl phthalate	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Chrysene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Dibenz(a,h)anthracene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Diethyl phthalate	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Dimethyl phthalate	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Di-n-butyl phthalate	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Di-n-octyl phthalate	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Fluoranthene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Fluorene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Hexachloro-1,3-butadiene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Hexachlorobenzene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Hexachlorocyclopentadiene	ND		280	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Hexachloroethane	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Indeno[1,2,3-cd]pyrene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Isophorone	ND	*	55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Naphthalene	**180**		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Nitrobenzene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
N-Nitrosodimethylamine	ND		55	11	ug/L		06/17/13 14:56	06/18/13 18:04	1
N-Nitrosodi-n-propylamine	ND		55	8.3	ug/L		06/17/13 14:56	06/18/13 18:04	1
N-Nitrosodiphenylamine	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Pentachlorophenol	ND		280	7.0	ug/L		06/17/13 14:56	06/18/13 18:04	1
Phenanthrene	**18**	**J**	55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1
Pyrene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*41 - 109*	*06/17/13 14:56*	*06/18/13 18:04*	*1*
2-Fluorobiphenyl (Surr)	*0*	*X*	*31 - 103*	*06/17/13 14:56*	*06/18/13 18:04*	*1*
2-Fluorophenol (Surr)	*0*	*X*	*23 - 82*	*06/17/13 14:56*	*06/18/13 18:04*	*1*
Nitrobenzene-d5 (Surr)	*0*	*X*	*36 - 98*	*06/17/13 14:56*	*06/18/13 18:04*	*1*
Phenol-d5 (Surr)	*0*	*X*	*14 - 68*	*06/17/13 14:56*	*06/18/13 18:04*	*1*

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2671-1

Client Sample ID: 207/208 MSD

Date Collected: 06/11/13 17:30
Date Received: 06/12/13 13:27

Lab Sample ID: 160-2671-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14 (Surr)	0	X	43 - 107	06/17/13 14:56	06/18/13 18:04	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**8900**	*	1100	220	ug/L		06/17/13 14:56	06/18/13 15:15	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	0	D X	41 - 109	06/17/13 14:56	06/18/13 15:15	20
2-Fluorobiphenyl (Surr)	0	D X	31 - 103	06/17/13 14:56	06/18/13 15:15	20
2-Fluorophenol (Surr)	0	D X	23 - 82	06/17/13 14:56	06/18/13 15:15	20
Nitrobenzene-d5 (Surr)	0	D X	36 - 98	06/17/13 14:56	06/18/13 15:15	20
Phenol-d5 (Surr)	0	D X	14 - 68	06/17/13 14:56	06/18/13 15:15	20
Terphenyl-d14 (Surr)	0	D X	43 - 107	06/17/13 14:56	06/18/13 15:15	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		500	300	ug/L		06/12/13 14:37	06/13/13 11:49	5
Aluminum	**20000**		10000	4000	ug/L		06/12/13 14:37	06/13/13 11:49	5
Arsenic	**530**		500	99	ug/L		06/12/13 14:37	06/13/13 11:49	5
Beryllium	ND		250	25	ug/L		06/12/13 14:37	06/13/13 11:49	5
Cadmium	ND		250	23	ug/L		06/12/13 14:37	06/13/13 11:49	5
Cobalt	ND		2500	200	ug/L		06/12/13 14:37	06/13/13 11:49	5
Chromium	**310**	**J**	500	160	ug/L		06/12/13 14:37	06/13/13 11:49	5
Copper	ND		1300	230	ug/L		06/12/13 14:37	06/13/13 11:49	5
Iron	**990000**		5000	800	ug/L		06/12/13 14:37	06/13/13 11:49	5
Nickel	ND		2000	670	ug/L		06/12/13 14:37	06/13/13 11:49	5
Lead	**240**	**J**	500	64	ug/L		06/12/13 14:37	06/13/13 11:49	5
Antimony	ND		500	200	ug/L		06/12/13 14:37	06/13/13 11:49	5
Selenium	ND		750	130	ug/L		06/12/13 14:37	06/13/13 11:49	5
Thallium	**110**	**J**	1000	44	ug/L		06/12/13 14:37	06/13/13 11:49	5
Zinc	**15000**		1000	260	ug/L		06/12/13 14:37	06/13/13 11:49	5

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10000	4000	ug/L		06/12/13 14:37	06/13/13 12:15	5
Antimony	ND		500	200	ug/L		06/12/13 14:37	06/13/13 12:15	5
Arsenic	**440**	**J**	500	99	ug/L		06/12/13 14:37	06/13/13 12:15	5
Beryllium	ND		250	25	ug/L		06/12/13 14:37	06/13/13 12:15	5
Cadmium	ND		250	23	ug/L		06/12/13 14:37	06/13/13 12:15	5
Chromium	**280**	**J**	500	160	ug/L		06/12/13 14:37	06/13/13 12:15	5
Cobalt	**340**	**J B**	2500	200	ug/L		06/12/13 14:37	06/13/13 12:15	5
Copper	ND		1300	230	ug/L		06/12/13 14:37	06/13/13 12:15	5
Iron	**760000**		5000	800	ug/L		06/12/13 14:37	06/13/13 12:15	5
Lead	**170**	**J**	500	64	ug/L		06/12/13 14:37	06/13/13 12:15	5
Nickel	ND		2000	670	ug/L		06/12/13 14:37	06/13/13 12:15	5
Selenium	ND		750	130	ug/L		06/12/13 14:37	06/13/13 12:15	5
Silver	ND		500	300	ug/L		06/12/13 14:37	06/13/13 12:15	5
Thallium	**130**	**J**	1000	44	ug/L		06/12/13 14:37	06/13/13 12:15	5
Zinc	**13000**		1000	260	ug/L		06/12/13 14:37	06/13/13 12:15	5

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2671-1

Client Sample ID: 207/208 MSD

Lab Sample ID: 160-2671-1
Matrix: Water

Date Collected: 06/11/13 17:30
Date Received: 06/12/13 13:27

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.7	J B	6.0	1.5	ug/L		06/17/13 07:34	06/18/13 21:54	1

Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	5.1	J B	6.0	1.5	ug/L		06/17/13 07:34	06/18/13 22:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	12	J	18	5.0	mg/L		06/14/13 01:19	06/14/13 01:41	1
Ammonia	710		20	9.0	mg/L			06/14/13 11:44	1000
Chemical Oxygen Demand	47000		1000	500	mg/L			06/17/13 20:44	100

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	920		40	40	mg/L			06/13/13 18:26	1
pH	6.00	HF	0.100	0.100	SU			06/12/13 13:48	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2671-2
Matrix: Water

Date Collected: 06/11/13 00:00
Date Received: 06/12/13 13:27

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/12/13 21:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/12/13 21:43	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/12/13 21:43	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/12/13 21:43	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/12/13 21:43	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/12/13 21:43	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/12/13 21:43	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/12/13 21:43	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/12/13 21:43	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/12/13 21:43	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/12/13 21:43	1
Benzene	ND		1.0	0.060	ug/L			06/12/13 21:43	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/12/13 21:43	1
Bromoform	ND		1.0	0.17	ug/L			06/12/13 21:43	1
Bromomethane	ND	*	2.0	0.13	ug/L			06/12/13 21:43	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/12/13 21:43	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/12/13 21:43	1
Chloroethane	ND	*	2.0	0.10	ug/L			06/12/13 21:43	1
Chloroform	ND		1.0	0.10	ug/L			06/12/13 21:43	1
Chloromethane	ND	*	2.0	0.080	ug/L			06/12/13 21:43	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/12/13 21:43	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/12/13 21:43	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/12/13 21:43	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/12/13 21:43	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/12/13 21:43	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/12/13 21:43	1
Toluene	ND		1.0	0.070	ug/L			06/12/13 21:43	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/12/13 21:43	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/12/13 21:43	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2671-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2671-2

Date Collected: 06/11/13 00:00

Matrix: Water

Date Received: 06/12/13 13:27

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		1.0	0.21	ug/L			06/12/13 21:43	1
Trichlorofluoromethane	ND	*	1.0	0.11	ug/L			06/12/13 21:43	1
Vinyl chloride	ND	*	2.0	0.080	ug/L			06/12/13 21:43	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/12/13 21:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*71 - 135*		*06/12/13 21:43*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 122*		*06/12/13 21:43*	*1*
Toluene-d8 (Surr)	*107*		*84 - 122*		*06/12/13 21:43*	*1*

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-56201/2
Matrix: Water
Analysis Batch: 56201

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/12/13 19:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/12/13 19:30	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/12/13 19:30	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/12/13 19:30	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/12/13 19:30	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/12/13 19:30	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/12/13 19:30	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/12/13 19:30	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/12/13 19:30	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/12/13 19:30	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/12/13 19:30	1
Benzene	ND		1.0	0.060	ug/L			06/12/13 19:30	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/12/13 19:30	1
Bromoform	ND		1.0	0.17	ug/L			06/12/13 19:30	1
Bromomethane	ND		2.0	0.13	ug/L			06/12/13 19:30	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/12/13 19:30	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/12/13 19:30	1
Chloroethane	ND		2.0	0.10	ug/L			06/12/13 19:30	1
Chloroform	ND		1.0	0.10	ug/L			06/12/13 19:30	1
Chloromethane	ND		2.0	0.080	ug/L			06/12/13 19:30	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/12/13 19:30	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/12/13 19:30	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/12/13 19:30	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/12/13 19:30	1
Methylene Chloride	2.42		1.0	0.11	ug/L			06/12/13 19:30	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/12/13 19:30	1
Toluene	ND		1.0	0.070	ug/L			06/12/13 19:30	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/12/13 19:30	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/12/13 19:30	1
Trichloroethene	ND		1.0	0.21	ug/L			06/12/13 19:30	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/12/13 19:30	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/12/13 19:30	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/12/13 19:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 135*		*06/12/13 19:30*	*1*
4-Bromofluorobenzene (Surr)	*107*		*80 - 122*		*06/12/13 19:30*	*1*
Toluene-d8 (Surr)	*115*		*84 - 122*		*06/12/13 19:30*	*1*

Lab Sample ID: LCS 160-56201/4
Matrix: Water
Analysis Batch: 56201

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	11.0		ug/L		110	82 - 127
1,1,2,2-Tetrachloroethane	10.0	9.31		ug/L		93	69 - 130
1,1,2-Trichloroethane	10.0	10.5		ug/L		105	78 - 122
1,1-Dichloroethane	10.0	11.3		ug/L		113	82 - 125

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-56201/4
Matrix: Water
Analysis Batch: 56201

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	10.9		ug/L		109	77 - 127
1,2-Dichlorobenzene	10.0	9.85		ug/L		98	83 - 121
1,2-Dichloroethane	10.0	11.0		ug/L		110	78 - 127
1,2-Dichloropropane	10.0	9.48		ug/L		95	81 - 124
1,3-Dichlorobenzene	10.0	9.58		ug/L		96	85 - 121
1,4-Dichlorobenzene	10.0	9.64		ug/L		96	83 - 116
2-Chloroethyl vinyl ether	10.0	9.11		ug/L		91	34 - 140
Benzene	10.0	9.78		ug/L		98	84 - 124
Bromodichloromethane	10.0	10.0		ug/L		100	81 - 127
Bromoform	10.0	9.68		ug/L		97	78 - 138
Bromomethane	10.0	5.65		ug/L		57	48 - 162
Carbon tetrachloride	10.0	11.0		ug/L		110	79 - 132
Chlorobenzene	10.0	9.63		ug/L		96	85 - 118
Chloroethane	10.0	5.64	*	ug/L		56	71 - 132
Chloroform	10.0	10.5		ug/L		105	82 - 124
Chloromethane	10.0	5.45	*	ug/L		54	68 - 136
cis-1,2-Dichloroethene	10.0	10.4		ug/L		104	83 - 123
cis-1,3-Dichloropropene	10.0	9.06		ug/L		91	79 - 132
Dibromochloromethane	10.0	10.5		ug/L		105	81 - 129
Ethylbenzene	10.0	9.55		ug/L		95	85 - 125
Methylene Chloride	10.0	12.6		ug/L		126	70 - 127
Tetrachloroethene	10.0	10.5		ug/L		105	76 - 129
Toluene	10.0	10.1		ug/L		101	83 - 127
trans-1,2-Dichloroethene	10.0	11.4		ug/L		114	78 - 122
trans-1,3-Dichloropropene	10.0	9.76		ug/L		98	83 - 130
Trichloroethene	10.0	9.61		ug/L		96	81 - 123
Trichlorofluoromethane	10.0	5.68	*	ug/L		57	72 - 135
Vinyl chloride	10.0	5.82	*	ug/L		58	72 - 132
Xylenes, Total	30.0	25.8		ug/L		86	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*114*		*71 - 135*
4-Bromofluorobenzene (Surr)	*95*		*80 - 122*
Toluene-d8 (Surr)	*102*		*84 - 122*

Lab Sample ID: LCSD 160-56201/5
Matrix: Water
Analysis Batch: 56201

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	10.0	9.84		ug/L		98	82 - 127	11	20
1,1,2,2-Tetrachloroethane	10.0	9.73		ug/L		97	69 - 130	4	20
1,1,2-Trichloroethane	10.0	9.90		ug/L		99	78 - 122	6	20
1,1-Dichloroethane	10.0	9.68		ug/L		97	82 - 125	15	20
1,1-Dichloroethene	10.0	9.41		ug/L		94	77 - 127	15	20
1,2-Dichlorobenzene	10.0	10.0		ug/L		100	83 - 121	2	20
1,2-Dichloroethane	10.0	10.3		ug/L		103	78 - 127	6	20
1,2-Dichloropropane	10.0	9.88		ug/L		99	81 - 124	4	20

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-56201/5
Matrix: Water
Analysis Batch: 56201

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	10.0	9.97		ug/L		100	85 - 121	4	20
1,4-Dichlorobenzene	10.0	10.0		ug/L		100	83 - 116	4	20
2-Chloroethyl vinyl ether	10.0	9.12		ug/L		91	34 - 140	0	20
Benzene	10.0	9.88		ug/L		99	84 - 124	1	20
Bromodichloromethane	10.0	10.1		ug/L		101	81 - 127	1	20
Bromoform	10.0	9.75		ug/L		98	78 - 138	1	20
Bromomethane	10.0	10.2	*	ug/L		102	48 - 162	58	20
Carbon tetrachloride	10.0	9.88		ug/L		99	79 - 132	11	20
Chlorobenzene	10.0	9.90		ug/L		99	85 - 118	3	20
Chloroethane	10.0	9.57	*	ug/L		96	71 - 132	52	20
Chloroform	10.0	9.76		ug/L		98	82 - 124	7	20
Chloromethane	10.0	9.54	*	ug/L		95	68 - 136	55	20
cis-1,2-Dichloroethene	10.0	9.67		ug/L		97	83 - 123	7	20
cis-1,3-Dichloropropene	10.0	9.46		ug/L		95	79 - 132	4	20
Dibromochloromethane	10.0	10.1		ug/L		101	81 - 129	4	20
Ethylbenzene	10.0	10.1		ug/L		101	85 - 125	5	20
Methylene Chloride	10.0	10.6		ug/L		106	70 - 127	17	20
Tetrachloroethene	10.0	10.1		ug/L		101	76 - 129	4	20
Toluene	10.0	9.71		ug/L		97	83 - 127	4	20
trans-1,2-Dichloroethene	10.0	9.58		ug/L		96	78 - 122	17	20
trans-1,3-Dichloropropene	10.0	9.24		ug/L		92	83 - 130	5	20
Trichloroethene	10.0	9.94		ug/L		99	81 - 123	3	20
Trichlorofluoromethane	10.0	9.67	*	ug/L		97	72 - 135	52	20
Vinyl chloride	10.0	10.0	*	ug/L		100	72 - 132	53	20
Xylenes, Total	30.0	31.3		ug/L		104	70 - 130	19	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 135*
4-Bromofluorobenzene (Surr)	*98*		*80 - 122*
Toluene-d8 (Surr)	*95*		*84 - 122*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-56272/1-A
Matrix: Water
Analysis Batch: 56695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
bis (2-chloroisopropyl) ether	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4,6-Trichlorophenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4-Dichlorophenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4-Dimethylphenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4-Dinitrophenol	ND		50	2.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4-Dinitrotoluene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,6-Dinitrotoluene	ND		10	2.2	ug/L		06/17/13 14:56	06/18/13 13:35	1
2-Chloronaphthalene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2-Chlorophenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-56272/1-A
Matrix: Water
Analysis Batch: 56695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		10	1.5	ug/L		06/17/13 14:56	06/18/13 13:35	1
3,3'-Dichlorobenzidine	ND		50	1.3	ug/L		06/17/13 14:56	06/18/13 13:35	1
4,6-Dinitro-2-methylphenol	ND		50	1.3	ug/L		06/17/13 14:56	06/18/13 13:35	1
4-Bromophenyl phenyl ether	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
4-Chlorophenyl phenyl ether	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
4-Nitrophenol	ND		50	2.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Acenaphthene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Acenaphthylene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Anthracene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzidine	ND		100	20	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[a]anthracene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[a]pyrene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[b]fluoranthene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[g,h,i]perylene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[k]fluoranthene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Bis(2-chloroethoxy)methane	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Bis(2-chloroethyl)ether	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Bis(2-ethylhexyl) phthalate	ND		10	1.9	ug/L		06/17/13 14:56	06/18/13 13:35	1
Butyl benzyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Chrysene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Dibenz(a,h)anthracene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Diethyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Dimethyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Di-n-butyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Di-n-octyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Fluoranthene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Fluorene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Hexachloro-1,3-butadiene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Hexachlorobenzene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Hexachlorocyclopentadiene	ND		50	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Hexachloroethane	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Indeno[1,2,3-cd]pyrene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Isophorone	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Naphthalene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Nitrobenzene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/L		06/17/13 14:56	06/18/13 13:35	1
N-Nitrosodiphenylamine	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Pentachlorophenol	ND		50	1.3	ug/L		06/17/13 14:56	06/18/13 13:35	1
Phenanthrene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Phenol	ND		10	2.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Pyrene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*55*		*41 - 109*	*06/17/13 14:56*	*06/18/13 13:35*	*1*
2-Fluorobiphenyl (Surr)	*45*		*31 - 103*	*06/17/13 14:56*	*06/18/13 13:35*	*1*
2-Fluorophenol (Surr)	*27*		*23 - 82*	*06/17/13 14:56*	*06/18/13 13:35*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-56272/1-A
Matrix: Water
Analysis Batch: 56695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56272

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	47		36 - 98	06/17/13 14:56	06/18/13 13:35	1
Phenol-d5 (Surr)	17		14 - 68	06/17/13 14:56	06/18/13 13:35	1
Terphenyl-d14 (Surr)	55		43 - 107	06/17/13 14:56	06/18/13 13:35	1

Lab Sample ID: LCS 160-56272/2-A
Matrix: Water
Analysis Batch: 56695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 56272

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	99.9	52.3		ug/L		52	44 - 84
bis (2-chloroisopropyl) ether	100	61.8		ug/L		62	42 - 102
2,4,6-Trichlorophenol	100	60.2		ug/L		60	54 - 105
2,4-Dichlorophenol	100	57.8		ug/L		58	46 - 103
2,4-Dimethylphenol	100	54.5		ug/L		55	40 - 105
2,4-Dinitrophenol	100	57.5		ug/L		58	42 - 146
2,4-Dinitrotoluene	100	74.4		ug/L		74	62 - 101
2,6-Dinitrotoluene	100	69.2		ug/L		69	62 - 103
2-Chloronaphthalene	100	59.5		ug/L		59	45 - 95
2-Chlorophenol	100	51.2	*	ug/L		51	56 - 93
2-Nitrophenol	100	56.8		ug/L		57	51 - 98
3,3'-Dichlorobenzidine	100	58.7		ug/L		59	26 - 77
4,6-Dinitro-2-methylphenol	100	69.2		ug/L		69	61 - 120
4-Bromophenyl phenyl ether	100	68.8		ug/L		69	54 - 111
4-Chloro-3-methylphenol	100	62.3		ug/L		62	45 - 106
4-Chlorophenyl phenyl ether	100	67.5		ug/L		68	53 - 100
4-Nitrophenol	100	20.6	J *	ug/L		21	25 - 45
Acenaphthene	100	62.5		ug/L		62	51 - 89
Acenaphthylene	100	61.5		ug/L		62	46 - 98
Anthracene	100	67.4		ug/L		67	54 - 111
Benzo[a]anthracene	100	75.2		ug/L		75	68 - 108
Benzo[a]pyrene	100	67.7		ug/L		68	55 - 108
Benzo[b]fluoranthene	100	69.5		ug/L		69	57 - 114
Benzo[g,h,i]perylene	100	70.4		ug/L		70	58 - 120
Benzo[k]fluoranthene	100	72.5		ug/L		72	59 - 112
Bis(2-chloroethoxy)methane	100	60.1		ug/L		60	53 - 99
Bis(2-chloroethyl)ether	100	53.5		ug/L		53	50 - 97
Bis(2-ethylhexyl) phthalate	100	64.3		ug/L		64	54 - 116
Butyl benzyl phthalate	100	64.2		ug/L		64	52 - 126
Chrysene	100	65.4		ug/L		65	58 - 112
Dibenz(a,h)anthracene	100	76.3		ug/L		76	56 - 122
Diethyl phthalate	100	67.1		ug/L		67	60 - 101
Dimethyl phthalate	100	69.9		ug/L		70	57 - 101
Di-n-butyl phthalate	100	68.9		ug/L		69	57 - 108
Di-n-octyl phthalate	100	66.5		ug/L		67	57 - 118
Fluoranthene	100	73.6		ug/L		74	55 - 114
Fluorene	100	66.8		ug/L		67	59 - 96
Hexachloro-1,3-butadiene	100	49.5		ug/L		50	36 - 84
Hexachlorobenzene	100	70.7		ug/L		71	56 - 110

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-56272/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56695 — **Prep Batch: 56272**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	100	52.5		ug/L		53	16 - 86
Hexachloroethane	100	47.5		ug/L		47	40 - 77
Indeno[1,2,3-cd]pyrene	100	74.5		ug/L		75	55 - 124
Isophorone	100	48.6	*	ug/L		49	50 - 107
Naphthalene	100	53.7		ug/L		54	42 - 82
Nitrobenzene	100	56.2		ug/L		56	48 - 96
N-Nitrosodi-n-propylamine	100	65.9		ug/L		66	57 - 113
Pentachlorophenol	100	60.0		ug/L		60	56 - 126
Phenanthrene	100	69.1		ug/L		69	54 - 110
Phenol	100	21.7	*	ug/L		22	27 - 43
Pyrene	100	61.9		ug/L		62	53 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*76*		*41 - 109*
2-Fluorobiphenyl (Surr)	*62*		*31 - 103*
2-Fluorophenol (Surr)	*31*		*23 - 82*
Nitrobenzene-d5 (Surr)	*59*		*36 - 98*
Phenol-d5 (Surr)	*21*		*14 - 68*
Terphenyl-d14 (Surr)	*65*		*43 - 107*

Lab Sample ID: LCSD 160-56272/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56695 — **Prep Batch: 56272**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	99.9	53.9		ug/L		54	44 - 84	3	20
bis (2-chloroisopropyl) ether	100	62.5		ug/L		63	42 - 102	1	20
2,4,6-Trichlorophenol	100	62.1		ug/L		62	54 - 105	3	20
2,4-Dichlorophenol	100	58.6		ug/L		59	46 - 103	1	20
2,4-Dimethylphenol	100	53.7		ug/L		54	40 - 105	2	20
2,4-Dinitrophenol	100	61.2		ug/L		61	42 - 146	6	20
2,4-Dinitrotoluene	100	79.4		ug/L		79	62 - 101	6	20
2,6-Dinitrotoluene	100	72.7		ug/L		73	62 - 103	5	20
2-Chloronaphthalene	100	61.4		ug/L		61	45 - 95	3	20
2-Chlorophenol	100	51.3	*	ug/L		51	56 - 93	0	20
2-Nitrophenol	100	57.4		ug/L		57	51 - 98	1	20
3,3'-Dichlorobenzidine	100	61.0		ug/L		61	26 - 77	4	20
4,6-Dinitro-2-methylphenol	100	74.2		ug/L		74	61 - 120	7	20
4-Bromophenyl phenyl ether	100	71.7		ug/L		72	54 - 111	4	20
4-Chloro-3-methylphenol	100	63.9		ug/L		64	45 - 106	3	20
4-Chlorophenyl phenyl ether	100	70.6		ug/L		71	53 - 100	4	20
4-Nitrophenol	100	21.8	J *	ug/L		22	25 - 45	5	20
Acenaphthene	100	65.2		ug/L		65	51 - 89	4	20
Acenaphthylene	100	64.0		ug/L		64	46 - 98	4	20
Anthracene	100	70.3		ug/L		70	54 - 111	4	20
Benzo[a]anthracene	100	79.2		ug/L		79	68 - 108	5	20
Benzo[a]pyrene	100	70.5		ug/L		71	55 - 108	4	20
Benzo[b]fluoranthene	100	74.2		ug/L		74	57 - 114	7	20

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-56272/3-A
Matrix: Water
Analysis Batch: 56695

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 56272

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[g,h,i]perylene	100	74.5		ug/L		74	58 - 120	6	20
Benzo[k]fluoranthene	100	75.0		ug/L		75	59 - 112	3	20
Bis(2-chloroethoxy)methane	100	61.0		ug/L		61	53 - 99	1	20
Bis(2-chloroethyl)ether	100	54.5		ug/L		54	50 - 97	2	20
Bis(2-ethylhexyl) phthalate	100	68.4		ug/L		68	54 - 116	6	20
Butyl benzyl phthalate	100	68.0		ug/L		68	52 - 126	6	20
Chrysene	100	69.5		ug/L		69	58 - 112	6	20
Dibenz(a,h)anthracene	100	79.4		ug/L		79	56 - 122	4	20
Diethyl phthalate	100	70.7		ug/L		71	60 - 101	5	20
Dimethyl phthalate	100	74.1		ug/L		74	57 - 101	6	20
Di-n-butyl phthalate	100	72.7		ug/L		73	57 - 108	5	20
Di-n-octyl phthalate	100	71.1		ug/L		71	57 - 118	7	20
Fluoranthene	100	77.2		ug/L		77	55 - 114	5	20
Fluorene	100	69.8		ug/L		70	59 - 96	4	20
Hexachloro-1,3-butadiene	100	51.1		ug/L		51	36 - 84	3	20
Hexachlorobenzene	100	73.6		ug/L		74	56 - 110	4	20
Hexachlorocyclopentadiene	100	53.6		ug/L		54	16 - 86	2	20
Hexachloroethane	100	49.3		ug/L		49	40 - 77	4	20
Indeno[1,2,3-cd]pyrene	100	79.2		ug/L		79	55 - 124	6	20
Isophorone	100	49.4	*	ug/L		49	50 - 107	2	20
Naphthalene	100	55.2		ug/L		55	42 - 82	3	20
Nitrobenzene	100	56.8		ug/L		57	48 - 96	1	20
N-Nitrosodi-n-propylamine	100	67.5		ug/L		68	57 - 113	2	20
Pentachlorophenol	100	64.8		ug/L		65	56 - 126	8	20
Phenanthrene	100	71.7		ug/L		72	54 - 110	4	20
Phenol	100	22.0	*	ug/L		22	27 - 43	1	20
Pyrene	100	65.2		ug/L		65	53 - 117	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*79*		*41 - 109*
2-Fluorobiphenyl (Surr)	*62*		*31 - 103*
2-Fluorophenol (Surr)	*31*		*23 - 82*
Nitrobenzene-d5 (Surr)	*59*		*36 - 98*
Phenol-d5 (Surr)	*22*		*14 - 68*
Terphenyl-d14 (Surr)	*68*		*43 - 107*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 160-55605/1-A
Matrix: Water
Analysis Batch: 55703

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 55605

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		06/12/13 14:37	06/13/13 11:13	1
Arsenic	ND		10	2.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Beryllium	ND		5.0	0.50	ug/L		06/12/13 14:37	06/13/13 11:13	1
Cadmium	ND		5.0	0.45	ug/L		06/12/13 14:37	06/13/13 11:13	1
Chromium	ND		10	3.1	ug/L		06/12/13 14:37	06/13/13 11:13	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 160-55605/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55703 — **Prep Batch: 55605**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	4.90	J	50	4.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Copper	ND		25	4.6	ug/L		06/12/13 14:37	06/13/13 11:13	1
Iron	ND		100	16	ug/L		06/12/13 14:37	06/13/13 11:13	1
Lead	ND		10	1.3	ug/L		06/12/13 14:37	06/13/13 11:13	1
Nickel	ND		40	13	ug/L		06/12/13 14:37	06/13/13 11:13	1
Antimony	ND		10	4.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Selenium	ND		15	2.7	ug/L		06/12/13 14:37	06/13/13 11:13	1
Silver	ND		10	6.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Thallium	ND		20	0.88	ug/L		06/12/13 14:37	06/13/13 11:13	1
Zinc	ND		20	5.2	ug/L		06/12/13 14:37	06/13/13 11:13	1

Lab Sample ID: LCS 160-55605/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55703 — **Prep Batch: 55605**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	10100		ug/L		101	85 - 115
Arsenic	1000	1030		ug/L		103	85 - 115
Beryllium	1000	1020		ug/L		102	85 - 115
Cadmium	1000	1040		ug/L		104	85 - 115
Chromium	1000	1050		ug/L		105	85 - 115
Cobalt	1000	1080		ug/L		108	85 - 115
Copper	1000	1040		ug/L		104	85 - 115
Iron	10000	10500		ug/L		105	85 - 115
Lead	1000	1070		ug/L		107	85 - 115
Nickel	1000	1070		ug/L		107	85 - 115
Antimony	500	522		ug/L		104	85 - 115
Selenium	1000	1040		ug/L		104	85 - 115
Silver	100	106		ug/L		106	85 - 115
Thallium	200	230		ug/L		115	85 - 115
Zinc	1000	1040		ug/L		104	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 160-56207/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56516 — **Prep Batch: 56207**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	4.40	J	6.0	1.5	ug/L		06/17/13 07:34	06/18/13 21:42	1

Lab Sample ID: LCS 160-56207/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56516 — **Prep Batch: 56207**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	150	157		ug/L		105	85 - 115

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2671-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 480-123901/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123903 — **Prep Batch: 123901**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/14/13 01:19	06/14/13 01:41	1

Lab Sample ID: LCS 480-123901/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123903 — **Prep Batch: 123901**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	42.6		mg/L		107	78 - 114

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-124097/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124097

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/14/13 11:42	1

Lab Sample ID: MB 480-124097/75 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124097

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/14/13 12:52	1

Lab Sample ID: LCS 480-124097/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124097

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.04		mg/L		104	90 - 110

Lab Sample ID: LCS 480-124097/76 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124097

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.02		mg/L		102	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 480-124417/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124417

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			06/17/13 20:44	1

Method: 410.4 - COD (Continued)

Lab Sample ID: LCS 480-124417/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124417

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	188		mg/L		94	90 - 110

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-123843/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123843

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			06/13/13 17:35	1

Lab Sample ID: LCS 480-123843/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123843

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	213	202		mg/L		95	88 - 110

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2671-1

GC/MS VOA

Analysis Batch: 56201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2671-1	207/208 MSD	Total/NA	Water	624	
160-2671-2	TRIP BLANK	Total/NA	Water	624	
LCS 160-56201/4	Lab Control Sample	Total/NA	Water	624	
LCSD 160-56201/5	Lab Control Sample Dup	Total/NA	Water	624	
MB 160-56201/2	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 56272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2671-1	207/208 MSD	Total/NA	Water	625	
160-2671-1 - DL	207/208 MSD	Total/NA	Water	625	
LCS 160-56272/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 160-56272/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 160-56272/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 56695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2671-1	207/208 MSD	Total/NA	Water	625	56272
160-2671-1 - DL	207/208 MSD	Total/NA	Water	625	56272
LCS 160-56272/2-A	Lab Control Sample	Total/NA	Water	625	56272
LCSD 160-56272/3-A	Lab Control Sample Dup	Total/NA	Water	625	56272
MB 160-56272/1-A	Method Blank	Total/NA	Water	625	56272

Metals

Prep Batch: 55605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2671-1	207/208 MSD	Total/NA	Water	200.7/200.8	
160-2671-1	207/208 MSD	Dissolved	Water	200.7/200.8	
LCS 160-55605/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
MB 160-55605/1-A	Method Blank	Total/NA	Water	200.7/200.8	

Analysis Batch: 55703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2671-1	207/208 MSD	Total/NA	Water	200.7 Rev 4.4	55605
160-2671-1	207/208 MSD	Dissolved	Water	200.7 Rev 4.4	55605
LCS 160-55605/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	55605
MB 160-55605/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	55605

Prep Batch: 56207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2671-1	207/208 MSD	Total/NA	Water	245.1	
160-2671-1	207/208 MSD	Dissolved	Water	245.1	
LCS 160-56207/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 160-56207/1-A	Method Blank	Total/NA	Water	245.1	

Analysis Batch: 56516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2671-1	207/208 MSD	Total/NA	Water	245.1	56207

Metals (Continued)

Analysis Batch: 56516 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2671-1	207/208 MSD	Dissolved	Water	245.1	56207
LCS 160-56207/2-A	Lab Control Sample	Total/NA	Water	245.1	56207
MB 160-56207/1-A	Method Blank	Total/NA	Water	245.1	56207

General Chemistry

Analysis Batch: 55596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2671-1	207/208 MSD	Total/NA	Water	SM 4500 H+ B	
LCS 160-55596/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 123843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2671-1	207/208 MSD	Total/NA	Water	SM 2540D	
LCS 480-123843/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-123843/1	Method Blank	Total/NA	Water	SM 2540D	

Prep Batch: 123901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2671-1	207/208 MSD	Total/NA	Water	1664A	
LCS 480-123901/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 480-123901/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 123903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2671-1	207/208 MSD	Total/NA	Water	1664A	123901
LCS 480-123901/2-A	Lab Control Sample	Total/NA	Water	1664A	123901
MB 480-123901/1-A	Method Blank	Total/NA	Water	1664A	123901

Analysis Batch: 124097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2671-1	207/208 MSD	Total/NA	Water	350.1	
LCS 480-124097/4	Lab Control Sample	Total/NA	Water	350.1	
LCS 480-124097/76	Lab Control Sample	Total/NA	Water	350.1	
MB 480-124097/3	Method Blank	Total/NA	Water	350.1	
MB 480-124097/75	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 124417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2671-1	207/208 MSD	Total/NA	Water	410.4	
LCS 480-124417/4	Lab Control Sample	Total/NA	Water	410.4	
MB 480-124417/3	Method Blank	Total/NA	Water	410.4	

Surrogate Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2671-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(71-135)	(80-122)	(84-122)
160-2671-1	207/208 MSD	94	114	111
160-2671-2	TRIP BLANK	107	103	107
LCS 160-56201/4	Lab Control Sample	114	95	102
LCSD 160-56201/5	Lab Control Sample Dup	100	98	95
MB 160-56201/2	Method Blank	100	107	115

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(41-109)	(31-103)	(23-82)	(36-98)	(14-68)	(43-107)
160-2671-1	207/208 MSD	0 X	0 X	0 X	0 X	0 X	0 X
160-2671-1 - DL	207/208 MSD	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
LCS 160-56272/2-A	Lab Control Sample	76	62	31	59	21	65
LCSD 160-56272/3-A	Lab Control Sample Dup	79	62	31	59	22	68
MB 160-56272/1-A	Method Blank	55	45	27	47	17	55

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2671-2
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/20/2013 3:55:43 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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.

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Job ID: 160-2671-2

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2671-2

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 6/12/2013 1:27 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0º C.

BIOCHEMICAL OXYGEN DEMAND

Sample 207/208 MSD (160-2671-1) was analyzed for Biochemical oxygen demand in accordance with SM 5210B. The samples were analyzed on 06/13/2013.

All of the dilutions overdepleted for the following samples: 207/208 MSD (160-2671-1). Only a "greater than" result could be calculated from the most dilute preparation.

No difficulties were encountered during the BOD analysis.

All quality control parameters were within the acceptance limits.

Job ID: 160-2671-2 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

[redacted]

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CR 351

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	~~BARR~~ DEP BILL ABERNATHY / FEJ	6/11/13	197601
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
816-~~8~~285-8410	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State)	Carrier/Waybill Number
BRIDGETON LF / MISSOURI	

Contract/Purchase Order/Quote No.

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): 624-25ml-VOC	1664A-HEM	5210B-BOD	625-SVOC	200.7 245.1	2540D-TSS	410.4 350.1	200.7 245.1 D	pH				Special Instructions/ Conditions of Receipt
207/208 MSD	6/11/13	17:30		✓				4	1	1	4				3	1	1	1	1	1	1	1	✓				
Trip Blank 6.12.13				✓							2				✓												

Possible Hazard Identification

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

Sample Disposal

☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 DAYS

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
[signature]	6/12/13	12:35	[signature]	6/12/13	1239
2. Relinquished By	**Date**	**Time**	**2. Received By**	**Date**	**Time**
3. Relinquished By	**Date**	**Time**	**3. Received By**	**Date**	**Time**

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2671-2

Login Number: 2671

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
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	
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.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2671-2

Login Number: 2671
List Number: 1
Creator: Janish, Carl

List Source: TestAmerica Buffalo
List Creation: 06/13/13 03:13 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2671-2

Method	Method Description	Protocol	Laboratory
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2671-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2671-1	207/208 MSD	Water	06/11/13 17:30	06/12/13 13:27

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2671-2

Client Sample ID: 207/208 MSD

Lab Sample ID: 160-2671-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	>22946.00		10	10	mg/L	5		SM 5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2671-2

Client Sample ID: 207/208 MSD

Lab Sample ID: 160-2671-1

Date Collected: 06/11/13 17:30

Matrix: Water

Date Received: 06/12/13 13:27

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	>22946.00		10	10	mg/L			06/13/13 14:15	5

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2671-2

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-123846/1 USB
Matrix: Water
Analysis Batch: 123846

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			06/13/13 14:15	1

Lab Sample ID: LCS 480-123846/2
Matrix: Water
Analysis Batch: 123846

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	186		mg/L		94	85 - 115		

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2671-2

General Chemistry

Analysis Batch: 123846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2671-1	207/208 MSD	Total/NA	Water	SM 5210B	
LCS 480-123846/2	Lab Control Sample	Total/NA	Water	SM 5210B	
USB 480-123846/1 USB	Method Blank	Total/NA	Water	SM 5210B	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2673-1
Client Project/Site: Bridgeton Landfill
Revision: 1

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
7/1/2013 3:41:40 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

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Have a Question? Ask The Expert

Visit us at:
www.testamericainc.com

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.

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Job ID: 160-2673-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2673-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

Revision 1 - Per client request, all reported analytes are also reported in the LCS/LCSD list.

RECEIPT

The samples were received on 6/12/2013 12:39 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the coolers at receipt was 1.7º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples 210/211-MSD (160-2673-1) and TRIP BLANK (160-2673-2) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA Method 624. The samples were analyzed on 06/12/2013.

Methylene Chloride was detected in method blank MB 160-56201/2 at a level exceeding the reporting limit. None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

Chloroethane, Chloromethane, Vinyl chloride and Trichlorofluoromethane failed the recovery criteria low for LCS 160-56201/4.

Job ID: 160-2673-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Bromomethane, Chloroethane, Chloromethane, Vinyl chloride and Trichlorofluoromethane exceeded the RPD limit for LCSD 160-56201/5. The laboratory control sample duplicate (LCSD) for batch 56201 recovered within QC limits indicating a poor purge for the LCS. Since the failed target analytes had passing QC for the CCV and LCSD, re-analysis was not warranted.

For batch 56201 and as determined by sample screening, the associated samples did not have a MS/MSD analyzed. The associated samples were all either tripblanks, which do not warrant a MS/MSD analysis, or diluted at 50x. A LCS/LCSD were analyzed and the LCSD had passing QC.

In batch 56201, the following samples had pH <2 even with HCl preservation. The samples were all analyzed within the 7 day hold time allowable for unpresreved samples.

The following samples were diluted due to the abundance of non-target analytes: 210/211-MSD (160-2673-1). Elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the VOCs analysis.

All other quality control parameters were within the acceptance limits.

Organic Prep
Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 56272. laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Due to the matrix, the following sample(s) could not be concentrated to the final method required volume: 210/211-MSD (160-2673-1). The reporting limits (RLs) are elevated proportionately.

The following samples formed emulsions during the extraction procedure: 210/211-MSD (160-2673-1). The emulsions were broken up using centrifuge.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 210/211-MSD (160-2673-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA Method 625. The samples were prepared on 06/17/2013 and analyzed on 06/18/2013.

The following samples were diluted to bring the concentration of target analytes within the calibration range: 210/211-MSD (160-2673-1) [20X]. Elevated reporting limits (RLs) are provided.

Several analytes failed the surrogate recovery criteria low for 210/211-MSD (160-2673-1). Due to the level of dilution required for the following sample(s), surrogate recoveries are not reported. Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required. The samples shows evidence of matrix interference; therefore, re-extraction and/or re-analysis was not performed.

2-Chlorophenol, 4-Nitrophenol, Isophorone and Phenol failed the recovery criteria low for LCS 160-56272/2-A and LCSD 160-56272/3-A. There was insufficient sample to perform a re-extraction or re-analysis; therefore, the data have been reported.

No other difficulties were encountered during the SVOC analysis.

All other quality control parameters were within the acceptance limits.

ICP total and dissolved
Sample 210/211-MSD (160-2673-1) was analyzed for ICP in accordance with EPA Method 200.7, Rev. 4.4. The samples were prepared on 06/12/2013 and analyzed on 06/13/2013.

Cobalt was detected in method blank MB 160-55605/1-A at a level that was above the method detection limit but below the reporting limit.

The following samples were diluted due to the nature of the sample matrix. The sample digestates were dark yellow in color: 210/211-MSD (160-2673-1)[5X]. Elevated reporting limits (RLs) are provided.

Job ID: 160-2673-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

No other difficulties were encountered during the ICP analysis.

All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)
Sample 210/211-MSD (160-2673-1) was analyzed for dissolved mercury (CVAA) in accordance with EPA Method 245.1. The samples were prepared on 06/17/2013 and analyzed on 06/18/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

MERCURY
Sample 210/211-MSD (160-2673-1) was analyzed for mercury in accordance with EPA Method 245.1. The samples were prepared on 06/17/2013 and analyzed on 06/18/2013.

Mercury was detected in method blank MB 160-56207/1-A at a level that was above the method detection limit but below the reporting limit.

No other difficulties were encountered during the mercury analysis.

All other quality control parameters were within the acceptance limits.

SGT-HEM
Sample 210/211-MSD (160-2673-1) was analyzed for SGT-HEM in accordance with EPA Method 1664A. The samples were prepared and analyzed on 06/14/2013.

No difficulties were encountered during the SGT-HEM analysis.

All quality control parameters were within the acceptance limits.

TOTAL SUSPENDED SOLIDS
Sample 210/211-MSD (160-2673-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 06/13/2013.

Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: 210/211-MSD (160-2673-1). The reporting limits (RLs) have been adjusted proportionately.

No difficulties were encountered during the TSS analysis.

All quality control parameters were within the acceptance limits.

AMMONIA
Sample 210/211-MSD (160-2673-1) was analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/14/2013.

Sample 210/211-MSD (160-2673-1)[1000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the ammonia analysis.

All other quality control parameters were within the acceptance limits.

CHEMICAL OXYGEN DEMAND
Sample 210/211-MSD (160-2673-1) was analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 06/17/2013.

Job ID: 160-2673-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Sample 210/211-MSD (160-2673-1)[100X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the COD analysis.

All quality control parameters were within the acceptance limits.

PH

Sample 210/211-MSD (160-2673-1) was analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed on 06/12/2013.

For the analysis of the associated samples in pH batch #55596, this analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 210/211-MSD (160-2673-1)

For the analysis of the associated samples in pH batch #55596, the samples were analyzed using ph indicator strips due the the samples matrices possibly damaging the pH probe. The indicator strips used were range 0-14 (Lot HC270245).210/211-MSD (160-2673-1)

No difficulties were encountered during the pH analysis.

All quality control parameters were within the acceptance limits.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

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Cal 351

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY / FEI	6/12/13	197602
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
816-285-8410	(314) 502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State): BRIDGETON LF / MISSOURI

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.:

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): 624-25ml-VOC	1664A-HEM	5210B-BOD	625-SVOC	200.7 245.1 T	2540D-TSS	410.4 350.1	200.7 245.1 D	pH				Special Instructions/ Conditions of Receipt
210/211-MSD	6/12/13	11:30		✓			4	1	1	4			3	1	1	1	1	1	1	1	✓				
TRIP BLANK				✓						2			2												

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 DAYS

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By	6/12/13	12:39	1. Received By	6/12/13	1239
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2673-1

Login Number: 2673

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
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	Received same day of collection; chilling process has begun.
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?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2673-1

Login Number: 2673
List Number: 1
Creator: Janish, Carl

List Source: TestAmerica Buffalo
List Creation: 06/13/13 03:13 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Definitions/Glossary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2673-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2673-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SL
245.1	Mercury (CVAA)	EPA	TAL SL
1664A	HEM and SGT-HEM	1664A	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
410.4	COD	MCAWW	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL SL

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2673-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2673-1	210/211-MSD	Water	06/12/13 11:30	06/12/13 12:39
160-2673-2	TRIP BLANK	Water	06/12/13 00:00	06/12/13 12:39

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2673-1

Client Sample ID: 210/211-MSD — Lab Sample ID: 160-2673-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	58		50	6.0	ug/L	1		624	Total/NA
Benzene	49	J	50	3.0	ug/L	1		624	Total/NA
Naphthalene	170		55	5.5	ug/L	1		625	Total/NA
Phenanthrene	14	J	55	5.5	ug/L	1		625	Total/NA
Phenol - DL	8400	*	1100	220	ug/L	20		625	Total/NA
Aluminum	19000		10000	4000	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	490	J	500	99	ug/L	5		200.7 Rev 4.4	Total/NA
Chromium	350	J	500	160	ug/L	5		200.7 Rev 4.4	Total/NA
Iron	1000000		5000	800	ug/L	5		200.7 Rev 4.4	Total/NA
Lead	330	J	500	64	ug/L	5		200.7 Rev 4.4	Total/NA
Thallium	130	J	1000	44	ug/L	5		200.7 Rev 4.4	Total/NA
Zinc	17000		1000	260	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	470	J	500	99	ug/L	5		200.7 Rev 4.4	Dissolved
Chromium	280	J	500	160	ug/L	5		200.7 Rev 4.4	Dissolved
Cobalt	270	J B	2500	200	ug/L	5		200.7 Rev 4.4	Dissolved
Iron	800000		5000	800	ug/L	5		200.7 Rev 4.4	Dissolved
Lead	180	J	500	64	ug/L	5		200.7 Rev 4.4	Dissolved
Thallium	120	J	1000	44	ug/L	5		200.7 Rev 4.4	Dissolved
Zinc	15000		1000	260	ug/L	5		200.7 Rev 4.4	Dissolved
Mercury	4.8	J B	6.0	1.5	ug/L	1		245.1	Dissolved
Oil & Grease	11	J	17	4.7	mg/L	1		1664A	Total/NA
Ammonia	710		20	9.0	mg/L	1000		350.1	Total/NA
Chemical Oxygen Demand	50000		1000	500	mg/L	100		410.4	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
Total Suspended Solids	810		40	40	mg/L	1		SM 2540D	Total/NA
pH	6.00	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 160-2673-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2673-1

Client Sample ID: 210/211-MSD

Lab Sample ID: 160-2673-1

Date Collected: 06/12/13 11:30
Matrix: Water
Date Received: 06/12/13 12:39

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.5	ug/L			06/12/13 23:30	1
1,1,2,2-Tetrachloroethane	ND		50	5.0	ug/L			06/12/13 23:30	1
1,1,2-Trichloroethane	ND		50	7.5	ug/L			06/12/13 23:30	1
1,1-Dichloroethane	ND		50	3.5	ug/L			06/12/13 23:30	1
1,1-Dichloroethene	ND		50	4.0	ug/L			06/12/13 23:30	1
1,2-Dichlorobenzene	ND		50	3.0	ug/L			06/12/13 23:30	1
1,2-Dichloroethane	ND		50	5.0	ug/L			06/12/13 23:30	1
1,2-Dichloropropane	ND		50	5.0	ug/L			06/12/13 23:30	1
1,3-Dichlorobenzene	ND		50	4.0	ug/L			06/12/13 23:30	1
1,4-Dichlorobenzene	**58**		50	6.0	ug/L			06/12/13 23:30	1
2-Chloroethyl vinyl ether	ND		100	8.5	ug/L			06/12/13 23:30	1
Benzene	**49**	**J**	50	3.0	ug/L			06/12/13 23:30	1
Bromodichloromethane	ND		50	4.5	ug/L			06/12/13 23:30	1
Bromoform	ND		50	8.5	ug/L			06/12/13 23:30	1
Bromomethane	ND	*	100	6.5	ug/L			06/12/13 23:30	1
Carbon tetrachloride	ND		50	6.5	ug/L			06/12/13 23:30	1
Chlorobenzene	ND		50	7.5	ug/L			06/12/13 23:30	1
Chloroethane	ND	*	100	5.0	ug/L			06/12/13 23:30	1
Chloroform	ND		50	5.0	ug/L			06/12/13 23:30	1
Chloromethane	ND	*	100	4.0	ug/L			06/12/13 23:30	1
cis-1,2-Dichloroethene	ND		50	4.5	ug/L			06/12/13 23:30	1
cis-1,3-Dichloropropene	ND		50	3.5	ug/L			06/12/13 23:30	1
Dibromochloromethane	ND		50	6.5	ug/L			06/12/13 23:30	1
Ethylbenzene	ND		50	4.5	ug/L			06/12/13 23:30	1
Methylene Chloride	ND		50	5.5	ug/L			06/12/13 23:30	1
Tetrachloroethene	ND		50	9.0	ug/L			06/12/13 23:30	1
Toluene	ND		50	3.5	ug/L			06/12/13 23:30	1
trans-1,2-Dichloroethene	ND		50	4.0	ug/L			06/12/13 23:30	1
trans-1,3-Dichloropropene	ND		50	4.0	ug/L			06/12/13 23:30	1
Trichloroethene	ND		50	11	ug/L			06/12/13 23:30	1
Trichlorofluoromethane	ND	*	50	5.5	ug/L			06/12/13 23:30	1
Vinyl chloride	ND	*	100	4.0	ug/L			06/12/13 23:30	1
Xylenes, Total	ND		150	10	ug/L			06/12/13 23:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*71 - 135*		*06/12/13 23:30*	*1*
4-Bromofluorobenzene (Surr)	*110*		*80 - 122*		*06/12/13 23:30*	*1*
Toluene-d8 (Surr)	*115*		*84 - 122*		*06/12/13 23:30*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
bis (2-chloroisopropyl) ether	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
2,4,6-Trichlorophenol	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
2,4-Dichlorophenol	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
2,4-Dimethylphenol	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
2,4-Dinitrophenol	ND		270	11	ug/L		06/17/13 14:56	06/18/13 19:11	1
2,4-Dinitrotoluene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
2,6-Dinitrotoluene	ND		55	12	ug/L		06/17/13 14:56	06/18/13 19:11	1
2-Chloronaphthalene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2673-1

Client Sample ID: 210/211-MSD

Date Collected: 06/12/13 11:30
Date Received: 06/12/13 12:39

Lab Sample ID: 160-2673-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND	*	55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
2-Nitrophenol	ND		55	8.3	ug/L		06/17/13 14:56	06/18/13 19:11	1
3,3'-Dichlorobenzidine	ND		270	7.0	ug/L		06/17/13 14:56	06/18/13 19:11	1
4,6-Dinitro-2-methylphenol	ND		270	6.9	ug/L		06/17/13 14:56	06/18/13 19:11	1
4-Bromophenyl phenyl ether	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
4-Chloro-3-methylphenol	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
4-Chlorophenyl phenyl ether	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
4-Nitrophenol	ND	*	270	11	ug/L		06/17/13 14:56	06/18/13 19:11	1
Acenaphthene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Acenaphthylene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Anthracene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Benzidine	ND		550	110	ug/L		06/17/13 14:56	06/18/13 19:11	1
Benzo[a]anthracene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Benzo[a]pyrene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Benzo[b]fluoranthene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Benzo[g,h,i]perylene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Benzo[k]fluoranthene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Bis(2-chloroethoxy)methane	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Bis(2-chloroethyl)ether	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Bis(2-ethylhexyl) phthalate	ND		55	10	ug/L		06/17/13 14:56	06/18/13 19:11	1
Butyl benzyl phthalate	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Chrysene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Dibenz(a,h)anthracene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Diethyl phthalate	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Dimethyl phthalate	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Di-n-butyl phthalate	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Di-n-octyl phthalate	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Fluoranthene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Fluorene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Hexachloro-1,3-butadiene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Hexachlorobenzene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Hexachlorocyclopentadiene	ND		270	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Hexachloroethane	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Indeno[1,2,3-cd]pyrene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Isophorone	ND	*	55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Naphthalene	**170**		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Nitrobenzene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
N-Nitrosodimethylamine	ND		55	11	ug/L		06/17/13 14:56	06/18/13 19:11	1
N-Nitrosodi-n-propylamine	ND		55	8.2	ug/L		06/17/13 14:56	06/18/13 19:11	1
N-Nitrosodiphenylamine	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Pentachlorophenol	ND		270	6.9	ug/L		06/17/13 14:56	06/18/13 19:11	1
Phenanthrene	**14**	**J**	55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1
Pyrene	ND		55	5.5	ug/L		06/17/13 14:56	06/18/13 19:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*41 - 109*	*06/17/13 14:56*	*06/18/13 19:11*	*1*
2-Fluorobiphenyl (Surr)	*0*	*X*	*31 - 103*	*06/17/13 14:56*	*06/18/13 19:11*	*1*
2-Fluorophenol (Surr)	*0*	*X*	*23 - 82*	*06/17/13 14:56*	*06/18/13 19:11*	*1*
Nitrobenzene-d5 (Surr)	*0*	*X*	*36 - 98*	*06/17/13 14:56*	*06/18/13 19:11*	*1*
Phenol-d5 (Surr)	*0*	*X*	*14 - 68*	*06/17/13 14:56*	*06/18/13 19:11*	*1*

Client Sample ID: 210/211-MSD

Lab Sample ID: 160-2673-1

Date Collected: 06/12/13 11:30

Matrix: Water

Date Received: 06/12/13 12:39

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14 (Surr)	0	X	43 - 107	06/17/13 14:56	06/18/13 19:11	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	8400	*	1100	220	ug/L		06/17/13 14:56	06/18/13 16:20	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	0	D X	41 - 109	06/17/13 14:56	06/18/13 16:20	20
2-Fluorobiphenyl (Surr)	0	D X	31 - 103	06/17/13 14:56	06/18/13 16:20	20
2-Fluorophenol (Surr)	0	D X	23 - 82	06/17/13 14:56	06/18/13 16:20	20
Nitrobenzene-d5 (Surr)	0	D X	36 - 98	06/17/13 14:56	06/18/13 16:20	20
Phenol-d5 (Surr)	0	D X	14 - 68	06/17/13 14:56	06/18/13 16:20	20
Terphenyl-d14 (Surr)	0	D X	43 - 107	06/17/13 14:56	06/18/13 16:20	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		500	300	ug/L		06/12/13 14:37	06/13/13 11:53	5
Aluminum	19000		10000	4000	ug/L		06/12/13 14:37	06/13/13 11:53	5
Arsenic	490	J	500	99	ug/L		06/12/13 14:37	06/13/13 11:53	5
Beryllium	ND		250	25	ug/L		06/12/13 14:37	06/13/13 11:53	5
Cadmium	ND		250	23	ug/L		06/12/13 14:37	06/13/13 11:53	5
Cobalt	ND		2500	200	ug/L		06/12/13 14:37	06/13/13 11:53	5
Chromium	350	J	500	160	ug/L		06/12/13 14:37	06/13/13 11:53	5
Copper	ND		1300	230	ug/L		06/12/13 14:37	06/13/13 11:53	5
Iron	1000000		5000	800	ug/L		06/12/13 14:37	06/13/13 11:53	5
Nickel	ND		2000	670	ug/L		06/12/13 14:37	06/13/13 11:53	5
Lead	330	J	500	64	ug/L		06/12/13 14:37	06/13/13 11:53	5
Antimony	ND		500	200	ug/L		06/12/13 14:37	06/13/13 11:53	5
Selenium	ND		750	130	ug/L		06/12/13 14:37	06/13/13 11:53	5
Thallium	130	J	1000	44	ug/L		06/12/13 14:37	06/13/13 11:53	5
Zinc	17000		1000	260	ug/L		06/12/13 14:37	06/13/13 11:53	5

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10000	4000	ug/L		06/12/13 14:37	06/13/13 12:18	5
Antimony	ND		500	200	ug/L		06/12/13 14:37	06/13/13 12:18	5
Arsenic	470	J	500	99	ug/L		06/12/13 14:37	06/13/13 12:18	5
Beryllium	ND		250	25	ug/L		06/12/13 14:37	06/13/13 12:18	5
Cadmium	ND		250	23	ug/L		06/12/13 14:37	06/13/13 12:18	5
Chromium	280	J	500	160	ug/L		06/12/13 14:37	06/13/13 12:18	5
Cobalt	270	J B	2500	200	ug/L		06/12/13 14:37	06/13/13 12:18	5
Copper	ND		1300	230	ug/L		06/12/13 14:37	06/13/13 12:18	5
Iron	800000		5000	800	ug/L		06/12/13 14:37	06/13/13 12:18	5
Lead	180	J	500	64	ug/L		06/12/13 14:37	06/13/13 12:18	5
Nickel	ND		2000	670	ug/L		06/12/13 14:37	06/13/13 12:18	5
Selenium	ND		750	130	ug/L		06/12/13 14:37	06/13/13 12:18	5
Silver	ND		500	300	ug/L		06/12/13 14:37	06/13/13 12:18	5
Thallium	120	J	1000	44	ug/L		06/12/13 14:37	06/13/13 12:18	5
Zinc	15000		1000	260	ug/L		06/12/13 14:37	06/13/13 12:18	5

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2673-1

Client Sample ID: 210/211-MSD

Lab Sample ID: 160-2673-1
Matrix: Water

Date Collected: 06/12/13 11:30
Date Received: 06/12/13 12:39

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		6.0	1.5	ug/L		06/17/13 07:34	06/18/13 21:57	1

Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**4.8**	**J B**	6.0	1.5	ug/L		06/17/13 07:34	06/18/13 22:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	**11**	**J**	17	4.7	mg/L		06/14/13 01:19	06/14/13 01:41	1
Ammonia	**710**		20	9.0	mg/L			06/14/13 11:45	1000
Chemical Oxygen Demand	**50000**		1000	500	mg/L			06/17/13 20:44	100

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**810**		40	40	mg/L			06/13/13 18:29	1
pH	**6.00**	**HF**	0.100	0.100	SU			06/12/13 13:48	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2673-2
Matrix: Water

Date Collected: 06/12/13 00:00
Date Received: 06/12/13 12:39

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/12/13 22:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/12/13 22:10	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/12/13 22:10	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/12/13 22:10	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/12/13 22:10	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/12/13 22:10	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/12/13 22:10	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/12/13 22:10	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/12/13 22:10	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/12/13 22:10	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/12/13 22:10	1
Benzene	ND		1.0	0.060	ug/L			06/12/13 22:10	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/12/13 22:10	1
Bromoform	ND		1.0	0.17	ug/L			06/12/13 22:10	1
Bromomethane	ND	*	2.0	0.13	ug/L			06/12/13 22:10	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/12/13 22:10	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/12/13 22:10	1
Chloroethane	ND	*	2.0	0.10	ug/L			06/12/13 22:10	1
Chloroform	ND		1.0	0.10	ug/L			06/12/13 22:10	1
Chloromethane	ND	*	2.0	0.080	ug/L			06/12/13 22:10	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/12/13 22:10	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/12/13 22:10	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/12/13 22:10	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/12/13 22:10	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/12/13 22:10	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/12/13 22:10	1
Toluene	ND		1.0	0.070	ug/L			06/12/13 22:10	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/12/13 22:10	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/12/13 22:10	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2673-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2673-2

Date Collected: 06/12/13 00:00

Matrix: Water

Date Received: 06/12/13 12:39

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		1.0	0.21	ug/L			06/12/13 22:10	1
Trichlorofluoromethane	ND	*	1.0	0.11	ug/L			06/12/13 22:10	1
Vinyl chloride	ND	*	2.0	0.080	ug/L			06/12/13 22:10	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/12/13 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*71 - 135*		*06/12/13 22:10*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 122*		*06/12/13 22:10*	*1*
Toluene-d8 (Surr)	*108*		*84 - 122*		*06/12/13 22:10*	*1*

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-56201/2
Matrix: Water
Analysis Batch: 56201

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/12/13 19:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/12/13 19:30	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/12/13 19:30	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/12/13 19:30	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/12/13 19:30	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/12/13 19:30	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/12/13 19:30	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/12/13 19:30	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/12/13 19:30	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/12/13 19:30	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/12/13 19:30	1
Benzene	ND		1.0	0.060	ug/L			06/12/13 19:30	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/12/13 19:30	1
Bromoform	ND		1.0	0.17	ug/L			06/12/13 19:30	1
Bromomethane	ND		2.0	0.13	ug/L			06/12/13 19:30	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/12/13 19:30	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/12/13 19:30	1
Chloroethane	ND		2.0	0.10	ug/L			06/12/13 19:30	1
Chloroform	ND		1.0	0.10	ug/L			06/12/13 19:30	1
Chloromethane	ND		2.0	0.080	ug/L			06/12/13 19:30	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/12/13 19:30	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/12/13 19:30	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/12/13 19:30	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/12/13 19:30	1
Methylene Chloride	2.42		1.0	0.11	ug/L			06/12/13 19:30	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/12/13 19:30	1
Toluene	ND		1.0	0.070	ug/L			06/12/13 19:30	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/12/13 19:30	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/12/13 19:30	1
Trichloroethene	ND		1.0	0.21	ug/L			06/12/13 19:30	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/12/13 19:30	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/12/13 19:30	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/12/13 19:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 135*		*06/12/13 19:30*	*1*
4-Bromofluorobenzene (Surr)	*107*		*80 - 122*		*06/12/13 19:30*	*1*
Toluene-d8 (Surr)	*115*		*84 - 122*		*06/12/13 19:30*	*1*

Lab Sample ID: LCS 160-56201/4
Matrix: Water
Analysis Batch: 56201

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	11.0		ug/L		110	82 - 127
1,1,2,2-Tetrachloroethane	10.0	9.31		ug/L		93	69 - 130
1,1,2-Trichloroethane	10.0	10.5		ug/L		105	78 - 122
1,1-Dichloroethane	10.0	11.3		ug/L		113	82 - 125

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-56201/4
Matrix: Water
Analysis Batch: 56201

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	10.9		ug/L		109	77 - 127
1,2-Dichlorobenzene	10.0	9.85		ug/L		98	83 - 121
1,2-Dichloroethane	10.0	11.0		ug/L		110	78 - 127
1,2-Dichloropropane	10.0	9.48		ug/L		95	81 - 124
1,3-Dichlorobenzene	10.0	9.58		ug/L		96	85 - 121
1,4-Dichlorobenzene	10.0	9.64		ug/L		96	83 - 116
2-Chloroethyl vinyl ether	10.0	9.11		ug/L		91	34 - 140
Benzene	10.0	9.78		ug/L		98	84 - 124
Bromodichloromethane	10.0	10.0		ug/L		100	81 - 127
Bromoform	10.0	9.68		ug/L		97	78 - 138
Bromomethane	10.0	5.65		ug/L		57	48 - 162
Carbon tetrachloride	10.0	11.0		ug/L		110	79 - 132
Chlorobenzene	10.0	9.63		ug/L		96	85 - 118
Chloroethane	10.0	5.64	*	ug/L		56	71 - 132
Chloroform	10.0	10.5		ug/L		105	82 - 124
Chloromethane	10.0	5.45	*	ug/L		54	68 - 136
cis-1,2-Dichloroethene	10.0	10.4		ug/L		104	83 - 123
cis-1,3-Dichloropropene	10.0	9.06		ug/L		91	79 - 132
Dibromochloromethane	10.0	10.5		ug/L		105	81 - 129
Ethylbenzene	10.0	9.55		ug/L		95	85 - 125
Methylene Chloride	10.0	12.6		ug/L		126	70 - 127
Tetrachloroethene	10.0	10.5		ug/L		105	76 - 129
Toluene	10.0	10.1		ug/L		101	83 - 127
trans-1,2-Dichloroethene	10.0	11.4		ug/L		114	78 - 122
trans-1,3-Dichloropropene	10.0	9.76		ug/L		98	83 - 130
Trichloroethene	10.0	9.61		ug/L		96	81 - 123
Trichlorofluoromethane	10.0	5.68	*	ug/L		57	72 - 135
Vinyl chloride	10.0	5.82	*	ug/L		58	72 - 132
Xylenes, Total	30.0	25.8		ug/L		86	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*114*		*71 - 135*
4-Bromofluorobenzene (Surr)	*95*		*80 - 122*
Toluene-d8 (Surr)	*102*		*84 - 122*

Lab Sample ID: LCSD 160-56201/5
Matrix: Water
Analysis Batch: 56201

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	10.0	9.84		ug/L		98	82 - 127	11	20
1,1,2,2-Tetrachloroethane	10.0	9.73		ug/L		97	69 - 130	4	20
1,1,2-Trichloroethane	10.0	9.90		ug/L		99	78 - 122	6	20
1,1-Dichloroethane	10.0	9.68		ug/L		97	82 - 125	15	20
1,1-Dichloroethene	10.0	9.41		ug/L		94	77 - 127	15	20
1,2-Dichlorobenzene	10.0	10.0		ug/L		100	83 - 121	2	20
1,2-Dichloroethane	10.0	10.3		ug/L		103	78 - 127	6	20
1,2-Dichloropropane	10.0	9.88		ug/L		99	81 - 124	4	20

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-56201/5
Matrix: Water
Analysis Batch: 56201

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	10.0	9.97		ug/L		100	85 - 121	4	20
1,4-Dichlorobenzene	10.0	10.0		ug/L		100	83 - 116	4	20
2-Chloroethyl vinyl ether	10.0	9.12		ug/L		91	34 - 140	0	20
Benzene	10.0	9.88		ug/L		99	84 - 124	1	20
Bromodichloromethane	10.0	10.1		ug/L		101	81 - 127	1	20
Bromoform	10.0	9.75		ug/L		98	78 - 138	1	20
Bromomethane	10.0	10.2	*	ug/L		102	48 - 162	58	20
Carbon tetrachloride	10.0	9.88		ug/L		99	79 - 132	11	20
Chlorobenzene	10.0	9.90		ug/L		99	85 - 118	3	20
Chloroethane	10.0	9.57	*	ug/L		96	71 - 132	52	20
Chloroform	10.0	9.76		ug/L		98	82 - 124	7	20
Chloromethane	10.0	9.54	*	ug/L		95	68 - 136	55	20
cis-1,2-Dichloroethene	10.0	9.67		ug/L		97	83 - 123	7	20
cis-1,3-Dichloropropene	10.0	9.46		ug/L		95	79 - 132	4	20
Dibromochloromethane	10.0	10.1		ug/L		101	81 - 129	4	20
Ethylbenzene	10.0	10.1		ug/L		101	85 - 125	5	20
Methylene Chloride	10.0	10.6		ug/L		106	70 - 127	17	20
Tetrachloroethene	10.0	10.1		ug/L		101	76 - 129	4	20
Toluene	10.0	9.71		ug/L		97	83 - 127	4	20
trans-1,2-Dichloroethene	10.0	9.58		ug/L		96	78 - 122	17	20
trans-1,3-Dichloropropene	10.0	9.24		ug/L		92	83 - 130	5	20
Trichloroethene	10.0	9.94		ug/L		99	81 - 123	3	20
Trichlorofluoromethane	10.0	9.67	*	ug/L		97	72 - 135	52	20
Vinyl chloride	10.0	10.0	*	ug/L		100	72 - 132	53	20
Xylenes, Total	30.0	31.3		ug/L		104	70 - 130	19	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 135*
4-Bromofluorobenzene (Surr)	*98*		*80 - 122*
Toluene-d8 (Surr)	*95*		*84 - 122*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-56272/1-A
Matrix: Water
Analysis Batch: 56695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
bis (2-chloroisopropyl) ether	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4,6-Trichlorophenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4-Dichlorophenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4-Dimethylphenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4-Dinitrophenol	ND		50	2.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4-Dinitrotoluene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,6-Dinitrotoluene	ND		10	2.2	ug/L		06/17/13 14:56	06/18/13 13:35	1
2-Chloronaphthalene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2-Chlorophenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-56272/1-A
Matrix: Water
Analysis Batch: 56695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		10	1.5	ug/L		06/17/13 14:56	06/18/13 13:35	1
3,3'-Dichlorobenzidine	ND		50	1.3	ug/L		06/17/13 14:56	06/18/13 13:35	1
4,6-Dinitro-2-methylphenol	ND		50	1.3	ug/L		06/17/13 14:56	06/18/13 13:35	1
4-Bromophenyl phenyl ether	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
4-Chlorophenyl phenyl ether	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
4-Nitrophenol	ND		50	2.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Acenaphthene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Acenaphthylene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Anthracene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzidine	ND		100	20	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[a]anthracene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[a]pyrene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[b]fluoranthene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[g,h,i]perylene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[k]fluoranthene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Bis(2-chloroethoxy)methane	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Bis(2-chloroethyl)ether	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Bis(2-ethylhexyl) phthalate	ND		10	1.9	ug/L		06/17/13 14:56	06/18/13 13:35	1
Butyl benzyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Chrysene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Dibenz(a,h)anthracene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Diethyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Dimethyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Di-n-butyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Di-n-octyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Fluoranthene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Fluorene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Hexachloro-1,3-butadiene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Hexachlorobenzene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Hexachlorocyclopentadiene	ND		50	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Hexachloroethane	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Indeno[1,2,3-cd]pyrene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Isophorone	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Naphthalene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Nitrobenzene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/L		06/17/13 14:56	06/18/13 13:35	1
N-Nitrosodiphenylamine	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Pentachlorophenol	ND		50	1.3	ug/L		06/17/13 14:56	06/18/13 13:35	1
Phenanthrene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Phenol	ND		10	2.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Pyrene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*55*		*41 - 109*	*06/17/13 14:56*	*06/18/13 13:35*	*1*
2-Fluorobiphenyl (Surr)	*45*		*31 - 103*	*06/17/13 14:56*	*06/18/13 13:35*	*1*
2-Fluorophenol (Surr)	*27*		*23 - 82*	*06/17/13 14:56*	*06/18/13 13:35*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-56272/1-A
Matrix: Water
Analysis Batch: 56695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56272

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	47		36 - 98	06/17/13 14:56	06/18/13 13:35	1
Phenol-d5 (Surr)	17		14 - 68	06/17/13 14:56	06/18/13 13:35	1
Terphenyl-d14 (Surr)	55		43 - 107	06/17/13 14:56	06/18/13 13:35	1

Lab Sample ID: LCS 160-56272/2-A
Matrix: Water
Analysis Batch: 56695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 56272

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	99.9	52.3		ug/L		52	44 - 84
bis (2-chloroisopropyl) ether	100	61.8		ug/L		62	42 - 102
2,4,6-Trichlorophenol	100	60.2		ug/L		60	54 - 105
2,4-Dichlorophenol	100	57.8		ug/L		58	46 - 103
2,4-Dimethylphenol	100	54.5		ug/L		55	40 - 105
2,4-Dinitrophenol	100	57.5		ug/L		58	42 - 146
2,4-Dinitrotoluene	100	74.4		ug/L		74	62 - 101
2,6-Dinitrotoluene	100	69.2		ug/L		69	62 - 103
2-Chloronaphthalene	100	59.5		ug/L		59	45 - 95
2-Chlorophenol	100	51.2	*	ug/L		51	56 - 93
2-Nitrophenol	100	56.8		ug/L		57	51 - 98
3,3'-Dichlorobenzidine	100	58.7		ug/L		59	26 - 77
4,6-Dinitro-2-methylphenol	100	69.2		ug/L		69	61 - 120
4-Bromophenyl phenyl ether	100	68.8		ug/L		69	54 - 111
4-Chloro-3-methylphenol	100	62.3		ug/L		62	45 - 106
4-Chlorophenyl phenyl ether	100	67.5		ug/L		68	53 - 100
4-Nitrophenol	100	20.6	J *	ug/L		21	25 - 45
Acenaphthene	100	62.5		ug/L		62	51 - 89
Acenaphthylene	100	61.5		ug/L		62	46 - 98
Anthracene	100	67.4		ug/L		67	54 - 111
Benzo[a]anthracene	100	75.2		ug/L		75	68 - 108
Benzo[a]pyrene	100	67.7		ug/L		68	55 - 108
Benzo[b]fluoranthene	100	69.5		ug/L		69	57 - 114
Benzo[g,h,i]perylene	100	70.4		ug/L		70	58 - 120
Benzo[k]fluoranthene	100	72.5		ug/L		72	59 - 112
Bis(2-chloroethoxy)methane	100	60.1		ug/L		60	53 - 99
Bis(2-chloroethyl)ether	100	53.5		ug/L		53	50 - 97
Bis(2-ethylhexyl) phthalate	100	64.3		ug/L		64	54 - 116
Butyl benzyl phthalate	100	64.2		ug/L		64	52 - 126
Chrysene	100	65.4		ug/L		65	58 - 112
Dibenz(a,h)anthracene	100	76.3		ug/L		76	56 - 122
Diethyl phthalate	100	67.1		ug/L		67	60 - 101
Dimethyl phthalate	100	69.9		ug/L		70	57 - 101
Di-n-butyl phthalate	100	68.9		ug/L		69	57 - 108
Di-n-octyl phthalate	100	66.5		ug/L		67	57 - 118
Fluoranthene	100	73.6		ug/L		74	55 - 114
Fluorene	100	66.8		ug/L		67	59 - 96
Hexachloro-1,3-butadiene	100	49.5		ug/L		50	36 - 84
Hexachlorobenzene	100	70.7		ug/L		71	56 - 110

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-56272/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56695 — **Prep Batch: 56272**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	100	52.5		ug/L		53	16 - 86
Hexachloroethane	100	47.5		ug/L		47	40 - 77
Indeno[1,2,3-cd]pyrene	100	74.5		ug/L		75	55 - 124
Isophorone	100	48.6	*	ug/L		49	50 - 107
Naphthalene	100	53.7		ug/L		54	42 - 82
Nitrobenzene	100	56.2		ug/L		56	48 - 96
N-Nitrosodi-n-propylamine	100	65.9		ug/L		66	57 - 113
Pentachlorophenol	100	60.0		ug/L		60	56 - 126
Phenanthrene	100	69.1		ug/L		69	54 - 110
Phenol	100	21.7	*	ug/L		22	27 - 43
Pyrene	100	61.9		ug/L		62	53 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*76*		*41 - 109*
2-Fluorobiphenyl (Surr)	*62*		*31 - 103*
2-Fluorophenol (Surr)	*31*		*23 - 82*
Nitrobenzene-d5 (Surr)	*59*		*36 - 98*
Phenol-d5 (Surr)	*21*		*14 - 68*
Terphenyl-d14 (Surr)	*65*		*43 - 107*

Lab Sample ID: LCSD 160-56272/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56695 — **Prep Batch: 56272**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	99.9	53.9		ug/L		54	44 - 84	3	20
bis (2-chloroisopropyl) ether	100	62.5		ug/L		63	42 - 102	1	20
2,4,6-Trichlorophenol	100	62.1		ug/L		62	54 - 105	3	20
2,4-Dichlorophenol	100	58.6		ug/L		59	46 - 103	1	20
2,4-Dimethylphenol	100	53.7		ug/L		54	40 - 105	2	20
2,4-Dinitrophenol	100	61.2		ug/L		61	42 - 146	6	20
2,4-Dinitrotoluene	100	79.4		ug/L		79	62 - 101	6	20
2,6-Dinitrotoluene	100	72.7		ug/L		73	62 - 103	5	20
2-Chloronaphthalene	100	61.4		ug/L		61	45 - 95	3	20
2-Chlorophenol	100	51.3	*	ug/L		51	56 - 93	0	20
2-Nitrophenol	100	57.4		ug/L		57	51 - 98	1	20
3,3'-Dichlorobenzidine	100	61.0		ug/L		61	26 - 77	4	20
4,6-Dinitro-2-methylphenol	100	74.2		ug/L		74	61 - 120	7	20
4-Bromophenyl phenyl ether	100	71.7		ug/L		72	54 - 111	4	20
4-Chloro-3-methylphenol	100	63.9		ug/L		64	45 - 106	3	20
4-Chlorophenyl phenyl ether	100	70.6		ug/L		71	53 - 100	4	20
4-Nitrophenol	100	21.8	J *	ug/L		22	25 - 45	5	20
Acenaphthene	100	65.2		ug/L		65	51 - 89	4	20
Acenaphthylene	100	64.0		ug/L		64	46 - 98	4	20
Anthracene	100	70.3		ug/L		70	54 - 111	4	20
Benzo[a]anthracene	100	79.2		ug/L		79	68 - 108	5	20
Benzo[a]pyrene	100	70.5		ug/L		71	55 - 108	4	20
Benzo[b]fluoranthene	100	74.2		ug/L		74	57 - 114	7	20

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-56272/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56695 — **Prep Batch: 56272**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[g,h,i]perylene	100	74.5		ug/L		74	58 - 120	6	20
Benzo[k]fluoranthene	100	75.0		ug/L		75	59 - 112	3	20
Bis(2-chloroethoxy)methane	100	61.0		ug/L		61	53 - 99	1	20
Bis(2-chloroethyl)ether	100	54.5		ug/L		54	50 - 97	2	20
Bis(2-ethylhexyl) phthalate	100	68.4		ug/L		68	54 - 116	6	20
Butyl benzyl phthalate	100	68.0		ug/L		68	52 - 126	6	20
Chrysene	100	69.5		ug/L		69	58 - 112	6	20
Dibenz(a,h)anthracene	100	79.4		ug/L		79	56 - 122	4	20
Diethyl phthalate	100	70.7		ug/L		71	60 - 101	5	20
Dimethyl phthalate	100	74.1		ug/L		74	57 - 101	6	20
Di-n-butyl phthalate	100	72.7		ug/L		73	57 - 108	5	20
Di-n-octyl phthalate	100	71.1		ug/L		71	57 - 118	7	20
Fluoranthene	100	77.2		ug/L		77	55 - 114	5	20
Fluorene	100	69.8		ug/L		70	59 - 96	4	20
Hexachloro-1,3-butadiene	100	51.1		ug/L		51	36 - 84	3	20
Hexachlorobenzene	100	73.6		ug/L		74	56 - 110	4	20
Hexachlorocyclopentadiene	100	53.6		ug/L		54	16 - 86	2	20
Hexachloroethane	100	49.3		ug/L		49	40 - 77	4	20
Indeno[1,2,3-cd]pyrene	100	79.2		ug/L		79	55 - 124	6	20
Isophorone	100	49.4	*	ug/L		49	50 - 107	2	20
Naphthalene	100	55.2		ug/L		55	42 - 82	3	20
Nitrobenzene	100	56.8		ug/L		57	48 - 96	1	20
N-Nitrosodi-n-propylamine	100	67.5		ug/L		68	57 - 113	2	20
Pentachlorophenol	100	64.8		ug/L		65	56 - 126	8	20
Phenanthrene	100	71.7		ug/L		72	54 - 110	4	20
Phenol	100	22.0	*	ug/L		22	27 - 43	1	20
Pyrene	100	65.2		ug/L		65	53 - 117	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*79*		*41 - 109*
2-Fluorobiphenyl (Surr)	*62*		*31 - 103*
2-Fluorophenol (Surr)	*31*		*23 - 82*
Nitrobenzene-d5 (Surr)	*59*		*36 - 98*
Phenol-d5 (Surr)	*22*		*14 - 68*
Terphenyl-d14 (Surr)	*68*		*43 - 107*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 160-55605/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55703 — **Prep Batch: 55605**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		06/12/13 14:37	06/13/13 11:13	1
Arsenic	ND		10	2.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Beryllium	ND		5.0	0.50	ug/L		06/12/13 14:37	06/13/13 11:13	1
Cadmium	ND		5.0	0.45	ug/L		06/12/13 14:37	06/13/13 11:13	1
Chromium	ND		10	3.1	ug/L		06/12/13 14:37	06/13/13 11:13	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 160-55605/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55703 — **Prep Batch: 55605**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	4.90	J	50	4.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Copper	ND		25	4.6	ug/L		06/12/13 14:37	06/13/13 11:13	1
Iron	ND		100	16	ug/L		06/12/13 14:37	06/13/13 11:13	1
Lead	ND		10	1.3	ug/L		06/12/13 14:37	06/13/13 11:13	1
Nickel	ND		40	13	ug/L		06/12/13 14:37	06/13/13 11:13	1
Antimony	ND		10	4.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Selenium	ND		15	2.7	ug/L		06/12/13 14:37	06/13/13 11:13	1
Silver	ND		10	6.0	ug/L		06/12/13 14:37	06/13/13 11:13	1
Thallium	ND		20	0.88	ug/L		06/12/13 14:37	06/13/13 11:13	1
Zinc	ND		20	5.2	ug/L		06/12/13 14:37	06/13/13 11:13	1

Lab Sample ID: LCS 160-55605/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55703 — **Prep Batch: 55605**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	10100		ug/L		101	85 - 115
Arsenic	1000	1030		ug/L		103	85 - 115
Beryllium	1000	1020		ug/L		102	85 - 115
Cadmium	1000	1040		ug/L		104	85 - 115
Chromium	1000	1050		ug/L		105	85 - 115
Cobalt	1000	1080		ug/L		108	85 - 115
Copper	1000	1040		ug/L		104	85 - 115
Iron	10000	10500		ug/L		105	85 - 115
Lead	1000	1070		ug/L		107	85 - 115
Nickel	1000	1070		ug/L		107	85 - 115
Antimony	500	522		ug/L		104	85 - 115
Selenium	1000	1040		ug/L		104	85 - 115
Silver	100	106		ug/L		106	85 - 115
Thallium	200	230		ug/L		115	85 - 115
Zinc	1000	1040		ug/L		104	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 160-56207/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56516 — **Prep Batch: 56207**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	4.40	J	6.0	1.5	ug/L		06/17/13 07:34	06/18/13 21:42	1

Lab Sample ID: LCS 160-56207/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56516 — **Prep Batch: 56207**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	150	157		ug/L		105	85 - 115

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 480-123901/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123903 — **Prep Batch: 123901**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/14/13 01:19	06/14/13 01:41	1

Lab Sample ID: LCS 480-123901/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123903 — **Prep Batch: 123901**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	42.6		mg/L		107	78 - 114

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-124097/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124097

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/14/13 11:42	1

Lab Sample ID: MB 480-124097/75 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124097

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/14/13 12:52	1

Lab Sample ID: LCS 480-124097/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124097

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.04		mg/L		104	90 - 110

Lab Sample ID: LCS 480-124097/76 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124097

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.02		mg/L		102	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 480-124417/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124417

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			06/17/13 20:44	1

Method: 410.4 - COD (Continued)

Lab Sample ID: LCS 480-124417/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124417

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	188		mg/L		94	90 - 110

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-123843/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123843

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			06/13/13 17:35	1

Lab Sample ID: LCS 480-123843/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123843

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	213	202		mg/L		95	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 160-55596/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55596

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	6.950		SU		99	99.0 - 101.0

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2673-1

GC/MS VOA

Analysis Batch: 56201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2673-1	210/211-MSD	Total/NA	Water	624	
160-2673-2	TRIP BLANK	Total/NA	Water	624	
LCS 160-56201/4	Lab Control Sample	Total/NA	Water	624	
LCSD 160-56201/5	Lab Control Sample Dup	Total/NA	Water	624	
MB 160-56201/2	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 56272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2673-1	210/211-MSD	Total/NA	Water	625	
160-2673-1 - DL	210/211-MSD	Total/NA	Water	625	
LCS 160-56272/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 160-56272/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 160-56272/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 56695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2673-1	210/211-MSD	Total/NA	Water	625	56272
160-2673-1 - DL	210/211-MSD	Total/NA	Water	625	56272
LCS 160-56272/2-A	Lab Control Sample	Total/NA	Water	625	56272
LCSD 160-56272/3-A	Lab Control Sample Dup	Total/NA	Water	625	56272
MB 160-56272/1-A	Method Blank	Total/NA	Water	625	56272

Metals

Prep Batch: 55605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2673-1	210/211-MSD	Total/NA	Water	200.7/200.8	
160-2673-1	210/211-MSD	Dissolved	Water	200.7/200.8	
LCS 160-55605/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
MB 160-55605/1-A	Method Blank	Total/NA	Water	200.7/200.8	

Analysis Batch: 55703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2673-1	210/211-MSD	Total/NA	Water	200.7 Rev 4.4	55605
160-2673-1	210/211-MSD	Dissolved	Water	200.7 Rev 4.4	55605
LCS 160-55605/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	55605
MB 160-55605/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	55605

Prep Batch: 56207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2673-1	210/211-MSD	Total/NA	Water	245.1	
160-2673-1	210/211-MSD	Dissolved	Water	245.1	
LCS 160-56207/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 160-56207/1-A	Method Blank	Total/NA	Water	245.1	

Analysis Batch: 56516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2673-1	210/211-MSD	Total/NA	Water	245.1	56207

Metals (Continued)

Analysis Batch: 56516 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2673-1	210/211-MSD	Dissolved	Water	245.1	56207
LCS 160-56207/2-A	Lab Control Sample	Total/NA	Water	245.1	56207
MB 160-56207/1-A	Method Blank	Total/NA	Water	245.1	56207

General Chemistry

Analysis Batch: 55596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2673-1	210/211-MSD	Total/NA	Water	SM 4500 H+ B	
LCS 160-55596/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 123843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2673-1	210/211-MSD	Total/NA	Water	SM 2540D	
LCS 480-123843/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-123843/1	Method Blank	Total/NA	Water	SM 2540D	

Prep Batch: 123901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2673-1	210/211-MSD	Total/NA	Water	1664A	
LCS 480-123901/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 480-123901/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 123903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2673-1	210/211-MSD	Total/NA	Water	1664A	123901
LCS 480-123901/2-A	Lab Control Sample	Total/NA	Water	1664A	123901
MB 480-123901/1-A	Method Blank	Total/NA	Water	1664A	123901

Analysis Batch: 124097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2673-1	210/211-MSD	Total/NA	Water	350.1	
LCS 480-124097/4	Lab Control Sample	Total/NA	Water	350.1	
LCS 480-124097/76	Lab Control Sample	Total/NA	Water	350.1	
MB 480-124097/3	Method Blank	Total/NA	Water	350.1	
MB 480-124097/75	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 124417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2673-1	210/211-MSD	Total/NA	Water	410.4	
LCS 480-124417/4	Lab Control Sample	Total/NA	Water	410.4	
MB 480-124417/3	Method Blank	Total/NA	Water	410.4	

Surrogate Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2673-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(71-135)	(80-122)	(84-122)
160-2673-1	210/211-MSD	98	110	115
160-2673-2	TRIP BLANK	103	103	108
LCS 160-56201/4	Lab Control Sample	114	95	102
LCSD 160-56201/5	Lab Control Sample Dup	100	98	95
MB 160-56201/2	Method Blank	100	107	115

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(41-109)	(31-103)	(23-82)	(36-98)	(14-68)	(43-107)
160-2673-1	210/211-MSD	0 X	0 X	0 X	0 X	0 X	0 X
160-2673-1 - DL	210/211-MSD	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
LCS 160-56272/2-A	Lab Control Sample	76	62	31	59	21	65
LCSD 160-56272/3-A	Lab Control Sample Dup	79	62	31	59	22	68
MB 160-56272/1-A	Method Blank	55	45	27	47	17	55

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2673-2
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/20/2013 4:01:03 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

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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.

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Job ID: 160-2673-2

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2673-2

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 6/12/2013 12:39 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the coolers at receipt was 1.7º C.

BIOCHEMICAL OXYGEN DEMAND

Sample 210/211-MSD (160-2673-1) was analyzed for Biochemical oxygen demand in accordance with SM 5210B. The samples were analyzed on 06/13/2013.

All of the dilutions overdepleted for the following samples: 210/211-MSD (160-2673-1). Only a "greater than" result could be calculated from the most dilute preparation.

No difficulties were encountered during the BOD analysis.

All quality control parameters were within the acceptance limits.

Job ID: 160-2673-2 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica

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Cal 351

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY / FEI	6/12/13	197602
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
816-285-8410	(314) 502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State): BRIDGETON LF / MISSOURI

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.:

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): 624-25ml-VOC	1664A-HEM	5210B-BOD	625-SVOC	200.7 245.1 T	2540D-TSS	410.4 350.1	200.7 245.1 D	pH				Special Instructions/ Conditions of Receipt
210/211-MSD	6/12/13	11:30		✓			4	1	1	4			3	1	1	1	1	1	1	1	✓				
TRIP BLANK				✓						2			2												

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 DAYS

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By	6/12/13	12:39	1. Received By	6/12/13	1239
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2673-2

Login Number: 2673

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
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	Received same day of collection; chilling process has begun.
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?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2673-2

Login Number: 2673
List Number: 1
Creator: Janish, Carl

List Source: TestAmerica Buffalo
List Creation: 06/13/13 03:13 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2673-2

Method	Method Description	Protocol	Laboratory
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2673-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2673-1	210/211-MSD	Water	06/12/13 11:30	06/12/13 12:39

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2673-2

Client Sample ID: 210/211-MSD

Lab Sample ID: 160-2673-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	>22796.00		10	10	mg/L	5		SM 5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2673-2

Client Sample ID: 210/211-MSD

Lab Sample ID: 160-2673-1

Date Collected: 06/12/13 11:30

Matrix: Water

Date Received: 06/12/13 12:39

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	>22796.00		10	10	mg/L			06/13/13 14:15	5

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2673-2

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-123846/1 USB
Matrix: Water
Analysis Batch: 123846

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			06/13/13 14:15	1

Lab Sample ID: LCS 480-123846/2
Matrix: Water
Analysis Batch: 123846

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	186		mg/L		94	85 - 115		

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2673-2

General Chemistry

Analysis Batch: 123846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2673-1	210/211-MSD	Total/NA	Water	SM 5210B	
LCS 480-123846/2	Lab Control Sample	Total/NA	Water	SM 5210B	
USB 480-123846/1 USB	Method Blank	Total/NA	Water	SM 5210B	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2702-1
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/20/2013 4:40:29 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

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Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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.

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Job ID: 160-2702-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2702-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 6/13/2013 3:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples 213-214 MSD (160-2702-1) and TRIP BLANK (160-2702-2) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA Method 624. The samples were analyzed on 06/16/2013.

In batch 56642 and after viewing the screening data, the following samples were analyzed at reduced volume due to high concentrations of analytes: 213-214 MSD (160-2702-1). The calculation was done using an initial volume adjustment rather than a dilution factor. The reporting limits have been elevated by the appropriate factor. Also, a MS/MSD was not analyzed. The LCS/LCSD results meet method criteria for precision and accuracy.

In batch 56642, the sample pH was >2. The sample was analyzed within 7 days as if unpreserved instead of the 14 days of a preserved sample with a pH <2.

Job ID: 160-2702-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

No difficulties were encountered during the VOCs analysis.

All quality control parameters were within the acceptance limits.

Organic Prep
Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 56272. laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Due to the matrix, the following sample(s) could not be concentrated to the final method required volume: 213-214 MSD (160-2702-1). The reporting limits (RLs) are elevated proportionately.

The following samples formed emulsions during the extraction procedure: 213-214 MSD (160-2702-1). The emulsions were broken up using centrifuge.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 213-214 MSD (160-2702-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA Method 625. The samples were prepared on 06/17/2013 and analyzed on 06/18/2013.

The following samples were diluted to bring the concentration of target analytes within the calibration range: 213-214 MSD (160-2702-1) [20X].

Due to the level of dilution required for the following sample(s), surrogate recoveries are not reported: 213-214 MSD (160-2702-1). The samples shows evidence of matrix interference; therefore, re-extraction and/or re-analysis was not performed. Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

2-Chlorophenol, 4-Nitrophenol, Isophorone and Phenol failed the recovery criteria low for LCS 160-56272/2-A and LCSD 160-56272/3-A. There was insufficient sample to perform a re-extraction or re-analysis; therefore, the data have been reported.

No other difficulties were encountered during the SVOC analysis.

All other quality control parameters were within the acceptance limits.

ICP total and dissolved
Sample 213-214 MSD (160-2702-1) was analyzed for ICP in accordance with EPA Method 200.7, Rev. 4.4. The samples were prepared on 06/14/2013 and analyzed on 06/17/2013.

The following samples were diluted due to the nature of the sample matrix. The sample digestates were dark yellow in color.: (160-2702-1 MS), (160-2702-1 MSD), (160-2702-1 SD), 213-214 MSD (160-2702-1)[5X]. Elevated reporting limits (RLs) are provided.

Lead, Thallium, and Zinc were detected in method blank MB 160-55941/1-A at levels that were above the method detection limit but below the reporting limit.

Iron failed the recovery criteria high for the MSD of sample 213-214 MSDMSD (160-2702-1) in batch 160-56257.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

The initial calibration verification (ICV) for analytical batch 55941 was outside control criteria for Thallium. The samples are ND for Thallium. The data have been qualified and reported.

No other difficulties were encountered during the ICP analysis.

All other quality control parameters were within the acceptance limits.

Job ID: 160-2702-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

DISSOLVED MERCURY (CVAA)
Sample 213-214 MSD (160-2702-1) was analyzed for dissolved mercury (CVAA) in accordance with EPA Method 245.1. The samples were prepared on 06/17/2013 and analyzed on 06/18/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

MERCURY
Sample 213-214 MSD (160-2702-1) was analyzed for mercury in accordance with EPA Method 245.1. The samples were prepared on 06/17/2013 and analyzed on 06/18/2013.

Mercury was detected in method blank MB 160-56207/1-A at a level that was above the method detection limit but below the reporting limit.

No other difficulties were encountered during the mercury analysis.

All other quality control parameters were within the acceptance limits.

SGT-HEM
Sample 213-214 MSD (160-2702-1) was analyzed for SGT-HEM in accordance with EPA Method 1664A. The samples were prepared and analyzed on 06/20/2013.

No difficulties were encountered during the SGT-HEM analysis.

All quality control parameters were within the acceptance limits.

TOTAL SUSPENDED SOLIDS
Sample 213-214 MSD (160-2702-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 06/14/2013.

Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: 213-214 MSD (160-2702-1). The reporting limits (RLs) have been adjusted proportionately.

No difficulties were encountered during the TSS analysis.

All quality control parameters were within the acceptance limits.

AMMONIA
Sample 213-214 MSD (160-2702-1) was analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/17/2013.

Ammonia was detected in method blank MB 480-124334/3 at a level that was above the method detection limit but below the reporting limit; therefore, re-extraction and/or re-analysis of samples was not performed.

Sample 213-214 MSD (160-2702-1)[1000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the ammonia analysis.

All other quality control parameters were within the acceptance limits.

CHEMICAL OXYGEN DEMAND
Sample 213-214 MSD (160-2702-1) was analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 06/19/2013.

Job ID: 160-2702-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Sample 213-214 MSD (160-2702-1)[200X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the COD analysis.

All other quality control parameters were within the acceptance limits.

PH

Sample 213-214 MSD (160-2702-1) was analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed on 06/13/2013.

For the analysis of the associated sample in pH batch #55867, the sample was analyzed using pH indicator strips due to the sample matrices possible damaging the pH probe. Indicator strips used were range 0-14 (Lot HC270245).

For the analysis of the associated sample in pH batch #55867, this analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 213-214 MSD (160-2702-1)

No difficulties were encountered during the pH analysis.

All quality control parameters were within the acceptance limits.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

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TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY / FEI	6/13/13	197603
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
(816) -285-8410	314 - 502 -1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State)	Carrier/Waybill Number
BRIDGETON LF / MISSOURI	

Contract/Purchase Order/Quote No.

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH		624-25ml-VOC	1664A-HEM	5210B-BOD	625-SVOC	200.7 2451 T	2540D-TSS	410.4 3381	200.7 2451 D	PH				Special Instructions/ Conditions of Receipt
			Matrix					Containers & Preservatives							Analysis (Attach list if more space is needed)												
213-214 MSD	6/13/13			✓				5	1	1	4				3	1	1	1	1	1	1	1	1				
TRIP BLANK	6/13/13			✓							2																

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

Sample Disposal
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 DAYS

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
[signature]	6/13/13	315:50	[signature]	6/13/13	1550
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2702-1

Login Number: 2702

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
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	
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?	False	Not requested on COC.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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	Refer to Job Narrative for details.
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	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2702-1

Login Number: 2702
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/14/13 09:38 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	4.9 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2702-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SL
245.1	Mercury (CVAA)	EPA	TAL SL
1664A	HEM and SGT-HEM	1664A	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
410.4	COD	MCAWW	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL SL

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2702-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2702-1	213-214 MSD	Water	06/13/13 00:00	06/13/13 15:54
160-2702-2	TRIP BLANK	Water	06/13/13 00:00	06/13/13 15:54

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2702-1

Client Sample ID: 213-214 MSD — Lab Sample ID: 160-2702-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	39	J	50	6.0	ug/L	1		624	Total/NA
Naphthalene	150		56	5.6	ug/L	1		625	Total/NA
Phenanthrene	28	J	56	5.6	ug/L	1		625	Total/NA
Phenol - DL	10000	*	1100	220	ug/L	20		625	Total/NA
Aluminum	26000		10000	4000	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	410	J	500	99	ug/L	5		200.7 Rev 4.4	Total/NA
Cobalt	310	J	2500	200	ug/L	5		200.7 Rev 4.4	Total/NA
Chromium	300	J	500	160	ug/L	5		200.7 Rev 4.4	Total/NA
Iron	1200000		5000	800	ug/L	5		200.7 Rev 4.4	Total/NA
Lead	440	J B	500	64	ug/L	5		200.7 Rev 4.4	Total/NA
Thallium	160	J ^ B	1000	44	ug/L	5		200.7 Rev 4.4	Total/NA
Zinc	21000	B	1000	260	ug/L	5		200.7 Rev 4.4	Total/NA
Aluminum	5200	J	10000	4000	ug/L	5		200.7 Rev 4.4	Dissolved
Arsenic	340	J	500	99	ug/L	5		200.7 Rev 4.4	Dissolved
Chromium	240	J	500	160	ug/L	5		200.7 Rev 4.4	Dissolved
Cobalt	420	J	2500	200	ug/L	5		200.7 Rev 4.4	Dissolved
Iron	900000		5000	800	ug/L	5		200.7 Rev 4.4	Dissolved
Lead	240	J B	500	64	ug/L	5		200.7 Rev 4.4	Dissolved
Thallium	150	J ^ B	1000	44	ug/L	5		200.7 Rev 4.4	Dissolved
Zinc	19000	B	1000	260	ug/L	5		200.7 Rev 4.4	Dissolved
Mercury	4.8	J B	6.0	1.5	ug/L	1		245.1	Dissolved
Oil & Grease	12	J	17	4.7	mg/L	1		1664A	Total/NA
Ammonia	660	B	20	9.0	mg/L	1000		350.1	Total/NA
Chemical Oxygen Demand	58000		2000	1000	mg/L	200		410.4	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
Total Suspended Solids	1700		100	100	mg/L	1		SM 2540D	Total/NA
pH	6.00	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 160-2702-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2702-1

Client Sample ID: 213-214 MSD

Lab Sample ID: 160-2702-1

Date Collected: 06/13/13 00:00

Matrix: Water

Date Received: 06/13/13 15:54

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.5	ug/L			06/16/13 06:19	1
1,1,2,2-Tetrachloroethane	ND		50	5.0	ug/L			06/16/13 06:19	1
1,1,2-Trichloroethane	ND		50	7.5	ug/L			06/16/13 06:19	1
1,1-Dichloroethane	ND		50	3.5	ug/L			06/16/13 06:19	1
1,1-Dichloroethene	ND		50	4.0	ug/L			06/16/13 06:19	1
1,2-Dichlorobenzene	ND		50	3.0	ug/L			06/16/13 06:19	1
1,2-Dichloroethane	ND		50	5.0	ug/L			06/16/13 06:19	1
1,2-Dichloropropane	ND		50	5.0	ug/L			06/16/13 06:19	1
1,3-Dichlorobenzene	ND		50	4.0	ug/L			06/16/13 06:19	1
1,4-Dichlorobenzene	**39**	**J**	50	6.0	ug/L			06/16/13 06:19	1
2-Chloroethyl vinyl ether	ND		100	8.5	ug/L			06/16/13 06:19	1
Benzene	ND		50	3.0	ug/L			06/16/13 06:19	1
Bromodichloromethane	ND		50	4.5	ug/L			06/16/13 06:19	1
Bromoform	ND		50	8.5	ug/L			06/16/13 06:19	1
Bromomethane	ND		100	6.5	ug/L			06/16/13 06:19	1
Carbon tetrachloride	ND		50	6.5	ug/L			06/16/13 06:19	1
Chlorobenzene	ND		50	7.5	ug/L			06/16/13 06:19	1
Chloroethane	ND		100	5.0	ug/L			06/16/13 06:19	1
Chloroform	ND		50	5.0	ug/L			06/16/13 06:19	1
Chloromethane	ND		100	4.0	ug/L			06/16/13 06:19	1
cis-1,2-Dichloroethene	ND		50	4.5	ug/L			06/16/13 06:19	1
cis-1,3-Dichloropropene	ND		50	3.5	ug/L			06/16/13 06:19	1
Dibromochloromethane	ND		50	6.5	ug/L			06/16/13 06:19	1
Ethylbenzene	ND		50	4.5	ug/L			06/16/13 06:19	1
Methylene Chloride	ND		50	5.5	ug/L			06/16/13 06:19	1
Tetrachloroethene	ND		50	9.0	ug/L			06/16/13 06:19	1
Toluene	ND		50	3.5	ug/L			06/16/13 06:19	1
trans-1,2-Dichloroethene	ND		50	4.0	ug/L			06/16/13 06:19	1
trans-1,3-Dichloropropene	ND		50	4.0	ug/L			06/16/13 06:19	1
Trichloroethene	ND		50	11	ug/L			06/16/13 06:19	1
Trichlorofluoromethane	ND		50	5.5	ug/L			06/16/13 06:19	1
Vinyl chloride	ND		100	4.0	ug/L			06/16/13 06:19	1
Xylenes, Total	ND		150	10	ug/L			06/16/13 06:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*71 - 135*		*06/16/13 06:19*	*1*
4-Bromofluorobenzene (Surr)	*121*		*80 - 122*		*06/16/13 06:19*	*1*
Toluene-d8 (Surr)	*112*		*84 - 122*		*06/16/13 06:19*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
bis (2-chloroisopropyl) ether	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
2,4,6-Trichlorophenol	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
2,4-Dichlorophenol	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
2,4-Dimethylphenol	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
2,4-Dinitrophenol	ND		280	11	ug/L		06/17/13 14:56	06/18/13 20:18	1
2,4-Dinitrotoluene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
2,6-Dinitrotoluene	ND		56	12	ug/L		06/17/13 14:56	06/18/13 20:18	1
2-Chloronaphthalene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2702-1

Client Sample ID: 213-214 MSD

Date Collected: 06/13/13 00:00
Date Received: 06/13/13 15:54

Lab Sample ID: 160-2702-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND	*	56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
2-Nitrophenol	ND		56	8.5	ug/L		06/17/13 14:56	06/18/13 20:18	1
3,3'-Dichlorobenzidine	ND		280	7.2	ug/L		06/17/13 14:56	06/18/13 20:18	1
4,6-Dinitro-2-methylphenol	ND		280	7.1	ug/L		06/17/13 14:56	06/18/13 20:18	1
4-Bromophenyl phenyl ether	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
4-Chloro-3-methylphenol	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
4-Chlorophenyl phenyl ether	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
4-Nitrophenol	ND	*	280	11	ug/L		06/17/13 14:56	06/18/13 20:18	1
Acenaphthene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Acenaphthylene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Anthracene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Benzidine	ND		560	110	ug/L		06/17/13 14:56	06/18/13 20:18	1
Benzo[a]anthracene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Benzo[a]pyrene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Benzo[b]fluoranthene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Benzo[g,h,i]perylene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Benzo[k]fluoranthene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Bis(2-chloroethoxy)methane	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Bis(2-chloroethyl)ether	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Bis(2-ethylhexyl) phthalate	ND		56	10	ug/L		06/17/13 14:56	06/18/13 20:18	1
Butyl benzyl phthalate	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Chrysene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Dibenz(a,h)anthracene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Diethyl phthalate	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Dimethyl phthalate	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Di-n-butyl phthalate	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Di-n-octyl phthalate	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Fluoranthene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Fluorene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Hexachloro-1,3-butadiene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Hexachlorobenzene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Hexachlorocyclopentadiene	ND		280	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Hexachloroethane	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Indeno[1,2,3-cd]pyrene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Isophorone	ND	*	56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Naphthalene	**150**		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Nitrobenzene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
N-Nitrosodimethylamine	ND		56	11	ug/L		06/17/13 14:56	06/18/13 20:18	1
N-Nitrosodi-n-propylamine	ND		56	8.4	ug/L		06/17/13 14:56	06/18/13 20:18	1
N-Nitrosodiphenylamine	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Pentachlorophenol	ND		280	7.1	ug/L		06/17/13 14:56	06/18/13 20:18	1
Phenanthrene	**28**	**J**	56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1
Pyrene	ND		56	5.6	ug/L		06/17/13 14:56	06/18/13 20:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*41 - 109*	*06/17/13 14:56*	*06/18/13 20:18*	*1*
2-Fluorobiphenyl (Surr)	*0*	*X*	*31 - 103*	*06/17/13 14:56*	*06/18/13 20:18*	*1*
2-Fluorophenol (Surr)	*0*	*X*	*23 - 82*	*06/17/13 14:56*	*06/18/13 20:18*	*1*
Nitrobenzene-d5 (Surr)	*0*	*X*	*36 - 98*	*06/17/13 14:56*	*06/18/13 20:18*	*1*
Phenol-d5 (Surr)	*0*	*X*	*14 - 68*	*06/17/13 14:56*	*06/18/13 20:18*	*1*

Client Sample ID: 213-214 MSD

Lab Sample ID: 160-2702-1

Date Collected: 06/13/13 00:00

Matrix: Water

Date Received: 06/13/13 15:54

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14 (Surr)	0	X	43 - 107	06/17/13 14:56	06/18/13 20:18	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	10000	*	1100	220	ug/L		06/17/13 14:56	06/18/13 16:58	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	0	D X	41 - 109	06/17/13 14:56	06/18/13 16:58	20
2-Fluorobiphenyl (Surr)	0	D X	31 - 103	06/17/13 14:56	06/18/13 16:58	20
2-Fluorophenol (Surr)	0	D X	23 - 82	06/17/13 14:56	06/18/13 16:58	20
Nitrobenzene-d5 (Surr)	0	D X	36 - 98	06/17/13 14:56	06/18/13 16:58	20
Phenol-d5 (Surr)	0	D X	14 - 68	06/17/13 14:56	06/18/13 16:58	20
Terphenyl-d14 (Surr)	0	D X	43 - 107	06/17/13 14:56	06/18/13 16:58	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		500	300	ug/L		06/14/13 14:32	06/17/13 11:21	5
Aluminum	26000		10000	4000	ug/L		06/14/13 14:32	06/17/13 11:21	5
Arsenic	410	J	500	99	ug/L		06/14/13 14:32	06/17/13 11:21	5
Beryllium	ND		250	25	ug/L		06/14/13 14:32	06/17/13 11:21	5
Cadmium	ND		250	23	ug/L		06/14/13 14:32	06/17/13 11:21	5
Cobalt	310	J	2500	200	ug/L		06/14/13 14:32	06/17/13 11:21	5
Chromium	300	J	500	160	ug/L		06/14/13 14:32	06/17/13 11:21	5
Copper	ND		1300	230	ug/L		06/14/13 14:32	06/17/13 11:21	5
Iron	1200000		5000	800	ug/L		06/14/13 14:32	06/17/13 11:21	5
Nickel	ND		2000	670	ug/L		06/14/13 14:32	06/17/13 11:21	5
Lead	440	J B	500	64	ug/L		06/14/13 14:32	06/17/13 11:21	5
Antimony	ND		500	200	ug/L		06/14/13 14:32	06/17/13 11:21	5
Selenium	ND		750	130	ug/L		06/14/13 14:32	06/17/13 11:21	5
Thallium	160	J ^ B	1000	44	ug/L		06/14/13 14:32	06/17/13 11:21	5
Zinc	21000	B	1000	260	ug/L		06/14/13 14:32	06/17/13 11:21	5

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5200	J	10000	4000	ug/L		06/14/13 14:32	06/17/13 11:35	5
Antimony	ND		500	200	ug/L		06/14/13 14:32	06/17/13 11:35	5
Arsenic	340	J	500	99	ug/L		06/14/13 14:32	06/17/13 11:35	5
Beryllium	ND		250	25	ug/L		06/14/13 14:32	06/17/13 11:35	5
Cadmium	ND		250	23	ug/L		06/14/13 14:32	06/17/13 11:35	5
Chromium	240	J	500	160	ug/L		06/14/13 14:32	06/17/13 11:35	5
Cobalt	420	J	2500	200	ug/L		06/14/13 14:32	06/17/13 11:35	5
Copper	ND		1300	230	ug/L		06/14/13 14:32	06/17/13 11:35	5
Iron	900000		5000	800	ug/L		06/14/13 14:32	06/17/13 11:35	5
Lead	240	J B	500	64	ug/L		06/14/13 14:32	06/17/13 11:35	5
Nickel	ND		2000	670	ug/L		06/14/13 14:32	06/17/13 11:35	5
Selenium	ND		750	130	ug/L		06/14/13 14:32	06/17/13 11:35	5
Silver	ND		500	300	ug/L		06/14/13 14:32	06/17/13 11:35	5
Thallium	150	J ^ B	1000	44	ug/L		06/14/13 14:32	06/17/13 11:35	5
Zinc	19000	B	1000	260	ug/L		06/14/13 14:32	06/17/13 11:35	5

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2702-1

Client Sample ID: 213-214 MSD

Lab Sample ID: 160-2702-1
Matrix: Water

Date Collected: 06/13/13 00:00
Date Received: 06/13/13 15:54

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		6.0	1.5	ug/L		06/17/13 07:34	06/18/13 21:59	1

Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	4.8	J B	6.0	1.5	ug/L		06/17/13 07:34	06/18/13 22:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	12	J	17	4.7	mg/L		06/20/13 02:00	06/20/13 02:19	1
Ammonia	660	B	20	9.0	mg/L			06/17/13 12:06	1000
Chemical Oxygen Demand	58000		2000	1000	mg/L			06/19/13 12:54	200

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	1700		100	100	mg/L			06/14/13 17:10	1
pH	6.00	HF	0.100	0.100	SU			06/13/13 18:33	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2702-2
Matrix: Water

Date Collected: 06/13/13 00:00
Date Received: 06/13/13 15:54

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/16/13 05:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/16/13 05:53	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/16/13 05:53	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/16/13 05:53	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/16/13 05:53	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/16/13 05:53	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/16/13 05:53	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/16/13 05:53	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/16/13 05:53	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/16/13 05:53	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/16/13 05:53	1
Benzene	ND		1.0	0.060	ug/L			06/16/13 05:53	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/16/13 05:53	1
Bromoform	ND		1.0	0.17	ug/L			06/16/13 05:53	1
Bromomethane	ND		2.0	0.13	ug/L			06/16/13 05:53	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/16/13 05:53	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/16/13 05:53	1
Chloroethane	ND		2.0	0.10	ug/L			06/16/13 05:53	1
Chloroform	ND		1.0	0.10	ug/L			06/16/13 05:53	1
Chloromethane	ND		2.0	0.080	ug/L			06/16/13 05:53	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/16/13 05:53	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/16/13 05:53	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/16/13 05:53	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/16/13 05:53	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/16/13 05:53	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/16/13 05:53	1
Toluene	ND		1.0	0.070	ug/L			06/16/13 05:53	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/16/13 05:53	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/16/13 05:53	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2702-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2702-2

Date Collected: 06/13/13 00:00

Matrix: Water

Date Received: 06/13/13 15:54

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		1.0	0.21	ug/L			06/16/13 05:53	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/16/13 05:53	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/16/13 05:53	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/16/13 05:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*71 - 135*		*06/16/13 05:53*	*1*
4-Bromofluorobenzene (Surr)	*110*		*80 - 122*		*06/16/13 05:53*	*1*
Toluene-d8 (Surr)	*114*		*84 - 122*		*06/16/13 05:53*	*1*

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-56642/2
Matrix: Water
Analysis Batch: 56642

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/16/13 05:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/16/13 05:27	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/16/13 05:27	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/16/13 05:27	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/16/13 05:27	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/16/13 05:27	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/16/13 05:27	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/16/13 05:27	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/16/13 05:27	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/16/13 05:27	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/16/13 05:27	1
Benzene	ND		1.0	0.060	ug/L			06/16/13 05:27	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/16/13 05:27	1
Bromoform	ND		1.0	0.17	ug/L			06/16/13 05:27	1
Bromomethane	ND		2.0	0.13	ug/L			06/16/13 05:27	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/16/13 05:27	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/16/13 05:27	1
Chloroethane	ND		2.0	0.10	ug/L			06/16/13 05:27	1
Chloroform	ND		1.0	0.10	ug/L			06/16/13 05:27	1
Chloromethane	ND		2.0	0.080	ug/L			06/16/13 05:27	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/16/13 05:27	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/16/13 05:27	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/16/13 05:27	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/16/13 05:27	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/16/13 05:27	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/16/13 05:27	1
Toluene	ND		1.0	0.070	ug/L			06/16/13 05:27	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/16/13 05:27	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/16/13 05:27	1
Trichloroethene	ND		1.0	0.21	ug/L			06/16/13 05:27	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/16/13 05:27	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/16/13 05:27	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/16/13 05:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*71 - 135*		*06/16/13 05:27*	*1*
4-Bromofluorobenzene (Surr)	*108*		*80 - 122*		*06/16/13 05:27*	*1*
Toluene-d8 (Surr)	*112*		*84 - 122*		*06/16/13 05:27*	*1*

Lab Sample ID: LCS 160-56642/4
Matrix: Water
Analysis Batch: 56642

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	10.0	9.42		ug/L		94	69 - 130
1,1,2-Trichloroethane	10.0	9.66		ug/L		97	78 - 122
1,1-Dichloroethane	10.0	9.69		ug/L		97	82 - 125
1,1-Dichloroethene	10.0	9.52		ug/L		95	77 - 127

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-56642/4
Matrix: Water
Analysis Batch: 56642

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	10.0	10.1		ug/L		101	78 - 127
1,2-Dichloropropane	10.0	9.74		ug/L		97	81 - 124
1,4-Dichlorobenzene	10.0	10.3		ug/L		103	83 - 116
2-Chloroethyl vinyl ether	10.0	6.97		ug/L		70	34 - 140
Benzene	10.0	9.92		ug/L		99	84 - 124
Bromodichloromethane	10.0	9.81		ug/L		98	81 - 127
Bromoform	10.0	9.60		ug/L		96	78 - 138
Bromomethane	10.0	8.82		ug/L		88	48 - 162
Carbon tetrachloride	10.0	10.2		ug/L		102	79 - 132
Chlorobenzene	10.0	9.89		ug/L		99	85 - 118
Chloroethane	10.0	8.58		ug/L		86	71 - 132
Chloromethane	10.0	9.59		ug/L		96	68 - 136
cis-1,2-Dichloroethene	10.0	9.83		ug/L		98	83 - 123
Dibromochloromethane	10.0	9.55		ug/L		96	81 - 129
Ethylbenzene	10.0	9.99		ug/L		100	85 - 125
Toluene	10.0	9.97		ug/L		100	83 - 127
trans-1,2-Dichloroethene	10.0	9.57		ug/L		96	78 - 122
trans-1,3-Dichloropropene	10.0	9.41		ug/L		94	83 - 130
Trichlorofluoromethane	10.0	8.55		ug/L		85	72 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*71 - 135*
4-Bromofluorobenzene (Surr)	*101*		*80 - 122*
Toluene-d8 (Surr)	*99*		*84 - 122*

Lab Sample ID: LCSD 160-56642/5
Matrix: Water
Analysis Batch: 56642

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane	10.0	9.49		ug/L		95	69 - 130	1	20
1,1,2-Trichloroethane	10.0	9.85		ug/L		99	78 - 122	2	20
1,1-Dichloroethane	10.0	9.96		ug/L		100	82 - 125	3	20
1,1-Dichloroethene	10.0	9.76		ug/L		98	77 - 127	2	20
1,2-Dichloroethane	10.0	10.2		ug/L		102	78 - 127	1	20
1,2-Dichloropropane	10.0	9.61		ug/L		96	81 - 124	1	20
1,4-Dichlorobenzene	10.0	10.0		ug/L		100	83 - 116	3	20
2-Chloroethyl vinyl ether	10.0	7.14		ug/L		71	34 - 140	2	20
Benzene	10.0	10.1		ug/L		101	84 - 124	1	20
Bromodichloromethane	10.0	10.1		ug/L		101	81 - 127	3	20
Bromoform	10.0	9.54		ug/L		95	78 - 138	1	20
Bromomethane	10.0	9.15		ug/L		91	48 - 162	4	20
Carbon tetrachloride	10.0	10.1		ug/L		101	79 - 132	1	20
Chlorobenzene	10.0	9.88		ug/L		99	85 - 118	0	20
Chloroethane	10.0	8.58		ug/L		86	71 - 132	0	20
Chloromethane	10.0	9.83		ug/L		98	68 - 136	3	20
cis-1,2-Dichloroethene	10.0	9.94		ug/L		99	83 - 123	1	20
Dibromochloromethane	10.0	9.59		ug/L		96	81 - 129	0	20

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-56642/5
Matrix: Water
Analysis Batch: 56642

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	10.0	10.0		ug/L		100	85 - 125	0	20
Toluene	10.0	10.1		ug/L		101	83 - 127	1	20
trans-1,2-Dichloroethene	10.0	9.98		ug/L		100	78 - 122	4	20
trans-1,3-Dichloropropene	10.0	9.31		ug/L		93	83 - 130	1	20
Trichlorofluoromethane	10.0	8.74		ug/L		87	72 - 135	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 135*
4-Bromofluorobenzene (Surr)	*105*		*80 - 122*
Toluene-d8 (Surr)	*99*		*84 - 122*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-56272/1-A
Matrix: Water
Analysis Batch: 56695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
bis (2-chloroisopropyl) ether	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4,6-Trichlorophenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4-Dichlorophenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4-Dimethylphenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4-Dinitrophenol	ND		50	2.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4-Dinitrotoluene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,6-Dinitrotoluene	ND		10	2.2	ug/L		06/17/13 14:56	06/18/13 13:35	1
2-Chloronaphthalene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2-Chlorophenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2-Nitrophenol	ND		10	1.5	ug/L		06/17/13 14:56	06/18/13 13:35	1
3,3'-Dichlorobenzidine	ND		50	1.3	ug/L		06/17/13 14:56	06/18/13 13:35	1
4,6-Dinitro-2-methylphenol	ND		50	1.3	ug/L		06/17/13 14:56	06/18/13 13:35	1
4-Bromophenyl phenyl ether	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
4-Chlorophenyl phenyl ether	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
4-Nitrophenol	ND		50	2.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Acenaphthene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Acenaphthylene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Anthracene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzidine	ND		100	20	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[a]anthracene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[a]pyrene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[b]fluoranthene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[g,h,i]perylene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[k]fluoranthene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Bis(2-chloroethoxy)methane	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Bis(2-chloroethyl)ether	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Bis(2-ethylhexyl) phthalate	ND		10	1.9	ug/L		06/17/13 14:56	06/18/13 13:35	1
Butyl benzyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-56272/1-A
Matrix: Water
Analysis Batch: 56695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Dibenz(a,h)anthracene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Diethyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Dimethyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Di-n-butyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Di-n-octyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Fluoranthene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Fluorene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Hexachloro-1,3-butadiene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Hexachlorobenzene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Hexachlorocyclopentadiene	ND		50	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Hexachloroethane	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Indeno[1,2,3-cd]pyrene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Isophorone	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Naphthalene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Nitrobenzene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/L		06/17/13 14:56	06/18/13 13:35	1
N-Nitrosodiphenylamine	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Pentachlorophenol	ND		50	1.3	ug/L		06/17/13 14:56	06/18/13 13:35	1
Phenanthrene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Phenol	ND		10	2.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Pyrene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*55*		*41 - 109*	*06/17/13 14:56*	*06/18/13 13:35*	*1*
2-Fluorobiphenyl (Surr)	*45*		*31 - 103*	*06/17/13 14:56*	*06/18/13 13:35*	*1*
2-Fluorophenol (Surr)	*27*		*23 - 82*	*06/17/13 14:56*	*06/18/13 13:35*	*1*
Nitrobenzene-d5 (Surr)	*47*		*36 - 98*	*06/17/13 14:56*	*06/18/13 13:35*	*1*
Phenol-d5 (Surr)	*17*		*14 - 68*	*06/17/13 14:56*	*06/18/13 13:35*	*1*
Terphenyl-d14 (Surr)	*55*		*43 - 107*	*06/17/13 14:56*	*06/18/13 13:35*	*1*

Lab Sample ID: LCS 160-56272/2-A
Matrix: Water
Analysis Batch: 56695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 56272

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	99.9	52.3		ug/L		52	44 - 84
bis (2-chloroisopropyl) ether	100	61.8		ug/L		62	42 - 102
2,4,6-Trichlorophenol	100	60.2		ug/L		60	54 - 105
2,4-Dichlorophenol	100	57.8		ug/L		58	46 - 103
2,4-Dimethylphenol	100	54.5		ug/L		55	40 - 105
2,4-Dinitrophenol	100	57.5		ug/L		58	42 - 146
2,4-Dinitrotoluene	100	74.4		ug/L		74	62 - 101
2,6-Dinitrotoluene	100	69.2		ug/L		69	62 - 103
2-Chloronaphthalene	100	59.5		ug/L		59	45 - 95
2-Chlorophenol	100	51.2	*	ug/L		51	56 - 93
2-Nitrophenol	100	56.8		ug/L		57	51 - 98

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-56272/2-A
Matrix: Water
Analysis Batch: 56695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 56272

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
3,3'-Dichlorobenzidine	100	58.7		ug/L		59	26 - 77
4,6-Dinitro-2-methylphenol	100	69.2		ug/L		69	61 - 120
4-Bromophenyl phenyl ether	100	68.8		ug/L		69	54 - 111
4-Chloro-3-methylphenol	100	62.3		ug/L		62	45 - 106
4-Chlorophenyl phenyl ether	100	67.5		ug/L		68	53 - 100
4-Nitrophenol	100	20.6	J *	ug/L		21	25 - 45
Acenaphthene	100	62.5		ug/L		62	51 - 89
Acenaphthylene	100	61.5		ug/L		62	46 - 98
Anthracene	100	67.4		ug/L		67	54 - 111
Benzo[a]anthracene	100	75.2		ug/L		75	68 - 108
Benzo[a]pyrene	100	67.7		ug/L		68	55 - 108
Benzo[b]fluoranthene	100	69.5		ug/L		69	57 - 114
Benzo[g,h,i]perylene	100	70.4		ug/L		70	58 - 120
Benzo[k]fluoranthene	100	72.5		ug/L		72	59 - 112
Bis(2-chloroethoxy)methane	100	60.1		ug/L		60	53 - 99
Bis(2-chloroethyl)ether	100	53.5		ug/L		53	50 - 97
Bis(2-ethylhexyl) phthalate	100	64.3		ug/L		64	54 - 116
Butyl benzyl phthalate	100	64.2		ug/L		64	52 - 126
Chrysene	100	65.4		ug/L		65	58 - 112
Dibenz(a,h)anthracene	100	76.3		ug/L		76	56 - 122
Diethyl phthalate	100	67.1		ug/L		67	60 - 101
Dimethyl phthalate	100	69.9		ug/L		70	57 - 101
Di-n-butyl phthalate	100	68.9		ug/L		69	57 - 108
Di-n-octyl phthalate	100	66.5		ug/L		67	57 - 118
Fluoranthene	100	73.6		ug/L		74	55 - 114
Fluorene	100	66.8		ug/L		67	59 - 96
Hexachloro-1,3-butadiene	100	49.5		ug/L		50	36 - 84
Hexachlorobenzene	100	70.7		ug/L		71	56 - 110
Hexachlorocyclopentadiene	100	52.5		ug/L		53	16 - 86
Hexachloroethane	100	47.5		ug/L		47	40 - 77
Indeno[1,2,3-cd]pyrene	100	74.5		ug/L		75	55 - 124
Isophorone	100	48.6	*	ug/L		49	50 - 107
Naphthalene	100	53.7		ug/L		54	42 - 82
Nitrobenzene	100	56.2		ug/L		56	48 - 96
N-Nitrosodi-n-propylamine	100	65.9		ug/L		66	57 - 113
Pentachlorophenol	100	60.0		ug/L		60	56 - 126
Phenanthrene	100	69.1		ug/L		69	54 - 110
Phenol	100	21.7	*	ug/L		22	27 - 43
Pyrene	100	61.9		ug/L		62	53 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*76*		*41 - 109*
2-Fluorobiphenyl (Surr)	*62*		*31 - 103*
2-Fluorophenol (Surr)	*31*		*23 - 82*
Nitrobenzene-d5 (Surr)	*59*		*36 - 98*
Phenol-d5 (Surr)	*21*		*14 - 68*
Terphenyl-d14 (Surr)	*65*		*43 - 107*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-56272/3-A
Matrix: Water
Analysis Batch: 56695

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 56272

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	99.9	53.9		ug/L		54	44 - 84	3	20
bis (2-chloroisopropyl) ether	100	62.5		ug/L		63	42 - 102	1	20
2,4,6-Trichlorophenol	100	62.1		ug/L		62	54 - 105	3	20
2,4-Dichlorophenol	100	58.6		ug/L		59	46 - 103	1	20
2,4-Dimethylphenol	100	53.7		ug/L		54	40 - 105	2	20
2,4-Dinitrophenol	100	61.2		ug/L		61	42 - 146	6	20
2,4-Dinitrotoluene	100	79.4		ug/L		79	62 - 101	6	20
2,6-Dinitrotoluene	100	72.7		ug/L		73	62 - 103	5	20
2-Chloronaphthalene	100	61.4		ug/L		61	45 - 95	3	20
2-Chlorophenol	100	51.3	*	ug/L		51	56 - 93	0	20
2-Nitrophenol	100	57.4		ug/L		57	51 - 98	1	20
3,3'-Dichlorobenzidine	100	61.0		ug/L		61	26 - 77	4	20
4,6-Dinitro-2-methylphenol	100	74.2		ug/L		74	61 - 120	7	20
4-Bromophenyl phenyl ether	100	71.7		ug/L		72	54 - 111	4	20
4-Chloro-3-methylphenol	100	63.9		ug/L		64	45 - 106	3	20
4-Chlorophenyl phenyl ether	100	70.6		ug/L		71	53 - 100	4	20
4-Nitrophenol	100	21.8	J *	ug/L		22	25 - 45	5	20
Acenaphthene	100	65.2		ug/L		65	51 - 89	4	20
Acenaphthylene	100	64.0		ug/L		64	46 - 98	4	20
Anthracene	100	70.3		ug/L		70	54 - 111	4	20
Benzo[a]anthracene	100	79.2		ug/L		79	68 - 108	5	20
Benzo[a]pyrene	100	70.5		ug/L		71	55 - 108	4	20
Benzo[b]fluoranthene	100	74.2		ug/L		74	57 - 114	7	20
Benzo[g,h,i]perylene	100	74.5		ug/L		74	58 - 120	6	20
Benzo[k]fluoranthene	100	75.0		ug/L		75	59 - 112	3	20
Bis(2-chloroethoxy)methane	100	61.0		ug/L		61	53 - 99	1	20
Bis(2-chloroethyl)ether	100	54.5		ug/L		54	50 - 97	2	20
Bis(2-ethylhexyl) phthalate	100	68.4		ug/L		68	54 - 116	6	20
Butyl benzyl phthalate	100	68.0		ug/L		68	52 - 126	6	20
Chrysene	100	69.5		ug/L		69	58 - 112	6	20
Dibenz(a,h)anthracene	100	79.4		ug/L		79	56 - 122	4	20
Diethyl phthalate	100	70.7		ug/L		71	60 - 101	5	20
Dimethyl phthalate	100	74.1		ug/L		74	57 - 101	6	20
Di-n-butyl phthalate	100	72.7		ug/L		73	57 - 108	5	20
Di-n-octyl phthalate	100	71.1		ug/L		71	57 - 118	7	20
Fluoranthene	100	77.2		ug/L		77	55 - 114	5	20
Fluorene	100	69.8		ug/L		70	59 - 96	4	20
Hexachloro-1,3-butadiene	100	51.1		ug/L		51	36 - 84	3	20
Hexachlorobenzene	100	73.6		ug/L		74	56 - 110	4	20
Hexachlorocyclopentadiene	100	53.6		ug/L		54	16 - 86	2	20
Hexachloroethane	100	49.3		ug/L		49	40 - 77	4	20
Indeno[1,2,3-cd]pyrene	100	79.2		ug/L		79	55 - 124	6	20
Isophorone	100	49.4	*	ug/L		49	50 - 107	2	20
Naphthalene	100	55.2		ug/L		55	42 - 82	3	20
Nitrobenzene	100	56.8		ug/L		57	48 - 96	1	20
N-Nitrosodi-n-propylamine	100	67.5		ug/L		68	57 - 113	2	20
Pentachlorophenol	100	64.8		ug/L		65	56 - 126	8	20
Phenanthrene	100	71.7		ug/L		72	54 - 110	4	20

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-56272/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56695 — **Prep Batch: 56272**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	100	22.0	*	ug/L		22	27 - 43	1	20
Pyrene	100	65.2		ug/L		65	53 - 117	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*79*		*41 - 109*
2-Fluorobiphenyl (Surr)	*62*		*31 - 103*
2-Fluorophenol (Surr)	*31*		*23 - 82*
Nitrobenzene-d5 (Surr)	*59*		*36 - 98*
Phenol-d5 (Surr)	*22*		*14 - 68*
Terphenyl-d14 (Surr)	*68*		*43 - 107*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 160-55941/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56257 — **Prep Batch: 55941**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		06/14/13 14:32	06/17/13 11:13	1
Arsenic	ND		10	2.0	ug/L		06/14/13 14:32	06/17/13 11:13	1
Beryllium	ND		5.0	0.50	ug/L		06/14/13 14:32	06/17/13 11:13	1
Cadmium	ND		5.0	0.45	ug/L		06/14/13 14:32	06/17/13 11:13	1
Chromium	ND		10	3.1	ug/L		06/14/13 14:32	06/17/13 11:13	1
Cobalt	ND		50	4.0	ug/L		06/14/13 14:32	06/17/13 11:13	1
Copper	ND		25	4.6	ug/L		06/14/13 14:32	06/17/13 11:13	1
Iron	ND		100	16	ug/L		06/14/13 14:32	06/17/13 11:13	1
Lead	2.60	J	10	1.3	ug/L		06/14/13 14:32	06/17/13 11:13	1
Nickel	ND		40	13	ug/L		06/14/13 14:32	06/17/13 11:13	1
Antimony	ND		10	4.0	ug/L		06/14/13 14:32	06/17/13 11:13	1
Selenium	ND		15	2.7	ug/L		06/14/13 14:32	06/17/13 11:13	1
Silver	ND		10	6.0	ug/L		06/14/13 14:32	06/17/13 11:13	1
Thallium	2.20	J ^	20	0.88	ug/L		06/14/13 14:32	06/17/13 11:13	1
Zinc	7.40	J	20	5.2	ug/L		06/14/13 14:32	06/17/13 11:13	1

Lab Sample ID: LCS 160-55941/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56257 — **Prep Batch: 55941**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9980		ug/L		100	85 - 115
Arsenic	1000	981		ug/L		98	85 - 115
Beryllium	1000	1040		ug/L		104	85 - 115
Cadmium	1000	1020		ug/L		102	85 - 115
Chromium	1000	1010		ug/L		101	85 - 115
Cobalt	1000	1060		ug/L		106	85 - 115
Copper	1000	1010		ug/L		101	85 - 115
Iron	10000	10100		ug/L		101	85 - 115
Lead	1000	1040		ug/L		104	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 160-55941/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56257 — **Prep Batch: 55941**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	1000	1040		ug/L		104	85 - 115
Antimony	500	503		ug/L		101	85 - 115
Selenium	1000	990		ug/L		99	85 - 115
Silver	100	89.7		ug/L		90	85 - 115
Thallium	200	226	^	ug/L		113	85 - 115
Zinc	1000	1010		ug/L		101	85 - 115

Lab Sample ID: 160-2702-1 MS — **Client Sample ID: 213-214 MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56257 — **Prep Batch: 55941**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	26000		100000	139000		ug/L		113	70 - 130
Arsenic	410	J	10000	10100		ug/L		97	70 - 130
Beryllium	ND		10000	10500		ug/L		105	70 - 130
Cadmium	ND		10000	9920		ug/L		99	70 - 130
Chromium	300	J	10000	10100		ug/L		98	70 - 130
Cobalt	310	J	10000	10400		ug/L		101	70 - 130
Copper	ND		10000	9690		ug/L		97	70 - 130
Iron	1200000		100000	1310000	4	ug/L		129	70 - 130
Lead	440	J B	10000	10100		ug/L		97	70 - 130
Nickel	ND		10000	10100		ug/L		101	70 - 130
Antimony	ND		5000	4940		ug/L		99	70 - 130
Selenium	ND		10000	9860		ug/L		99	70 - 130
Silver	ND		1000	870		ug/L		87	70 - 130
Thallium	160	J ^ B	2000	2280	^	ug/L		106	70 - 130
Zinc	21000	B	10000	30700		ug/L		102	70 - 130

Lab Sample ID: 160-2702-1 MSD — **Client Sample ID: 213-214 MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56257 — **Prep Batch: 55941**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	26000		100000	144000		ug/L		118	70 - 130	3	20
Arsenic	410	J	10000	10300		ug/L		99	70 - 130	2	20
Beryllium	ND		10000	10600		ug/L		106	70 - 130	1	20
Cadmium	ND		10000	10100		ug/L		101	70 - 130	2	20
Chromium	300	J	10000	10200		ug/L		99	70 - 130	1	20
Cobalt	310	J	10000	10500		ug/L		102	70 - 130	1	20
Copper	ND		10000	9900		ug/L		99	70 - 130	2	20
Iron	1200000		100000	1340000	4	ug/L		156	70 - 130	2	20
Lead	440	J B	10000	10300		ug/L		98	70 - 130	1	20
Nickel	ND		10000	10200		ug/L		102	70 - 130	1	20
Antimony	ND		5000	5110		ug/L		102	70 - 130	3	20
Selenium	ND		10000	9950		ug/L		100	70 - 130	1	20
Silver	ND		1000	885		ug/L		89	70 - 130	2	20
Thallium	160	J ^ B	2000	2250	^	ug/L		105	70 - 130	1	20
Zinc	21000	B	10000	31400		ug/L		108	70 - 130	2	20

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2702-1

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 160-56207/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56516 — **Prep Batch: 56207**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	4.40	J	6.0	1.5	ug/L		06/17/13 07:34	06/18/13 21:42	1

Lab Sample ID: LCS 160-56207/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56516 — **Prep Batch: 56207**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	150	157		ug/L		105	85 - 115

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 480-124929/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124930 — **Prep Batch: 124929**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/20/13 02:00	06/20/13 02:19	1

Lab Sample ID: LCS 480-124929/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124930 — **Prep Batch: 124929**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	39.7		mg/L		99	78 - 114

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-124334/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124334

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.0154	J	0.020	0.0090	mg/L			06/17/13 12:04	1

Lab Sample ID: LCS 480-124334/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124334

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.04		mg/L		104	90 - 110

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2702-1

Method: 410.4 - COD

Lab Sample ID: MB 480-124856/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124856

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			06/19/13 12:52	1

Lab Sample ID: LCS 480-124856/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124856

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	197		mg/L		99	90 - 110

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-124113/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124113

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			06/14/13 17:10	1

Lab Sample ID: LCS 480-124113/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124113

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	217	204		mg/L		94	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 160-55867/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55867

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.000		SU		100	99.0 - 101.0

Lab Sample ID: 160-2702-1 DU — **Client Sample ID: 213-214 MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 55867

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	6.00	HF	6.000		SU		0	5

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2702-1

GC/MS VOA

Analysis Batch: 56642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2702-1	213-214 MSD	Total/NA	Water	624	
160-2702-2	TRIP BLANK	Total/NA	Water	624	
LCS 160-56642/4	Lab Control Sample	Total/NA	Water	624	
LCSD 160-56642/5	Lab Control Sample Dup	Total/NA	Water	624	
MB 160-56642/2	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 56272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2702-1	213-214 MSD	Total/NA	Water	625	
160-2702-1 - DL	213-214 MSD	Total/NA	Water	625	
LCS 160-56272/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 160-56272/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 160-56272/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 56695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2702-1	213-214 MSD	Total/NA	Water	625	56272
160-2702-1 - DL	213-214 MSD	Total/NA	Water	625	56272
LCS 160-56272/2-A	Lab Control Sample	Total/NA	Water	625	56272
LCSD 160-56272/3-A	Lab Control Sample Dup	Total/NA	Water	625	56272
MB 160-56272/1-A	Method Blank	Total/NA	Water	625	56272

Metals

Prep Batch: 55941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2702-1	213-214 MSD	Total/NA	Water	200.7/200.8	
160-2702-1	213-214 MSD	Dissolved	Water	200.7/200.8	
160-2702-1 MS	213-214 MSD	Total/NA	Water	200.7/200.8	
160-2702-1 MSD	213-214 MSD	Total/NA	Water	200.7/200.8	
LCS 160-55941/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
MB 160-55941/1-A	Method Blank	Total/NA	Water	200.7/200.8	

Prep Batch: 56207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2702-1	213-214 MSD	Total/NA	Water	245.1	
160-2702-1	213-214 MSD	Dissolved	Water	245.1	
LCS 160-56207/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 160-56207/1-A	Method Blank	Total/NA	Water	245.1	

Analysis Batch: 56257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2702-1	213-214 MSD	Total/NA	Water	200.7 Rev 4.4	55941
160-2702-1	213-214 MSD	Dissolved	Water	200.7 Rev 4.4	55941
160-2702-1 MS	213-214 MSD	Total/NA	Water	200.7 Rev 4.4	55941
160-2702-1 MSD	213-214 MSD	Total/NA	Water	200.7 Rev 4.4	55941
LCS 160-55941/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	55941
MB 160-55941/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	55941

Metals (Continued)

Analysis Batch: 56516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2702-1	213-214 MSD	Total/NA	Water	245.1	56207
160-2702-1	213-214 MSD	Dissolved	Water	245.1	56207
LCS 160-56207/2-A	Lab Control Sample	Total/NA	Water	245.1	56207
MB 160-56207/1-A	Method Blank	Total/NA	Water	245.1	56207

General Chemistry

Analysis Batch: 55867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2702-1	213-214 MSD	Total/NA	Water	SM 4500 H+ B	
160-2702-1 DU	213-214 MSD	Total/NA	Water	SM 4500 H+ B	
LCS 160-55867/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 124113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2702-1	213-214 MSD	Total/NA	Water	SM 2540D	
LCS 480-124113/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-124113/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 124334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2702-1	213-214 MSD	Total/NA	Water	350.1	
LCS 480-124334/4	Lab Control Sample	Total/NA	Water	350.1	
MB 480-124334/3	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 124856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2702-1	213-214 MSD	Total/NA	Water	410.4	
LCS 480-124856/4	Lab Control Sample	Total/NA	Water	410.4	
MB 480-124856/3	Method Blank	Total/NA	Water	410.4	

Prep Batch: 124929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2702-1	213-214 MSD	Total/NA	Water	1664A	
LCS 480-124929/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 480-124929/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 124930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2702-1	213-214 MSD	Total/NA	Water	1664A	124929
LCS 480-124929/2-A	Lab Control Sample	Total/NA	Water	1664A	124929
MB 480-124929/1-A	Method Blank	Total/NA	Water	1664A	124929

Surrogate Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2702-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(71-135)	(80-122)	(84-122)
160-2702-1	213-214 MSD	101	121	112
160-2702-2	TRIP BLANK	101	110	114
LCS 160-56642/4	Lab Control Sample	97	101	99
LCSD 160-56642/5	Lab Control Sample Dup	100	105	99
MB 160-56642/2	Method Blank	96	108	112

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(41-109)	(31-103)	(23-82)	(36-98)	(14-68)	(43-107)
160-2702-1	213-214 MSD	0 X	0 X	0 X	0 X	0 X	0 X
160-2702-1 - DL	213-214 MSD	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
LCS 160-56272/2-A	Lab Control Sample	76	62	31	59	21	65
LCSD 160-56272/3-A	Lab Control Sample Dup	79	62	31	59	22	68
MB 160-56272/1-A	Method Blank	55	45	27	47	17	55

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2702-2
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/25/2013 2:28:53 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

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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.

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QC Association Summary 14

Job ID: 160-2702-2

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2702-2

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 6/13/2013 3:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

BIOCHEMICAL OXYGEN DEMAND

Sample 213-214 MSD (160-2702-1) was analyzed for Biochemical oxygen demand in accordance with SM 5210B. The samples were analyzed on 06/14/2013.

The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results are reported. (USB 480-124027/1)

For batch # 124027, there is no LCS result. During the 5 day incubation period, the incubator temperature dropped below the required temperature range for 1 day. The result of the incubator malfunction was that the LCS samples expanded as they cooled which broke the BOD bottles and resulted in the loss of the samples. The secondary QC standard recovered at 99%. The actual value for this standard is 87.9 ppm with an acceptance range from 56.3 - 120 ppm. The result was 87.66. (LCS 480-124027/2)

Job ID: 160-2702-2 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Method 5210 B specifies that during the 5 day BOD incubation period that the incubator temperature must remain betwwn 19 and 21 degrees C. During day 2 of the incubation period for batch # 124143, the incubator temperature was noticed to be below this range. This condition was corrected and for the final 3 days of incubation, the temperature was monitored and remained within the required range.
213-214 MSD (160-2702-1)

All of the dilutions overdepleted for the following sample(s): 213-214 MSD (160-2702-1). Only a "greater than" result could be calculated from the most dilute preparation.

No difficulties were encountered during the BOD analysis.

All quality control parameters were within the acceptance limits.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

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TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY / FEI	6/13/13	197603
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
(816) -285-8410	314 - 502 -1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State)	Carrier/Waybill Number
BRIDGETON LF / MISSOURI	

Contract/Purchase Order/Quote No.

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		624-25ml-VOC	1664A-HEM	5210B-BOD	625-SVOC	200.7 2451 T	2540D-TSS	410.4 3381	200.7 2451 D	PH				Special Instructions/ Conditions of Receipt
			Matrix					Containers & Preservatives							Analysis (Attach list if more space is needed)												
213-214 MSD	6/13/13			✓				5	1	1	4				3	1	1	1	1	1	1	1	1				
TRIP BLANK	6/13/13			✓							2																

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

Sample Disposal
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 DAYS

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
[signature]	6/13/13	15:50	[signature]	6/13/13	1550
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2702-2

Login Number: 2702

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
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	
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?	False	Not requested on COC.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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	Refer to Job Narrative for details.
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	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2702-2

Login Number: 2702
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/14/13 09:38 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	4.9 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Definitions/Glossary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2702-2

Qualifiers

General Chemistry

Qualifier	Qualifier Description
b	Result Detected in the Unseeded Control blank (USB).

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2702-2

Method	Method Description	Protocol	Laboratory
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2702-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2702-1	213-214 MSD	Water	06/13/13 00:00	06/13/13 15:54

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2702-2

Client Sample ID: 213-214 MSD

Lab Sample ID: 160-2702-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	>11913	b	10	10	mg/L	5		SM 5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2702-2

Client Sample ID: 213-214 MSD

Lab Sample ID: 160-2702-1

Date Collected: 06/13/13 00:00

Matrix: Water

Date Received: 06/13/13 15:54

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	>11913	b	10	10	mg/L			06/14/13 08:56	5

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2702-2

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-124027/1 USB
Matrix: Water
Analysis Batch: 124027

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			06/14/13 08:56	1

Lab Sample ID: LCS 480-124027/2
Matrix: Water
Analysis Batch: 124027

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biochemical Oxygen Demand	198	no result		mg/L		NaN	85 - 115

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2702-2

General Chemistry

Analysis Batch: 124027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2702-1	213-214 MSD	Total/NA	Water	SM 5210B	
LCS 480-124027/2	Lab Control Sample	Total/NA	Water	SM 5210B	
USB 480-124027/1 USB	Method Blank	Total/NA	Water	SM 5210B	

TestAmerica

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2710-1
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/26/2013 5:08:10 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

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Job ID: 160-2710-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2710-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The sample was received on 6/15/2013 9:58 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample 218/219-MSD (160-2710-1) was analyzed for volatile organic compounds (GC-MS) in accordance with EPA Method 624. The samples were analyzed on 06/16/2013.

In batch 56642, due to the screening results, a MS/MSD was not analyzed. The LCS/LCSD results meet method criteria for precision and accuracies.

In batch 56642 and after viewing the screening data, the following samples were analyzed at reduced volume due to high concentrations of analytes: 218/219-MSD (160-2710-1). The calculation was done using an initial volume adjustment rather than a dilution factor. The reporting limits have been elevated by the appropriate factor.

Job ID: 160-2710-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

In batch 56642, the sample pH was >2. The sample was analyzed within 7 days as if unpreserved instead of the 14 days of a preserved sample with a pH <2.

No difficulties were encountered during the VOCs analysis.

All quality control parameters were within the acceptance limits.

Organic Prep
Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 56272. laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Due to the matrix, the following sample(s) could not be concentrated to the final method required volume: 218/219-MSD (160-2710-1). The reporting limits (RLs) are elevated proportionately.

The following samples formed emulsions during the extraction procedure: 218/219-MSD (160-2710-1). The emulsions were broken up using centrifuge.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 218/219-MSD (160-2710-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA Method 625. The samples were prepared on 06/17/2013 and analyzed on 06/18/2013.

2-Chlorophenol, 4-Nitrophenol, Isophorone and Phenol failed the recovery criteria low for LCS 160-56272/2-A. 2-Chlorophenol, 4-Nitrophenol, Isophorone and Phenol failed the recovery criteria low for LCSD 160-56272/3-A. There was insufficient sample to perform a re-extraction or re-analysis; therefore, the data have been reported.

The following samples were diluted to bring the concentration of target analytes within the calibration range: 218/219-MSD (160-2710-1) [20X]. Elevated reporting limits (RLs) are provided. Due to the level of dilution required for the following sample(s), surrogate recoveries are not reported: 218/219-MSD (160-2710-1).

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required. Surrogate recoveries for the following samples were outside control limits: 218/219-MSD (160-2710-1). The samples shows evidence of matrix interference; therefore, re-extraction and/or re-analysis was not performed.

No other difficulties were encountered during the SVOC analysis.

All other quality control parameters were within the acceptance limits.

ICP total and dissolved
Sample 218/219-MSD (160-2710-1) was analyzed for ICP in accordance with EPA Method 200.7, Rev. 4.4. The samples were prepared on 06/17/2013 and analyzed on 06/20/2013 and 06/21/2013.

Iron failed the recovery criteria high for the MS and MSD of sample 218/219-MSD (160-2710-1) in batch 160-57097. The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

The samples were digested at a 10x dilution due to an opaque matrix.

The following samples were diluted due to the nature of the sample matrix. The sample digestates were dark yellow in color: (160-2710-1 MS), (160-2710-1 MSD), (160-2710-1 SD), 218/219-MSD (160-2710-1)[5X]. Elevated reporting limits (RLs) are provided.

Due to the high concentration of iron, the matrix spike / matrix spike duplicate (MS/MSD) for batch 56281 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

The serial dilution performed for the following samples associated with batch 56281 was outside control limits for zinc indicating a possible matrix interference. The serial dilution in analytical batch 57423 confirmed the results: (160-2710-1 SD)

Job ID: 160-2710-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

No other difficulties were encountered during the ICP analysis.

All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)
Sample 218/219-MSD (160-2710-1) was analyzed for dissolved mercury (CVAA) in accordance with EPA Method 245.1. The samples were prepared on 06/17/2013 and analyzed on 06/18/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

MERCURY
Sample 218/219-MSD (160-2710-1) was analyzed for mercury in accordance with EPA Method 245.1. The samples were prepared on 06/17/2013 and analyzed on 06/18/2013.

Mercury was detected in method blank MB 160-56207/1-A at a level that was above the method detection limit but below the reporting limit.

No other difficulties were encountered during the mercury analysis.

All other quality control parameters were within the acceptance limits.

Oil & Grease
Sample 218/219-MSD (160-2710-1) was analyzed for Oil & Grease in accordance with EPA Method 1664A. The samples were prepared and analyzed on 06/20/2013.

No difficulties were encountered during the Oil & Grease analysis.

All quality control parameters were within the acceptance limits.

TOTAL SUSPENDED SOLIDS
Sample 218/219-MSD (160-2710-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 06/18/2013.

Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: 218/219-MSD (160-2710-1). The reporting limits (RLs) have been adjusted proportionately.

No difficulties were encountered during the TSS analysis.

All quality control parameters were within the acceptance limits.

AMMONIA
Sample 218/219-MSD (160-2710-1) was analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/19/2013.

Sample 218/219-MSD (160-2710-1)[1000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the ammonia analysis.

All quality control parameters were within the acceptance limits.

CHEMICAL OXYGEN DEMAND
Sample 218/219-MSD (160-2710-1) was analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 06/19/2013.

Job ID: 160-2710-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Sample 218/219-MSD (160-2710-1)[200X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the COD analysis.

All other quality control parameters were within the acceptance limits.

PH

Sample 218/219-MSD (160-2710-1) was analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed on 06/17/2013.

For the analysis of the following samples in pH batch #56287, this analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples have been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 218/219-MSD (160-2710-1)

For the analysis of the following pH samples in batch 56287, pH indicator strips were used to prevent the samples' matrices from possibly damaging the pH probe. 218/219-MSD (160-2710-1) The lot number for the pH indicator strips used for the 0-14 range was: HC270245

No difficulties were encountered during the pH analysis.

All quality control parameters were within the acceptance limits.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING/ED GALBRAITH	BILL ABERNATHY/FEI	6/14/13	197604
Address	Telephone Number (Area Code)/Fax Number: 314-502-1299	Lab Number	Page 1 of 1
City / State / Zip Code	Site Contact	Lab Contact	
Project Name and Location (State): BRIDGETON LF / MISSOURI	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		624 - VOCs	1664A - HEM FPH	5210B - BOD	625 - SVOCs	300.1 245.1 T	200.7 245.1 D	2540D - TSS	410.4 350.1	pH				Special Instructions/ Conditions of Receipt
218/219-MSD	6/15/13	0707		✓				5	1	1	4				3	1	1	1	1	1	1	1	1				

Analysis (Attach list if more space is needed)

Matrix / Containers & Preservatives

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 Days

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	6/15/13	0958	1. Received By: [signature]	6/15/13	0958
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2710-1

Login Number: 2710

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	
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?	False	Not requested on COC.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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	See NCM
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	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2710-1

Login Number: 2710
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/18/13 01:40 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	3.8 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2710-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SL
245.1	Mercury (CVAA)	EPA	TAL SL
1664A	HEM and SGT-HEM	1664A	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
410.4	COD	MCAWW	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL SL

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2710-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2710-1	218/219-MSD	Water	06/15/13 07:07	06/15/13 09:58

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2710-1

Client Sample ID: 218/219-MSD

Lab Sample ID: 160-2710-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	120		47	4.7	ug/L	1		625	Total/NA
Phenanthrene	18	J	47	4.7	ug/L	1		625	Total/NA
Phenol - DL	8300	*	930	190	ug/L	20		625	Total/NA
Aluminum	16000		10000	4000	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	480	J	500	99	ug/L	5		200.7 Rev 4.4	Total/NA
Cobalt	360	J	2500	200	ug/L	5		200.7 Rev 4.4	Total/NA
Iron	1100000		5000	800	ug/L	5		200.7 Rev 4.4	Total/NA
Lead	440	J	500	64	ug/L	5		200.7 Rev 4.4	Total/NA
Antimony	230	J	500	200	ug/L	5		200.7 Rev 4.4	Total/NA
Thallium	70	J	1000	44	ug/L	5		200.7 Rev 4.4	Total/NA
Zinc	24000		1000	260	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	350	J	500	99	ug/L	5		200.7 Rev 4.4	Dissolved
Cobalt	500	J	2500	200	ug/L	5		200.7 Rev 4.4	Dissolved
Iron	630000		5000	800	ug/L	5		200.7 Rev 4.4	Dissolved
Lead	230	J	500	64	ug/L	5		200.7 Rev 4.4	Dissolved
Zinc	16000		1000	260	ug/L	5		200.7 Rev 4.4	Dissolved
Mercury	4.9	J B	6.0	1.5	ug/L	1		245.1	Dissolved
Oil & Grease	25		17	4.7	mg/L	1		1664A	Total/NA
Ammonia	550		20	9.0	mg/L	1000		350.1	Total/NA
Chemical Oxygen Demand	38000		2000	1000	mg/L	200		410.4	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	1400		100	100	mg/L	1		SM 2540D	Total/NA
pH	6.00	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2710-1

Client Sample ID: 218/219-MSD

Lab Sample ID: 160-2710-1

Date Collected: 06/15/13 07:07

Matrix: Water

Date Received: 06/15/13 09:58

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.5	ug/L			06/16/13 06:45	1
1,1,2,2-Tetrachloroethane	ND		50	5.0	ug/L			06/16/13 06:45	1
1,1,2-Trichloroethane	ND		50	7.5	ug/L			06/16/13 06:45	1
1,1-Dichloroethane	ND		50	3.5	ug/L			06/16/13 06:45	1
1,1-Dichloroethene	ND		50	4.0	ug/L			06/16/13 06:45	1
1,2-Dichlorobenzene	ND		50	3.0	ug/L			06/16/13 06:45	1
1,2-Dichloroethane	ND		50	5.0	ug/L			06/16/13 06:45	1
1,2-Dichloropropane	ND		50	5.0	ug/L			06/16/13 06:45	1
1,3-Dichlorobenzene	ND		50	4.0	ug/L			06/16/13 06:45	1
1,4-Dichlorobenzene	ND		50	6.0	ug/L			06/16/13 06:45	1
2-Chloroethyl vinyl ether	ND		100	8.5	ug/L			06/16/13 06:45	1
Benzene	ND		50	3.0	ug/L			06/16/13 06:45	1
Bromodichloromethane	ND		50	4.5	ug/L			06/16/13 06:45	1
Bromoform	ND		50	8.5	ug/L			06/16/13 06:45	1
Bromomethane	ND		100	6.5	ug/L			06/16/13 06:45	1
Carbon tetrachloride	ND		50	6.5	ug/L			06/16/13 06:45	1
Chlorobenzene	ND		50	7.5	ug/L			06/16/13 06:45	1
Chloroethane	ND		100	5.0	ug/L			06/16/13 06:45	1
Chloroform	ND		50	5.0	ug/L			06/16/13 06:45	1
Chloromethane	ND		100	4.0	ug/L			06/16/13 06:45	1
cis-1,2-Dichloroethene	ND		50	4.5	ug/L			06/16/13 06:45	1
cis-1,3-Dichloropropene	ND		50	3.5	ug/L			06/16/13 06:45	1
Dibromochloromethane	ND		50	6.5	ug/L			06/16/13 06:45	1
Ethylbenzene	ND		50	4.5	ug/L			06/16/13 06:45	1
Methylene Chloride	ND		50	5.5	ug/L			06/16/13 06:45	1
Tetrachloroethene	ND		50	9.0	ug/L			06/16/13 06:45	1
Toluene	ND		50	3.5	ug/L			06/16/13 06:45	1
trans-1,2-Dichloroethene	ND		50	4.0	ug/L			06/16/13 06:45	1
trans-1,3-Dichloropropene	ND		50	4.0	ug/L			06/16/13 06:45	1
Trichloroethene	ND		50	11	ug/L			06/16/13 06:45	1
Trichlorofluoromethane	ND		50	5.5	ug/L			06/16/13 06:45	1
Vinyl chloride	ND		100	4.0	ug/L			06/16/13 06:45	1
Xylenes, Total	ND		150	10	ug/L			06/16/13 06:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 135*		*06/16/13 06:45*	*1*
4-Bromofluorobenzene (Surr)	*112*		*80 - 122*		*06/16/13 06:45*	*1*
Toluene-d8 (Surr)	*114*		*84 - 122*		*06/16/13 06:45*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
bis (2-chloroisopropyl) ether	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
2,4,6-Trichlorophenol	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
2,4-Dichlorophenol	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
2,4-Dimethylphenol	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
2,4-Dinitrophenol	ND		230	9.3	ug/L		06/17/13 14:56	06/18/13 21:24	1
2,4-Dinitrotoluene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
2,6-Dinitrotoluene	ND		47	10	ug/L		06/17/13 14:56	06/18/13 21:24	1
2-Chloronaphthalene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2710-1

Client Sample ID: 218/219-MSD

Date Collected: 06/15/13 07:07
Date Received: 06/15/13 09:58

Lab Sample ID: 160-2710-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND	*	47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
2-Nitrophenol	ND		47	7.1	ug/L		06/17/13 14:56	06/18/13 21:24	1
3,3'-Dichlorobenzidine	ND		230	6.0	ug/L		06/17/13 14:56	06/18/13 21:24	1
4,6-Dinitro-2-methylphenol	ND		230	5.9	ug/L		06/17/13 14:56	06/18/13 21:24	1
4-Bromophenyl phenyl ether	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
4-Chloro-3-methylphenol	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
4-Chlorophenyl phenyl ether	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
4-Nitrophenol	ND	*	230	9.3	ug/L		06/17/13 14:56	06/18/13 21:24	1
Acenaphthene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Acenaphthylene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Anthracene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Benzidine	ND		470	93	ug/L		06/17/13 14:56	06/18/13 21:24	1
Benzo[a]anthracene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Benzo[a]pyrene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Benzo[b]fluoranthene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Benzo[g,h,i]perylene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Benzo[k]fluoranthene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Bis(2-chloroethoxy)methane	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Bis(2-chloroethyl)ether	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Bis(2-ethylhexyl) phthalate	ND		47	8.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Butyl benzyl phthalate	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Chrysene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Dibenz(a,h)anthracene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Diethyl phthalate	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Dimethyl phthalate	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Di-n-butyl phthalate	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Di-n-octyl phthalate	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Fluoranthene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Fluorene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Hexachloro-1,3-butadiene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Hexachlorobenzene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Hexachlorocyclopentadiene	ND		230	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Hexachloroethane	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Indeno[1,2,3-cd]pyrene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Isophorone	ND	*	47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Naphthalene	**120**		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Nitrobenzene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
N-Nitrosodimethylamine	ND		47	9.3	ug/L		06/17/13 14:56	06/18/13 21:24	1
N-Nitrosodi-n-propylamine	ND		47	7.0	ug/L		06/17/13 14:56	06/18/13 21:24	1
N-Nitrosodiphenylamine	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Pentachlorophenol	ND		230	5.9	ug/L		06/17/13 14:56	06/18/13 21:24	1
Phenanthrene	**18**	**J**	47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1
Pyrene	ND		47	4.7	ug/L		06/17/13 14:56	06/18/13 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*41 - 109*	*06/17/13 14:56*	*06/18/13 21:24*	*1*
2-Fluorobiphenyl (Surr)	*0*	*X*	*31 - 103*	*06/17/13 14:56*	*06/18/13 21:24*	*1*
2-Fluorophenol (Surr)	*0*	*X*	*23 - 82*	*06/17/13 14:56*	*06/18/13 21:24*	*1*
Nitrobenzene-d5 (Surr)	*0*	*X*	*36 - 98*	*06/17/13 14:56*	*06/18/13 21:24*	*1*
Phenol-d5 (Surr)	*0*	*X*	*14 - 68*	*06/17/13 14:56*	*06/18/13 21:24*	*1*

Client Sample ID: 218/219-MSD

Date Collected: 06/15/13 07:07
Date Received: 06/15/13 09:58

Lab Sample ID: 160-2710-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14 (Surr)	0	X	43 - 107	06/17/13 14:56	06/18/13 21:24	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**8300**	*	930	190	ug/L		06/17/13 14:56	06/18/13 17:31	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	0	D X	41 - 109	06/17/13 14:56	06/18/13 17:31	20
2-Fluorobiphenyl (Surr)	0	D X	31 - 103	06/17/13 14:56	06/18/13 17:31	20
2-Fluorophenol (Surr)	0	D X	23 - 82	06/17/13 14:56	06/18/13 17:31	20
Nitrobenzene-d5 (Surr)	0	D X	36 - 98	06/17/13 14:56	06/18/13 17:31	20
Phenol-d5 (Surr)	0	D X	14 - 68	06/17/13 14:56	06/18/13 17:31	20
Terphenyl-d14 (Surr)	0	D X	43 - 107	06/17/13 14:56	06/18/13 17:31	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		500	300	ug/L		06/17/13 15:45	06/20/13 17:58	5
Aluminum	**16000**		10000	4000	ug/L		06/17/13 15:45	06/21/13 14:19	5
Arsenic	**480**	**J**	500	99	ug/L		06/17/13 15:45	06/20/13 17:58	5
Beryllium	ND		250	25	ug/L		06/17/13 15:45	06/20/13 17:58	5
Cadmium	ND		250	23	ug/L		06/17/13 15:45	06/20/13 17:58	5
Cobalt	**360**	**J**	2500	200	ug/L		06/17/13 15:45	06/20/13 17:58	5
Chromium	ND		500	160	ug/L		06/17/13 15:45	06/21/13 14:19	5
Copper	ND		1300	230	ug/L		06/17/13 15:45	06/20/13 17:58	5
Iron	**1100000**		5000	800	ug/L		06/17/13 15:45	06/20/13 17:58	5
Nickel	ND		2000	670	ug/L		06/17/13 15:45	06/20/13 17:58	5
Lead	**440**	**J**	500	64	ug/L		06/17/13 15:45	06/20/13 17:58	5
Antimony	**230**	**J**	500	200	ug/L		06/17/13 15:45	06/20/13 17:58	5
Selenium	ND		750	130	ug/L		06/17/13 15:45	06/20/13 17:58	5
Thallium	**70**	**J**	1000	44	ug/L		06/17/13 15:45	06/20/13 17:58	5
Zinc	**24000**		1000	260	ug/L		06/17/13 15:45	06/20/13 17:58	5

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10000	4000	ug/L		06/17/13 15:45	06/21/13 14:34	5
Antimony	ND		500	200	ug/L		06/17/13 15:45	06/20/13 18:13	5
Arsenic	**350**	**J**	500	99	ug/L		06/17/13 15:45	06/20/13 18:13	5
Beryllium	ND		250	25	ug/L		06/17/13 15:45	06/20/13 18:13	5
Cadmium	ND		250	23	ug/L		06/17/13 15:45	06/20/13 18:13	5
Chromium	ND		500	160	ug/L		06/17/13 15:45	06/21/13 14:34	5
Cobalt	**500**	**J**	2500	200	ug/L		06/17/13 15:45	06/20/13 18:13	5
Copper	ND		1300	230	ug/L		06/17/13 15:45	06/20/13 18:13	5
Iron	**630000**		5000	800	ug/L		06/17/13 15:45	06/20/13 18:13	5
Lead	**230**	**J**	500	64	ug/L		06/17/13 15:45	06/20/13 18:13	5
Nickel	ND		2000	670	ug/L		06/17/13 15:45	06/20/13 18:13	5
Selenium	ND		750	130	ug/L		06/17/13 15:45	06/20/13 18:13	5
Silver	ND		500	300	ug/L		06/17/13 15:45	06/20/13 18:13	5
Thallium	ND		1000	44	ug/L		06/17/13 15:45	06/20/13 18:13	5
Zinc	**16000**		1000	260	ug/L		06/17/13 15:45	06/20/13 18:13	5

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2710-1

Client Sample ID: 218/219-MSD

Lab Sample ID: 160-2710-1

Date Collected: 06/15/13 07:07

Matrix: Water

Date Received: 06/15/13 09:58

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		6.0	1.5	ug/L		06/17/13 07:34	06/18/13 22:01	1

Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**4.9**	**J B**	6.0	1.5	ug/L		06/17/13 07:34	06/18/13 22:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	**25**		17	4.7	mg/L		06/20/13 02:00	06/20/13 02:19	1
Ammonia	**550**		20	9.0	mg/L			06/19/13 12:49	1000
Chemical Oxygen Demand	**38000**		2000	1000	mg/L			06/19/13 12:56	200

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**1400**		100	100	mg/L			06/18/13 16:24	1
pH	**6.00**	**HF**	0.100	0.100	SU			06/17/13 18:16	1

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-56642/2
Matrix: Water
Analysis Batch: 56642

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/16/13 05:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/16/13 05:27	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/16/13 05:27	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/16/13 05:27	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/16/13 05:27	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/16/13 05:27	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/16/13 05:27	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/16/13 05:27	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/16/13 05:27	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/16/13 05:27	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/16/13 05:27	1
Benzene	ND		1.0	0.060	ug/L			06/16/13 05:27	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/16/13 05:27	1
Bromoform	ND		1.0	0.17	ug/L			06/16/13 05:27	1
Bromomethane	ND		2.0	0.13	ug/L			06/16/13 05:27	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/16/13 05:27	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/16/13 05:27	1
Chloroethane	ND		2.0	0.10	ug/L			06/16/13 05:27	1
Chloroform	ND		1.0	0.10	ug/L			06/16/13 05:27	1
Chloromethane	ND		2.0	0.080	ug/L			06/16/13 05:27	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/16/13 05:27	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/16/13 05:27	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/16/13 05:27	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/16/13 05:27	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/16/13 05:27	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/16/13 05:27	1
Toluene	ND		1.0	0.070	ug/L			06/16/13 05:27	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/16/13 05:27	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/16/13 05:27	1
Trichloroethene	ND		1.0	0.21	ug/L			06/16/13 05:27	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/16/13 05:27	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/16/13 05:27	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/16/13 05:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*71 - 135*		*06/16/13 05:27*	*1*
4-Bromofluorobenzene (Surr)	*108*		*80 - 122*		*06/16/13 05:27*	*1*
Toluene-d8 (Surr)	*112*		*84 - 122*		*06/16/13 05:27*	*1*

Lab Sample ID: LCS 160-56642/4
Matrix: Water
Analysis Batch: 56642

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	9.98		ug/L		100	82 - 127
1,1,2,2-Tetrachloroethane	10.0	9.42		ug/L		94	69 - 130
1,1,2-Trichloroethane	10.0	9.66		ug/L		97	78 - 122
1,1-Dichloroethane	10.0	9.69		ug/L		97	82 - 125

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-56642/4
Matrix: Water
Analysis Batch: 56642

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	9.52		ug/L		95	77 - 127
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	83 - 121
1,2-Dichloroethane	10.0	10.1		ug/L		101	78 - 127
1,2-Dichloropropane	10.0	9.74		ug/L		97	81 - 124
1,3-Dichlorobenzene	10.0	10.5		ug/L		105	85 - 121
1,4-Dichlorobenzene	10.0	10.3		ug/L		103	83 - 116
2-Chloroethyl vinyl ether	10.0	6.97		ug/L		70	34 - 140
Benzene	10.0	9.92		ug/L		99	84 - 124
Bromodichloromethane	10.0	9.81		ug/L		98	81 - 127
Bromoform	10.0	9.60		ug/L		96	78 - 138
Bromomethane	10.0	8.82		ug/L		88	48 - 162
Carbon tetrachloride	10.0	10.2		ug/L		102	79 - 132
Chlorobenzene	10.0	9.89		ug/L		99	85 - 118
Chloroethane	10.0	8.58		ug/L		86	71 - 132
Chloroform	10.0	9.88		ug/L		99	82 - 124
Chloromethane	10.0	9.59		ug/L		96	68 - 136
cis-1,2-Dichloroethene	10.0	9.83		ug/L		98	83 - 123
cis-1,3-Dichloropropene	10.0	9.59		ug/L		96	79 - 132
Dibromochloromethane	10.0	9.55		ug/L		96	81 - 129
Ethylbenzene	10.0	9.99		ug/L		100	85 - 125
Methylene Chloride	10.0	9.77		ug/L		98	70 - 127
Tetrachloroethene	10.0	10.6		ug/L		106	76 - 129
Toluene	10.0	9.97		ug/L		100	83 - 127
trans-1,2-Dichloroethene	10.0	9.57		ug/L		96	78 - 122
trans-1,3-Dichloropropene	10.0	9.41		ug/L		94	83 - 130
Trichloroethene	10.0	9.89		ug/L		99	81 - 123
Trichlorofluoromethane	10.0	8.55		ug/L		85	72 - 135
Vinyl chloride	10.0	9.00		ug/L		90	72 - 132
Xylenes, Total	30.0	31.6		ug/L		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*71 - 135*
4-Bromofluorobenzene (Surr)	*101*		*80 - 122*
Toluene-d8 (Surr)	*99*		*84 - 122*

Lab Sample ID: LCSD 160-56642/5
Matrix: Water
Analysis Batch: 56642

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	10.0	10.1		ug/L		101	82 - 127	1	20
1,1,2,2-Tetrachloroethane	10.0	9.49		ug/L		95	69 - 130	1	20
1,1,2-Trichloroethane	10.0	9.85		ug/L		99	78 - 122	2	20
1,1-Dichloroethane	10.0	9.96		ug/L		100	82 - 125	3	20
1,1-Dichloroethene	10.0	9.76		ug/L		98	77 - 127	2	20
1,2-Dichlorobenzene	10.0	10.1		ug/L		101	83 - 121	1	20
1,2-Dichloroethane	10.0	10.2		ug/L		102	78 - 127	1	20
1,2-Dichloropropane	10.0	9.61		ug/L		96	81 - 124	1	20

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-56642/5
Matrix: Water
Analysis Batch: 56642

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	10.0	10.3		ug/L		103	85 - 121	2	20
1,4-Dichlorobenzene	10.0	10.0		ug/L		100	83 - 116	3	20
2-Chloroethyl vinyl ether	10.0	7.14		ug/L		71	34 - 140	2	20
Benzene	10.0	10.1		ug/L		101	84 - 124	1	20
Bromodichloromethane	10.0	10.1		ug/L		101	81 - 127	3	20
Bromoform	10.0	9.54		ug/L		95	78 - 138	1	20
Bromomethane	10.0	9.15		ug/L		91	48 - 162	4	20
Carbon tetrachloride	10.0	10.1		ug/L		101	79 - 132	1	20
Chlorobenzene	10.0	9.88		ug/L		99	85 - 118	0	20
Chloroethane	10.0	8.58		ug/L		86	71 - 132	0	20
Chloroform	10.0	10.2		ug/L		102	82 - 124	3	20
Chloromethane	10.0	9.83		ug/L		98	68 - 136	3	20
cis-1,2-Dichloroethene	10.0	9.94		ug/L		99	83 - 123	1	20
cis-1,3-Dichloropropene	10.0	9.67		ug/L		97	79 - 132	1	20
Dibromochloromethane	10.0	9.59		ug/L		96	81 - 129	0	20
Ethylbenzene	10.0	10.0		ug/L		100	85 - 125	0	20
Methylene Chloride	10.0	9.83		ug/L		98	70 - 127	1	20
Tetrachloroethene	10.0	10.7		ug/L		107	76 - 129	1	20
Toluene	10.0	10.1		ug/L		101	83 - 127	1	20
trans-1,2-Dichloroethene	10.0	9.98		ug/L		100	78 - 122	4	20
trans-1,3-Dichloropropene	10.0	9.31		ug/L		93	83 - 130	1	20
Trichloroethene	10.0	10.0		ug/L		100	81 - 123	1	20
Trichlorofluoromethane	10.0	8.74		ug/L		87	72 - 135	2	20
Vinyl chloride	10.0	9.18		ug/L		92	72 - 132	2	20
Xylenes, Total	30.0	31.5		ug/L		105	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 135*
4-Bromofluorobenzene (Surr)	*105*		*80 - 122*
Toluene-d8 (Surr)	*99*		*84 - 122*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-56272/1-A
Matrix: Water
Analysis Batch: 56695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
bis (2-chloroisopropyl) ether	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4,6-Trichlorophenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4-Dichlorophenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4-Dimethylphenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4-Dinitrophenol	ND		50	2.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,4-Dinitrotoluene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2,6-Dinitrotoluene	ND		10	2.2	ug/L		06/17/13 14:56	06/18/13 13:35	1
2-Chloronaphthalene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
2-Chlorophenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-56272/1-A
Matrix: Water
Analysis Batch: 56695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		10	1.5	ug/L		06/17/13 14:56	06/18/13 13:35	1
3,3'-Dichlorobenzidine	ND		50	1.3	ug/L		06/17/13 14:56	06/18/13 13:35	1
4,6-Dinitro-2-methylphenol	ND		50	1.3	ug/L		06/17/13 14:56	06/18/13 13:35	1
4-Bromophenyl phenyl ether	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
4-Chlorophenyl phenyl ether	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
4-Nitrophenol	ND		50	2.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Acenaphthene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Acenaphthylene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Anthracene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzidine	ND		100	20	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[a]anthracene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[a]pyrene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[b]fluoranthene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[g,h,i]perylene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Benzo[k]fluoranthene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Bis(2-chloroethoxy)methane	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Bis(2-chloroethyl)ether	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Bis(2-ethylhexyl) phthalate	ND		10	1.9	ug/L		06/17/13 14:56	06/18/13 13:35	1
Butyl benzyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Chrysene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Dibenz(a,h)anthracene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Diethyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Dimethyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Di-n-butyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Di-n-octyl phthalate	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Fluoranthene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Fluorene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Hexachloro-1,3-butadiene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Hexachlorobenzene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Hexachlorocyclopentadiene	ND		50	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Hexachloroethane	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Indeno[1,2,3-cd]pyrene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Isophorone	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Naphthalene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Nitrobenzene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/L		06/17/13 14:56	06/18/13 13:35	1
N-Nitrosodiphenylamine	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Pentachlorophenol	ND		50	1.3	ug/L		06/17/13 14:56	06/18/13 13:35	1
Phenanthrene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Phenol	ND		10	2.0	ug/L		06/17/13 14:56	06/18/13 13:35	1
Pyrene	ND		10	1.0	ug/L		06/17/13 14:56	06/18/13 13:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*55*		*41 - 109*	*06/17/13 14:56*	*06/18/13 13:35*	*1*
2-Fluorobiphenyl (Surr)	*45*		*31 - 103*	*06/17/13 14:56*	*06/18/13 13:35*	*1*
2-Fluorophenol (Surr)	*27*		*23 - 82*	*06/17/13 14:56*	*06/18/13 13:35*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-56272/1-A
Matrix: Water
Analysis Batch: 56695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56272

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	47		36 - 98	06/17/13 14:56	06/18/13 13:35	1
Phenol-d5 (Surr)	17		14 - 68	06/17/13 14:56	06/18/13 13:35	1
Terphenyl-d14 (Surr)	55		43 - 107	06/17/13 14:56	06/18/13 13:35	1

Lab Sample ID: LCS 160-56272/2-A
Matrix: Water
Analysis Batch: 56695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 56272

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	99.9	52.3		ug/L		52	44 - 84
bis (2-chloroisopropyl) ether	100	61.8		ug/L		62	42 - 102
2,4,6-Trichlorophenol	100	60.2		ug/L		60	54 - 105
2,4-Dichlorophenol	100	57.8		ug/L		58	46 - 103
2,4-Dimethylphenol	100	54.5		ug/L		55	40 - 105
2,4-Dinitrophenol	100	57.5		ug/L		58	42 - 146
2,4-Dinitrotoluene	100	74.4		ug/L		74	62 - 101
2,6-Dinitrotoluene	100	69.2		ug/L		69	62 - 103
2-Chloronaphthalene	100	59.5		ug/L		59	45 - 95
2-Chlorophenol	100	51.2	*	ug/L		51	56 - 93
2-Nitrophenol	100	56.8		ug/L		57	51 - 98
3,3'-Dichlorobenzidine	100	58.7		ug/L		59	26 - 77
4,6-Dinitro-2-methylphenol	100	69.2		ug/L		69	61 - 120
4-Bromophenyl phenyl ether	100	68.8		ug/L		69	54 - 111
4-Chloro-3-methylphenol	100	62.3		ug/L		62	45 - 106
4-Chlorophenyl phenyl ether	100	67.5		ug/L		68	53 - 100
4-Nitrophenol	100	20.6	J *	ug/L		21	25 - 45
Acenaphthene	100	62.5		ug/L		62	51 - 89
Acenaphthylene	100	61.5		ug/L		62	46 - 98
Anthracene	100	67.4		ug/L		67	54 - 111
Benzo[a]anthracene	100	75.2		ug/L		75	68 - 108
Benzo[a]pyrene	100	67.7		ug/L		68	55 - 108
Benzo[b]fluoranthene	100	69.5		ug/L		69	57 - 114
Benzo[g,h,i]perylene	100	70.4		ug/L		70	58 - 120
Benzo[k]fluoranthene	100	72.5		ug/L		72	59 - 112
Bis(2-chloroethoxy)methane	100	60.1		ug/L		60	53 - 99
Bis(2-chloroethyl)ether	100	53.5		ug/L		53	50 - 97
Bis(2-ethylhexyl) phthalate	100	64.3		ug/L		64	54 - 116
Butyl benzyl phthalate	100	64.2		ug/L		64	52 - 126
Chrysene	100	65.4		ug/L		65	58 - 112
Dibenz(a,h)anthracene	100	76.3		ug/L		76	56 - 122
Diethyl phthalate	100	67.1		ug/L		67	60 - 101
Dimethyl phthalate	100	69.9		ug/L		70	57 - 101
Di-n-butyl phthalate	100	68.9		ug/L		69	57 - 108
Di-n-octyl phthalate	100	66.5		ug/L		67	57 - 118
Fluoranthene	100	73.6		ug/L		74	55 - 114
Fluorene	100	66.8		ug/L		67	59 - 96
Hexachloro-1,3-butadiene	100	49.5		ug/L		50	36 - 84
Hexachlorobenzene	100	70.7		ug/L		71	56 - 110

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-56272/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56695 — **Prep Batch: 56272**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	100	52.5		ug/L		53	16 - 86
Hexachloroethane	100	47.5		ug/L		47	40 - 77
Indeno[1,2,3-cd]pyrene	100	74.5		ug/L		75	55 - 124
Isophorone	100	48.6	*	ug/L		49	50 - 107
Naphthalene	100	53.7		ug/L		54	42 - 82
Nitrobenzene	100	56.2		ug/L		56	48 - 96
N-Nitrosodi-n-propylamine	100	65.9		ug/L		66	57 - 113
Pentachlorophenol	100	60.0		ug/L		60	56 - 126
Phenanthrene	100	69.1		ug/L		69	54 - 110
Phenol	100	21.7	*	ug/L		22	27 - 43
Pyrene	100	61.9		ug/L		62	53 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*76*		*41 - 109*
2-Fluorobiphenyl (Surr)	*62*		*31 - 103*
2-Fluorophenol (Surr)	*31*		*23 - 82*
Nitrobenzene-d5 (Surr)	*59*		*36 - 98*
Phenol-d5 (Surr)	*21*		*14 - 68*
Terphenyl-d14 (Surr)	*65*		*43 - 107*

Lab Sample ID: LCSD 160-56272/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56695 — **Prep Batch: 56272**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	99.9	53.9		ug/L		54	44 - 84	3	20
bis (2-chloroisopropyl) ether	100	62.5		ug/L		63	42 - 102	1	20
2,4,6-Trichlorophenol	100	62.1		ug/L		62	54 - 105	3	20
2,4-Dichlorophenol	100	58.6		ug/L		59	46 - 103	1	20
2,4-Dimethylphenol	100	53.7		ug/L		54	40 - 105	2	20
2,4-Dinitrophenol	100	61.2		ug/L		61	42 - 146	6	20
2,4-Dinitrotoluene	100	79.4		ug/L		79	62 - 101	6	20
2,6-Dinitrotoluene	100	72.7		ug/L		73	62 - 103	5	20
2-Chloronaphthalene	100	61.4		ug/L		61	45 - 95	3	20
2-Chlorophenol	100	51.3	*	ug/L		51	56 - 93	0	20
2-Nitrophenol	100	57.4		ug/L		57	51 - 98	1	20
3,3'-Dichlorobenzidine	100	61.0		ug/L		61	26 - 77	4	20
4,6-Dinitro-2-methylphenol	100	74.2		ug/L		74	61 - 120	7	20
4-Bromophenyl phenyl ether	100	71.7		ug/L		72	54 - 111	4	20
4-Chloro-3-methylphenol	100	63.9		ug/L		64	45 - 106	3	20
4-Chlorophenyl phenyl ether	100	70.6		ug/L		71	53 - 100	4	20
4-Nitrophenol	100	21.8	J *	ug/L		22	25 - 45	5	20
Acenaphthene	100	65.2		ug/L		65	51 - 89	4	20
Acenaphthylene	100	64.0		ug/L		64	46 - 98	4	20
Anthracene	100	70.3		ug/L		70	54 - 111	4	20
Benzo[a]anthracene	100	79.2		ug/L		79	68 - 108	5	20
Benzo[a]pyrene	100	70.5		ug/L		71	55 - 108	4	20
Benzo[b]fluoranthene	100	74.2		ug/L		74	57 - 114	7	20

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-56272/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56695 — **Prep Batch: 56272**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[g,h,i]perylene	100	74.5		ug/L		74	58 - 120	6	20
Benzo[k]fluoranthene	100	75.0		ug/L		75	59 - 112	3	20
Bis(2-chloroethoxy)methane	100	61.0		ug/L		61	53 - 99	1	20
Bis(2-chloroethyl)ether	100	54.5		ug/L		54	50 - 97	2	20
Bis(2-ethylhexyl) phthalate	100	68.4		ug/L		68	54 - 116	6	20
Butyl benzyl phthalate	100	68.0		ug/L		68	52 - 126	6	20
Chrysene	100	69.5		ug/L		69	58 - 112	6	20
Dibenz(a,h)anthracene	100	79.4		ug/L		79	56 - 122	4	20
Diethyl phthalate	100	70.7		ug/L		71	60 - 101	5	20
Dimethyl phthalate	100	74.1		ug/L		74	57 - 101	6	20
Di-n-butyl phthalate	100	72.7		ug/L		73	57 - 108	5	20
Di-n-octyl phthalate	100	71.1		ug/L		71	57 - 118	7	20
Fluoranthene	100	77.2		ug/L		77	55 - 114	5	20
Fluorene	100	69.8		ug/L		70	59 - 96	4	20
Hexachloro-1,3-butadiene	100	51.1		ug/L		51	36 - 84	3	20
Hexachlorobenzene	100	73.6		ug/L		74	56 - 110	4	20
Hexachlorocyclopentadiene	100	53.6		ug/L		54	16 - 86	2	20
Hexachloroethane	100	49.3		ug/L		49	40 - 77	4	20
Indeno[1,2,3-cd]pyrene	100	79.2		ug/L		79	55 - 124	6	20
Isophorone	100	49.4	*	ug/L		49	50 - 107	2	20
Naphthalene	100	55.2		ug/L		55	42 - 82	3	20
Nitrobenzene	100	56.8		ug/L		57	48 - 96	1	20
N-Nitrosodi-n-propylamine	100	67.5		ug/L		68	57 - 113	2	20
Pentachlorophenol	100	64.8		ug/L		65	56 - 126	8	20
Phenanthrene	100	71.7		ug/L		72	54 - 110	4	20
Phenol	100	22.0	*	ug/L		22	27 - 43	1	20
Pyrene	100	65.2		ug/L		65	53 - 117	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*79*		*41 - 109*
2-Fluorobiphenyl (Surr)	*62*		*31 - 103*
2-Fluorophenol (Surr)	*31*		*23 - 82*
Nitrobenzene-d5 (Surr)	*59*		*36 - 98*
Phenol-d5 (Surr)	*22*		*14 - 68*
Terphenyl-d14 (Surr)	*68*		*43 - 107*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 160-56281/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57097 — **Prep Batch: 56281**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10	2.0	ug/L		06/17/13 15:45	06/20/13 17:50	1
Beryllium	ND		5.0	0.50	ug/L		06/17/13 15:45	06/20/13 17:50	1
Cadmium	ND		5.0	0.45	ug/L		06/17/13 15:45	06/20/13 17:50	1
Cobalt	ND		50	4.0	ug/L		06/17/13 15:45	06/20/13 17:50	1
Copper	ND		25	4.6	ug/L		06/17/13 15:45	06/20/13 17:50	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 160-56281/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57097 — **Prep Batch: 56281**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		100	16	ug/L		06/17/13 15:45	06/20/13 17:50	1
Lead	ND		10	1.3	ug/L		06/17/13 15:45	06/20/13 17:50	1
Nickel	ND		40	13	ug/L		06/17/13 15:45	06/20/13 17:50	1
Antimony	ND		10	4.0	ug/L		06/17/13 15:45	06/20/13 17:50	1
Selenium	ND		15	2.7	ug/L		06/17/13 15:45	06/20/13 17:50	1
Silver	ND		10	6.0	ug/L		06/17/13 15:45	06/20/13 17:50	1
Thallium	ND		20	0.88	ug/L		06/17/13 15:45	06/20/13 17:50	1
Zinc	ND		20	5.2	ug/L		06/17/13 15:45	06/20/13 17:50	1

Lab Sample ID: MB 160-56281/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57423 — **Prep Batch: 56281**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		06/17/13 15:45	06/21/13 14:04	1
Chromium	ND		10	3.1	ug/L		06/17/13 15:45	06/21/13 14:04	1

Lab Sample ID: LCS 160-56281/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57097 — **Prep Batch: 56281**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1000	1010		ug/L		101	85 - 115
Beryllium	1000	1050		ug/L		105	85 - 115
Cadmium	1000	1030		ug/L		103	85 - 115
Cobalt	1000	1070		ug/L		107	85 - 115
Copper	1000	1020		ug/L		102	85 - 115
Iron	10000	10500		ug/L		105	85 - 115
Lead	1000	1060		ug/L		106	85 - 115
Nickel	1000	1060		ug/L		106	85 - 115
Antimony	500	515		ug/L		103	85 - 115
Selenium	1000	1020		ug/L		102	85 - 115
Silver	100	92.4		ug/L		92	85 - 115
Thallium	200	225		ug/L		112	85 - 115
Zinc	1000	1040		ug/L		104	85 - 115

Lab Sample ID: LCS 160-56281/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57423 — **Prep Batch: 56281**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	10100		ug/L		101	85 - 115
Chromium	1000	1040		ug/L		104	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 160-2710-1 MS — **Client Sample ID: 218/219-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57097 — **Prep Batch: 56281**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	480	J	10000	10700		ug/L		102	70 - 130
Beryllium	ND		10000	10600		ug/L		106	70 - 130
Cadmium	ND		10000	10300		ug/L		103	70 - 130
Cobalt	360	J	10000	10800		ug/L		105	70 - 130
Copper	ND		10000	10100		ug/L		101	70 - 130
Iron	1100000		100000	1240000	4	ug/L		136	70 - 130
Lead	440	J	10000	10700		ug/L		103	70 - 130
Nickel	ND		10000	10500		ug/L		105	70 - 130
Antimony	230	J	5000	5330		ug/L		102	70 - 130
Selenium	ND		10000	10300		ug/L		103	70 - 130
Silver	ND		1000	910		ug/L		91	70 - 130
Thallium	70	J	2000	2240		ug/L		109	70 - 130
Zinc	24000		10000	34900		ug/L		105	70 - 130

Lab Sample ID: 160-2710-1 MS — **Client Sample ID: 218/219-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57423 — **Prep Batch: 56281**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	16000		100000	132000		ug/L		116	70 - 130
Chromium	ND		10000	10800		ug/L		108	70 - 130

Lab Sample ID: 160-2710-1 MSD — **Client Sample ID: 218/219-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57097 — **Prep Batch: 56281**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	480	J	10000	11000		ug/L		105	70 - 130	3	20
Beryllium	ND		10000	10600		ug/L		106	70 - 130	1	20
Cadmium	ND		10000	10700		ug/L		107	70 - 130	3	20
Cobalt	360	J	10000	10900		ug/L		106	70 - 130	1	20
Copper	ND		10000	10400		ug/L		104	70 - 130	2	20
Iron	1100000		100000	1250000	4	ug/L		152	70 - 130	1	20
Lead	440	J	10000	11100		ug/L		107	70 - 130	4	20
Nickel	ND		10000	10900		ug/L		109	70 - 130	4	20
Antimony	230	J	5000	5440		ug/L		104	70 - 130	2	20
Selenium	ND		10000	10800		ug/L		108	70 - 130	4	20
Silver	ND		1000	920		ug/L		92	70 - 130	1	20
Thallium	70	J	2000	2230		ug/L		108	70 - 130	0	20
Zinc	24000		10000	36500		ug/L		121	70 - 130	4	20

Lab Sample ID: 160-2710-1 MSD — **Client Sample ID: 218/219-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57423 — **Prep Batch: 56281**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	16000		100000	132000		ug/L		116	70 - 130	0	20
Chromium	ND		10000	10700		ug/L		107	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 160-56207/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56516 — **Prep Batch: 56207**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	4.40	J	6.0	1.5	ug/L		06/17/13 07:34	06/18/13 21:42	1

Lab Sample ID: LCS 160-56207/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56516 — **Prep Batch: 56207**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	150	157		ug/L		105	85 - 115

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 480-124929/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124930 — **Prep Batch: 124929**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/20/13 02:00	06/20/13 02:19	1

Lab Sample ID: LCS 480-124929/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124930 — **Prep Batch: 124929**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	39.7		mg/L		99	78 - 114

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-124819/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124819

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/19/13 12:47	1

Lab Sample ID: LCS 480-124819/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124819

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.04		mg/L		104	90 - 110

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2710-1

Method: 410.4 - COD

Lab Sample ID: MB 480-124856/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124856

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			06/19/13 12:52	1

Lab Sample ID: LCS 480-124856/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124856

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	197		mg/L		99	90 - 110

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-124591/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124591

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			06/18/13 16:22	1

Lab Sample ID: LCS 480-124591/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124591

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	268	246		mg/L		92	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 160-56287/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56287

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	6.950		SU		99	99.0 - 101.0

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2710-1

GC/MS VOA

Analysis Batch: 56642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2710-1	218/219-MSD	Total/NA	Water	624	
LCS 160-56642/4	Lab Control Sample	Total/NA	Water	624	
LCSD 160-56642/5	Lab Control Sample Dup	Total/NA	Water	624	
MB 160-56642/2	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 56272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2710-1 - DL	218/219-MSD	Total/NA	Water	625	
160-2710-1	218/219-MSD	Total/NA	Water	625	
LCS 160-56272/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 160-56272/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 160-56272/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 56695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2710-1 - DL	218/219-MSD	Total/NA	Water	625	56272
160-2710-1	218/219-MSD	Total/NA	Water	625	56272
LCS 160-56272/2-A	Lab Control Sample	Total/NA	Water	625	56272
LCSD 160-56272/3-A	Lab Control Sample Dup	Total/NA	Water	625	56272
MB 160-56272/1-A	Method Blank	Total/NA	Water	625	56272

Metals

Prep Batch: 56207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2710-1	218/219-MSD	Total/NA	Water	245.1	
160-2710-1	218/219-MSD	Dissolved	Water	245.1	
LCS 160-56207/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 160-56207/1-A	Method Blank	Total/NA	Water	245.1	

Prep Batch: 56281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2710-1	218/219-MSD	Total/NA	Water	200.7/200.8	
160-2710-1	218/219-MSD	Dissolved	Water	200.7/200.8	
160-2710-1 MS	218/219-MSD	Total/NA	Water	200.7/200.8	
160-2710-1 MSD	218/219-MSD	Total/NA	Water	200.7/200.8	
LCS 160-56281/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
MB 160-56281/1-A	Method Blank	Total/NA	Water	200.7/200.8	

Analysis Batch: 56516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2710-1	218/219-MSD	Total/NA	Water	245.1	56207
160-2710-1	218/219-MSD	Dissolved	Water	245.1	56207
LCS 160-56207/2-A	Lab Control Sample	Total/NA	Water	245.1	56207
MB 160-56207/1-A	Method Blank	Total/NA	Water	245.1	56207

Metals (Continued)

Analysis Batch: 57097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2710-1	218/219-MSD	Total/NA	Water	200.7 Rev 4.4	56281
160-2710-1	218/219-MSD	Dissolved	Water	200.7 Rev 4.4	56281
160-2710-1 MS	218/219-MSD	Total/NA	Water	200.7 Rev 4.4	56281
160-2710-1 MSD	218/219-MSD	Total/NA	Water	200.7 Rev 4.4	56281
LCS 160-56281/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	56281
MB 160-56281/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	56281

Analysis Batch: 57423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2710-1	218/219-MSD	Total/NA	Water	200.7 Rev 4.4	56281
160-2710-1	218/219-MSD	Dissolved	Water	200.7 Rev 4.4	56281
160-2710-1 MS	218/219-MSD	Total/NA	Water	200.7 Rev 4.4	56281
160-2710-1 MSD	218/219-MSD	Total/NA	Water	200.7 Rev 4.4	56281
LCS 160-56281/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	56281
MB 160-56281/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	56281

General Chemistry

Analysis Batch: 56287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2710-1	218/219-MSD	Total/NA	Water	SM 4500 H+ B	
LCS 160-56287/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 124591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2710-1	218/219-MSD	Total/NA	Water	SM 2540D	
LCS 480-124591/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-124591/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 124819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2710-1	218/219-MSD	Total/NA	Water	350.1	
LCS 480-124819/4	Lab Control Sample	Total/NA	Water	350.1	
MB 480-124819/3	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 124856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2710-1	218/219-MSD	Total/NA	Water	410.4	
LCS 480-124856/4	Lab Control Sample	Total/NA	Water	410.4	
MB 480-124856/3	Method Blank	Total/NA	Water	410.4	

Prep Batch: 124929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2710-1	218/219-MSD	Total/NA	Water	1664A	
LCS 480-124929/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 480-124929/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 124930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2710-1	218/219-MSD	Total/NA	Water	1664A	124929

General Chemistry (Continued)

Analysis Batch: 124930 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-124929/2-A	Lab Control Sample	Total/NA	Water	1664A	124929
MB 480-124929/1-A	Method Blank	Total/NA	Water	1664A	124929

Surrogate Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2710-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(71-135)	(80-122)	(84-122)
160-2710-1	218/219-MSD	100	112	114
LCS 160-56642/4	Lab Control Sample	97	101	99
LCSD 160-56642/5	Lab Control Sample Dup	100	105	99
MB 160-56642/2	Method Blank	96	108	112

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(41-109)	(31-103)	(23-82)	(36-98)	(14-68)	(43-107)
160-2710-1 - DL	218/219-MSD	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
160-2710-1	218/219-MSD	0 X	0 X	0 X	0 X	0 X	0 X
LCS 160-56272/2-A	Lab Control Sample	76	62	31	59	21	65
LCSD 160-56272/3-A	Lab Control Sample Dup	79	62	31	59	22	68
MB 160-56272/1-A	Method Blank	55	45	27	47	17	55

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2710-2
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/26/2013 5:12:37 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

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www.testamericainc.com

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.

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Job ID: 160-2710-2

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2710-2

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The sample was received on 6/15/2013 9:58 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

BIOCHEMICAL OXYGEN DEMAND

Sample 218/219-MSD (160-2710-1) was analyzed for Biochemical oxygen demand in accordance with SM 5210B. The samples were analyzed on 06/15/2013.

Biochemical Oxygen Demand was detected in method blank SCB 160-57849/2 at a level that was above the method detection limit but below the reporting limit.

The method blank result associated with BOD batch 57849 was higher than the method-required limit of 0.20mg/L. The associated samples contained detects for this analyte at concentrations greater than 10X the value found in the method blank and the sample hold time is exceeded; therefore, re-analysis of the samples can not be performed.

Job ID: 160-2710-2 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Biochemical Oxygen Demand failed the recovery criteria low for LCS 160-57849/3.

The glucose-glutamic acid LCS/CCV standard in BOD Batch 57849 recovered outside the recovery limits specified in the method. Since the hold time for the sample has expired, the sample can not be re-analyzed.

No other difficulties were encountered during the BOD analysis.

All other quality control parameters were within the acceptance limits.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

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TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING/ED GALBRAITH	BILL ABERNATHY/FEI	6/14/13	197604
Address	Telephone Number (Area Code)/Fax Number: 314-502-1299	Lab Number	Page 1 of 1
City / State / Zip Code	Site Contact	Lab Contact	
Project Name and Location (State): BRIDGETON LF / MISSOURI	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		624 - VOCs	1664A - HEM FPH	5210B - BOD	625 - SVOCs	300.1 245.1 T	200.7 245.1 D	2540D - TSS	410.4 350.1	pH				Special Instructions/ Conditions of Receipt
218/219-MSD	6/15/13	0707		✓				5	1	1	4				3	1	1	1	1	1	1	1	1				

Analysis (Attach list if more space is needed)

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 Days

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	6/15/13	0958	1. Received By: [signature]	6/15/13	0958
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2710-2

Login Number: 2710

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	
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?	False	Not requested on COC.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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	See NCM
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	

Definitions/Glossary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2710-2

Qualifiers

General Chemistry

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
b	Result Detected in the Unseeded Control blank (USB).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
s	Seeded Control Blank (SCB) Recovery High

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2710-2

Method	Method Description	Protocol	Laboratory
SM 5210B	BOD, 5-Day	SM	TAL SL

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2710-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2710-1	218/219-MSD	Water	06/15/13 07:07	06/15/13 09:58

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2710-2

Client Sample ID: 218/219-MSD

Lab Sample ID: 160-2710-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	24000	J b * ^	60000	3000	mg/L	1		SM 5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2710-2

Client Sample ID: 218/219-MSD

Lab Sample ID: 160-2710-1

Date Collected: 06/15/13 07:07

Matrix: Water

Date Received: 06/15/13 09:58

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	24000	J b * ^	60000	3000	mg/L			06/15/13 12:11	1

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2710-2

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: SCB 160-57849/2 SCB — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57849

Analyte	SCB Result	SCB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	1.80	J s	2.0	0.10	mg/L			06/15/13 12:11	1

Lab Sample ID: USB 160-57849/1 USB — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57849

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	0.200	J	2.0	0.10	mg/L			06/15/13 12:11	1

Lab Sample ID: LCS 160-57849/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57849

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			199	156	^ *	mg/L		79	84.6 - 115.4		

Lab Sample ID: 160-2710-1 DU — **Client Sample ID: 218/219-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57849

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Biochemical Oxygen Demand	24000	J b * ^		24500	J * ^	mg/L				2	20

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2710-2

General Chemistry

Analysis Batch: 57849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2710-1	218/219-MSD	Total/NA	Water	SM 5210B	
160-2710-1 DU	218/219-MSD	Total/NA	Water	SM 5210B	
LCS 160-57849/3	Lab Control Sample	Total/NA	Water	SM 5210B	
SCB 160-57849/2 SCB	Method Blank	Total/NA	Water	SM 5210B	
USB 160-57849/1 USB	Method Blank	Total/NA	Water	SM 5210B	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2734-1
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/28/2013 12:19:44 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

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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.

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Job ID: 160-2734-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2734-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 6/17/2013 12:14 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples 223/224 - MSD (160-2734-1) and TRIP BLANK (160-2734-2) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA Method 624. The samples were analyzed on 06/18/2013.

Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 56643. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

The continuing calibration verification ZCCV8543 for 2- Chloroethylvinyl ether associated with batch 56643 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data has been reported.

Job ID: 160-2734-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 56643 recovered outside control limits for the following analyte: 2- Chloroethylvinyl ether. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

The sample was analyzed at a dilution based upon the sample's screened data. The reporting limit has been adjusted for the dilution. No lesser dilution was performed due to the sample's matrix (high concentrations of non-requested analytes). The calculation was done using an initial volume adjustment rather than a dilution factor.

No other difficulties were encountered during the VOCs analysis.

All other quality control parameters were within the acceptance limits.

Organic Prep
Emulsion was observed during extraction requiring vigorous stirring and/or centrifugation for the samples.

Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 57924. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 223/224 - MSD (160-2734-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA Method 625. The samples were prepared on 06/26/2013 and analyzed on 06/26/2013 and 06/27/2013.

Several analytes failed the surrogate recovery criteria low for 223/224 - MSD (160-2734-1). The samples show evidence of matrix interference; therefore, re-extraction and/or re-analysis was not performed.

The laboratory control sample (LCS) for batch 57510 recovered outside control limits. The associated samples were re-prepared and/or re-analyzed outside holding time. With a passing LCS/LCSD, the re-extract batch 58253 is set to be reported.

The continuing calibration verification (CCV) for Hexachlorocyclopentadiene associated with batch 58253 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The following samples were diluted to bring the concentration of target analytes within the calibration range: 223/224 - MSD (160-2734-1) [10X]. Elevated reporting limits (RLs) are provided. Due to the level of dilution, surrogates were diluted out. Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

No other difficulties were encountered during the SVOC analysis.

All other quality control parameters were within the acceptance limits.

ICP total and dissolved
Sample 223/224 - MSD (160-2734-1) was analyzed for ICP in accordance with EPA Method 200.7, Rev. 4.4. The samples were prepared on 06/19/2013 and analyzed on 06/20/2013 and 06/21/2013.

The following samples were diluted due to the nature of the sample matrix. The sample digestates were dark yellow in color: (160-2766-1 MS), (160-2766-1 MSD), (160-2766-1 SD), 232/233-MSD (160-2766-1) [5X]. Elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the ICP analysis.

All other quality control parameters were within the acceptance limits.

MERCURY total and dissolved
Sample 223/224 - MSD (160-2734-1) was analyzed for mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/19/2013.

Job ID: 160-2734-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Mercury was detected in method blank MB 160-56740/1-A at a level that was above the method detection limit but below the reporting limit.

Due to potential matrix interference, samples (160-2734-1 MS), (160-2734-1 MSD), 223/224 - MSD (160-2734-1) were prepped at a 30x dilution.

No other difficulties were encountered during the mercury analysis.

All other quality control parameters were within the acceptance limits.

Oil & Grease
Sample 223/224 - MSD (160-2734-1) was analyzed for HEM in accordance with EPA Method 1664A. The samples were prepared and analyzed on 06/20/2013.

No difficulties were encountered during the HEM analysis.

All quality control parameters were within the acceptance limits.

TOTAL SUSPENDED SOLIDS
Sample 223/224 - MSD (160-2734-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 06/18/2013.

Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: 223/224 - MSD (160-2734-1). The reporting limits (RLs) have been adjusted proportionately.

No difficulties were encountered during the TSS analysis.

All quality control parameters were within the acceptance limits.

AMMONIA
Sample 223/224 - MSD (160-2734-1) was analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/19/2013.

Sample 223/224 - MSD (160-2734-1)[1000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the ammonia analysis.

All quality control parameters were within the acceptance limits.

CHEMICAL OXYGEN DEMAND
Sample 223/224 - MSD (160-2734-1) was analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 06/19/2013.

Sample 223/224 - MSD (160-2734-1)[200X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the COD analysis.

All other quality control parameters were within the acceptance limits.

PH
Sample 223/224 - MSD (160-2734-1) was analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed on 06/17/2013.

For the analysis of the following samples in pH batch #56287, this analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples have been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 223/224 - MSD (160-2734-1)

Job ID: 160-2734-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

For the analysis of the following pH samples in batch 56287, pH indicator strips were used to prevent the samples' matrices from possibly damaging the pH probe. 223/224 - MSD (160-2734-1) The lot number for the pH indicator strips used for the 0-14 range was: HC270245

No difficulties were encountered during the pH analysis.

All quality control parameters were within the acceptance limits.

[redacted]

Chain of Custody Record

TAL-4124 (1007)

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY / FEI	6/16/13	197606
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 1
	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State)	Carrier/Waybill Number
BRIDGETON LF / MISSOURI	

Contract/Purchase Order/Quote No.

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): 624-VOCs	1664-HEM/TPH	8260B-BOD	625-SVOCs	200.7 245.1 T.	200.7 245.1 D.	2540D-TSS	410.4 350.1	7421				Special Instructions/ Conditions of Receipt
223/224-MSD	6/16/13	14:25		✓				5	1	1	4				3	1	1	1	1	1	1	1	1				
TRIP BLANK				✓							2				2												

Possible Hazard Identification

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

Sample Disposal

☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 DAYS

QC Requirements (Specify)

Relinquished By	Date	Time	Received By	Date	Time
1. [signature]	6/17/13	12:14	1. [signature]	6/17/13	1214
2.			2.		
3.			3.		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2734-1

Login Number: 2734

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
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	
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?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2734-1

Login Number: 2734
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/18/13 01:09 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	3.8 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2734-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SL
245.1	Mercury (CVAA)	EPA	TAL SL
1664A	HEM and SGT-HEM	1664A	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
410.4	COD	MCAWW	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL SL

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2734-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2734-1	223/224 - MSD	Water	06/16/13 14:25	06/17/13 12:14
160-2734-2	TRIP BLANK	Water	06/16/13 00:00	06/17/13 12:14

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2734-1

Client Sample ID: 223/224 - MSD — Lab Sample ID: 160-2734-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	46	J	50	6.0	ug/L	1		624	Total/NA
Phenol - DL	13000	H	890	180	ug/L	10		625	Total/NA
Naphthalene - RE	110	H	89	8.9	ug/L	1		625	Total/NA
Aluminum	16000		5000	2000	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	470		250	49	ug/L	5		200.7 Rev 4.4	Total/NA
Cobalt	140	J	1300	99	ug/L	5		200.7 Rev 4.4	Total/NA
Iron	1000000		2500	400	ug/L	5		200.7 Rev 4.4	Total/NA
Lead	280		250	32	ug/L	5		200.7 Rev 4.4	Total/NA
Antimony	120	J	250	99	ug/L	5		200.7 Rev 4.4	Total/NA
Thallium	40	J	500	22	ug/L	5		200.7 Rev 4.4	Total/NA
Zinc	24000		500	130	ug/L	5		200.7 Rev 4.4	Total/NA
Aluminum	5300		5000	2000	ug/L	5		200.7 Rev 4.4	Dissolved
Antimony	150	J	250	99	ug/L	5		200.7 Rev 4.4	Dissolved
Arsenic	420		250	49	ug/L	5		200.7 Rev 4.4	Dissolved
Chromium	100	J	250	79	ug/L	5		200.7 Rev 4.4	Dissolved
Cobalt	220	J	1300	99	ug/L	5		200.7 Rev 4.4	Dissolved
Iron	930000		2500	400	ug/L	5		200.7 Rev 4.4	Dissolved
Lead	200	J	250	32	ug/L	5		200.7 Rev 4.4	Dissolved
Thallium	55	J	500	22	ug/L	5		200.7 Rev 4.4	Dissolved
Zinc	25000		500	130	ug/L	5		200.7 Rev 4.4	Dissolved
Mercury	5.3	J B	6.0	1.5	ug/L	1		245.1	Total/NA
Oil & Grease	34		17	4.7	mg/L	1		1664A	Total/NA
Ammonia	790		20	9.0	mg/L	1000		350.1	Total/NA
Chemical Oxygen Demand	73000		2000	1000	mg/L	200		410.4	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
Total Suspended Solids	830		100	100	mg/L	1		SM 2540D	Total/NA
pH	6.00	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 160-2734-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2734-1

Client Sample ID: 223/224 - MSD

Lab Sample ID: 160-2734-1

Date Collected: 06/16/13 14:25

Matrix: Water

Date Received: 06/17/13 12:14

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.5	ug/L			06/18/13 10:39	1
1,1,2,2-Tetrachloroethane	ND		50	5.0	ug/L			06/18/13 10:39	1
1,1,2-Trichloroethane	ND		50	7.5	ug/L			06/18/13 10:39	1
1,1-Dichloroethane	ND		50	3.5	ug/L			06/18/13 10:39	1
1,1-Dichloroethene	ND		50	4.0	ug/L			06/18/13 10:39	1
1,2-Dichlorobenzene	ND		50	3.0	ug/L			06/18/13 10:39	1
1,2-Dichloroethane	ND		50	5.0	ug/L			06/18/13 10:39	1
1,2-Dichloropropane	ND		50	5.0	ug/L			06/18/13 10:39	1
1,3-Dichlorobenzene	ND		50	4.0	ug/L			06/18/13 10:39	1
1,4-Dichlorobenzene	**46**	**J**	50	6.0	ug/L			06/18/13 10:39	1
2-Chloroethyl vinyl ether	ND	*	100	8.5	ug/L			06/18/13 10:39	1
Benzene	ND		50	3.0	ug/L			06/18/13 10:39	1
Bromodichloromethane	ND		50	4.5	ug/L			06/18/13 10:39	1
Bromoform	ND		50	8.5	ug/L			06/18/13 10:39	1
Bromomethane	ND		100	6.5	ug/L			06/18/13 10:39	1
Carbon tetrachloride	ND		50	6.5	ug/L			06/18/13 10:39	1
Chlorobenzene	ND		50	7.5	ug/L			06/18/13 10:39	1
Chloroethane	ND		100	5.0	ug/L			06/18/13 10:39	1
Chloroform	ND		50	5.0	ug/L			06/18/13 10:39	1
Chloromethane	ND		100	4.0	ug/L			06/18/13 10:39	1
cis-1,2-Dichloroethene	ND		50	4.5	ug/L			06/18/13 10:39	1
cis-1,3-Dichloropropene	ND		50	3.5	ug/L			06/18/13 10:39	1
Dibromochloromethane	ND		50	6.5	ug/L			06/18/13 10:39	1
Ethylbenzene	ND		50	4.5	ug/L			06/18/13 10:39	1
Methylene Chloride	ND		50	5.5	ug/L			06/18/13 10:39	1
Tetrachloroethene	ND		50	9.0	ug/L			06/18/13 10:39	1
Toluene	ND		50	3.5	ug/L			06/18/13 10:39	1
trans-1,2-Dichloroethene	ND		50	4.0	ug/L			06/18/13 10:39	1
trans-1,3-Dichloropropene	ND		50	4.0	ug/L			06/18/13 10:39	1
Trichloroethene	ND		50	11	ug/L			06/18/13 10:39	1
Trichlorofluoromethane	ND		50	5.5	ug/L			06/18/13 10:39	1
Vinyl chloride	ND		100	4.0	ug/L			06/18/13 10:39	1
Xylenes, Total	ND		150	10	ug/L			06/18/13 10:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*71 - 135*		*06/18/13 10:39*	*1*
4-Bromofluorobenzene (Surr)	*106*		*80 - 122*		*06/18/13 10:39*	*1*
Toluene-d8 (Surr)	*107*		*84 - 122*		*06/18/13 10:39*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**13000**	**H**	890	180	ug/L		06/26/13 13:09	06/26/13 23:36	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*D X*	*41 - 109*	*06/26/13 13:09*	*06/26/13 23:36*	*10*
2-Fluorobiphenyl (Surr)	*0*	*D X*	*31 - 103*	*06/26/13 13:09*	*06/26/13 23:36*	*10*
2-Fluorophenol (Surr)	*0*	*D X*	*23 - 82*	*06/26/13 13:09*	*06/26/13 23:36*	*10*
Nitrobenzene-d5 (Surr)	*0*	*D X*	*36 - 98*	*06/26/13 13:09*	*06/26/13 23:36*	*10*
Phenol-d5 (Surr)	*0*	*D X*	*14 - 68*	*06/26/13 13:09*	*06/26/13 23:36*	*10*
Terphenyl-d14 (Surr)	*0*	*D X*	*43 - 107*	*06/26/13 13:09*	*06/26/13 23:36*	*10*

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2734-1

Client Sample ID: 223/224 - MSD

Lab Sample ID: 160-2734-1

Date Collected: 06/16/13 14:25

Matrix: Water

Date Received: 06/17/13 12:14

Method: 625 - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
bis (2-chloroisopropyl) ether	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
2,4,6-Trichlorophenol	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
2,4-Dichlorophenol	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
2,4-Dimethylphenol	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
2,4-Dinitrophenol	ND	H	440	18	ug/L		06/26/13 13:09	06/27/13 07:41	1
2,4-Dinitrotoluene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
2,6-Dinitrotoluene	ND	H	89	19	ug/L		06/26/13 13:09	06/27/13 07:41	1
2-Chloronaphthalene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
2-Chlorophenol	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
2-Nitrophenol	ND	H	89	13	ug/L		06/26/13 13:09	06/27/13 07:41	1
3,3'-Dichlorobenzidine	ND	H	440	11	ug/L		06/26/13 13:09	06/27/13 07:41	1
4,6-Dinitro-2-methylphenol	ND	H	440	11	ug/L		06/26/13 13:09	06/27/13 07:41	1
4-Bromophenyl phenyl ether	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
4-Chloro-3-methylphenol	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
4-Chlorophenyl phenyl ether	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
4-Nitrophenol	ND	H	440	18	ug/L		06/26/13 13:09	06/27/13 07:41	1
Acenaphthene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Acenaphthylene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Anthracene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Benzidine	ND	H	890	180	ug/L		06/26/13 13:09	06/27/13 07:41	1
Benzo[a]anthracene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Benzo[a]pyrene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Benzo[b]fluoranthene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Benzo[g,h,i]perylene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Benzo[k]fluoranthene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Bis(2-chloroethoxy)methane	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Bis(2-chloroethyl)ether	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Bis(2-ethylhexyl) phthalate	ND	H	89	17	ug/L		06/26/13 13:09	06/27/13 07:41	1
Butyl benzyl phthalate	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Chrysene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Dibenz(a,h)anthracene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Diethyl phthalate	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Dimethyl phthalate	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Di-n-butyl phthalate	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Di-n-octyl phthalate	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Fluoranthene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Fluorene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Hexachloro-1,3-butadiene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Hexachlorobenzene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Hexachlorocyclopentadiene	ND	H	440	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Hexachloroethane	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Indeno[1,2,3-cd]pyrene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Isophorone	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Naphthalene	**110**	**H**	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Nitrobenzene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
N-Nitrosodimethylamine	ND	H	89	18	ug/L		06/26/13 13:09	06/27/13 07:41	1
N-Nitrosodi-n-propylamine	ND	H	89	13	ug/L		06/26/13 13:09	06/27/13 07:41	1
N-Nitrosodiphenylamine	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1

Client Sample ID: 223/224 - MSD

Lab Sample ID: 160-2734-1

Date Collected: 06/16/13 14:25

Matrix: Water

Date Received: 06/17/13 12:14

Method: 625 - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND	H	440	11	ug/L		06/26/13 13:09	06/27/13 07:41	1
Phenanthrene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1
Pyrene	ND	H	89	8.9	ug/L		06/26/13 13:09	06/27/13 07:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*57*		*41 - 109*	*06/26/13 13:09*	*06/27/13 07:41*	*1*
2-Fluorobiphenyl (Surr)	*52*		*31 - 103*	*06/26/13 13:09*	*06/27/13 07:41*	*1*
2-Fluorophenol (Surr)	*0*	*X*	*23 - 82*	*06/26/13 13:09*	*06/27/13 07:41*	*1*
Nitrobenzene-d5 (Surr)	*0*	*X*	*36 - 98*	*06/26/13 13:09*	*06/27/13 07:41*	*1*
Phenol-d5 (Surr)	*0*	*X*	*14 - 68*	*06/26/13 13:09*	*06/27/13 07:41*	*1*
Terphenyl-d14 (Surr)	*23*	*X*	*43 - 107*	*06/26/13 13:09*	*06/27/13 07:41*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		250	150	ug/L		06/19/13 16:18	06/20/13 18:50	5
Aluminum	**16000**		5000	2000	ug/L		06/19/13 16:18	06/21/13 15:12	5
Arsenic	**470**		250	49	ug/L		06/19/13 16:18	06/20/13 18:50	5
Beryllium	ND		130	13	ug/L		06/19/13 16:18	06/20/13 18:50	5
Cadmium	ND		130	11	ug/L		06/19/13 16:18	06/20/13 18:50	5
Cobalt	**140**	**J**	1300	99	ug/L		06/19/13 16:18	06/20/13 18:50	5
Chromium	ND		250	79	ug/L		06/19/13 16:18	06/21/13 15:12	5
Copper	ND		630	110	ug/L		06/19/13 16:18	06/20/13 18:50	5
Iron	**1000000**		2500	400	ug/L		06/19/13 16:18	06/20/13 18:50	5
Nickel	ND		1000	330	ug/L		06/19/13 16:18	06/20/13 18:50	5
Lead	**280**		250	32	ug/L		06/19/13 16:18	06/20/13 18:50	5
Antimony	**120**	**J**	250	99	ug/L		06/19/13 16:18	06/20/13 18:50	5
Selenium	ND		380	67	ug/L		06/19/13 16:18	06/20/13 18:50	5
Thallium	**40**	**J**	500	22	ug/L		06/19/13 16:18	06/20/13 18:50	5
Zinc	**24000**		500	130	ug/L		06/19/13 16:18	06/20/13 18:50	5

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5300**		5000	2000	ug/L		06/19/13 16:18	06/21/13 15:23	5
Antimony	**150**	**J**	250	99	ug/L		06/19/13 16:18	06/20/13 19:09	5
Arsenic	**420**		250	49	ug/L		06/19/13 16:18	06/20/13 19:09	5
Beryllium	ND		130	13	ug/L		06/19/13 16:18	06/20/13 19:09	5
Cadmium	ND		130	11	ug/L		06/19/13 16:18	06/20/13 19:09	5
Chromium	**100**	**J**	250	79	ug/L		06/19/13 16:18	06/21/13 15:23	5
Cobalt	**220**	**J**	1300	99	ug/L		06/19/13 16:18	06/20/13 19:09	5
Copper	ND		630	110	ug/L		06/19/13 16:18	06/20/13 19:09	5
Iron	**930000**		2500	400	ug/L		06/19/13 16:18	06/20/13 19:09	5
Lead	**200**	**J**	250	32	ug/L		06/19/13 16:18	06/20/13 19:09	5
Nickel	ND		1000	330	ug/L		06/19/13 16:18	06/20/13 19:09	5
Selenium	ND		380	67	ug/L		06/19/13 16:18	06/20/13 19:09	5
Silver	ND		250	150	ug/L		06/19/13 16:18	06/20/13 19:09	5
Thallium	**55**	**J**	500	22	ug/L		06/19/13 16:18	06/20/13 19:09	5
Zinc	**25000**		500	130	ug/L		06/19/13 16:18	06/20/13 19:09	5

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2734-1

Client Sample ID: 223/224 - MSD

Lab Sample ID: 160-2734-1
Matrix: Water

Date Collected: 06/16/13 14:25
Date Received: 06/17/13 12:14

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	5.3	J B	6.0	1.5	ug/L		06/19/13 16:42	06/19/13 19:11	1

Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		6.0	1.5	ug/L		06/19/13 16:42	06/19/13 19:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	34		17	4.7	mg/L		06/20/13 02:00	06/20/13 02:19	1
Ammonia	790		20	9.0	mg/L			06/19/13 12:50	1000
Chemical Oxygen Demand	73000		2000	1000	mg/L			06/19/13 12:55	200

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	830		100	100	mg/L			06/18/13 16:25	1
pH	6.00	HF	0.100	0.100	SU			06/17/13 18:12	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2734-2
Matrix: Water

Date Collected: 06/16/13 00:00
Date Received: 06/17/13 12:14

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/18/13 10:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/18/13 10:15	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/18/13 10:15	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/18/13 10:15	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/18/13 10:15	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/18/13 10:15	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/18/13 10:15	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/18/13 10:15	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/18/13 10:15	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/18/13 10:15	1
2-Chloroethyl vinyl ether	ND	*	2.0	0.17	ug/L			06/18/13 10:15	1
Benzene	ND		1.0	0.060	ug/L			06/18/13 10:15	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/18/13 10:15	1
Bromoform	ND		1.0	0.17	ug/L			06/18/13 10:15	1
Bromomethane	ND		2.0	0.13	ug/L			06/18/13 10:15	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/18/13 10:15	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/18/13 10:15	1
Chloroethane	ND		2.0	0.10	ug/L			06/18/13 10:15	1
Chloroform	ND		1.0	0.10	ug/L			06/18/13 10:15	1
Chloromethane	ND		2.0	0.080	ug/L			06/18/13 10:15	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/18/13 10:15	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/18/13 10:15	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/18/13 10:15	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/18/13 10:15	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/18/13 10:15	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/18/13 10:15	1
Toluene	ND		1.0	0.070	ug/L			06/18/13 10:15	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/18/13 10:15	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/18/13 10:15	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2734-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2734-2

Date Collected: 06/16/13 00:00

Matrix: Water

Date Received: 06/17/13 12:14

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		1.0	0.21	ug/L			06/18/13 10:15	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/18/13 10:15	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/18/13 10:15	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/18/13 10:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*71 - 135*		*06/18/13 10:15*	*1*
4-Bromofluorobenzene (Surr)	*107*		*80 - 122*		*06/18/13 10:15*	*1*
Toluene-d8 (Surr)	*107*		*84 - 122*		*06/18/13 10:15*	*1*

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-56643/2
Matrix: Water
Analysis Batch: 56643

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/18/13 09:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/18/13 09:52	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/18/13 09:52	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/18/13 09:52	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/18/13 09:52	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/18/13 09:52	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/18/13 09:52	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/18/13 09:52	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/18/13 09:52	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/18/13 09:52	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/18/13 09:52	1
Benzene	ND		1.0	0.060	ug/L			06/18/13 09:52	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/18/13 09:52	1
Bromoform	ND		1.0	0.17	ug/L			06/18/13 09:52	1
Bromomethane	ND		2.0	0.13	ug/L			06/18/13 09:52	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/18/13 09:52	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/18/13 09:52	1
Chloroethane	ND		2.0	0.10	ug/L			06/18/13 09:52	1
Chloroform	ND		1.0	0.10	ug/L			06/18/13 09:52	1
Chloromethane	ND		2.0	0.080	ug/L			06/18/13 09:52	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/18/13 09:52	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/18/13 09:52	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/18/13 09:52	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/18/13 09:52	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/18/13 09:52	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/18/13 09:52	1
Toluene	ND		1.0	0.070	ug/L			06/18/13 09:52	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/18/13 09:52	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/18/13 09:52	1
Trichloroethene	ND		1.0	0.21	ug/L			06/18/13 09:52	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/18/13 09:52	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/18/13 09:52	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/18/13 09:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*71 - 135*		*06/18/13 09:52*	*1*
4-Bromofluorobenzene (Surr)	*108*		*80 - 122*		*06/18/13 09:52*	*1*
Toluene-d8 (Surr)	*105*		*84 - 122*		*06/18/13 09:52*	*1*

Lab Sample ID: LCS 160-56643/4
Matrix: Water
Analysis Batch: 56643

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	11.0		ug/L		110	82 - 127
1,1,2,2-Tetrachloroethane	10.0	10.5		ug/L		105	69 - 130
1,1,2-Trichloroethane	10.0	10.6		ug/L		106	78 - 122
1,1-Dichloroethane	10.0	10.3		ug/L		103	82 - 125

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-56643/4
Matrix: Water
Analysis Batch: 56643

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	10.0		ug/L		100	77 - 127
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	83 - 121
1,2-Dichloroethane	10.0	11.2		ug/L		112	78 - 127
1,2-Dichloropropane	10.0	9.95		ug/L		99	81 - 124
1,3-Dichlorobenzene	10.0	10.3		ug/L		103	85 - 121
1,4-Dichlorobenzene	10.0	10.2		ug/L		102	83 - 116
2-Chloroethyl vinyl ether	10.0	15.6	*	ug/L		156	34 - 140
Benzene	10.0	10.4		ug/L		104	84 - 124
Bromodichloromethane	10.0	10.7		ug/L		107	81 - 127
Bromoform	10.0	11.0		ug/L		110	78 - 138
Bromomethane	10.0	9.25		ug/L		92	48 - 162
Carbon tetrachloride	10.0	11.1		ug/L		111	79 - 132
Chlorobenzene	10.0	10.4		ug/L		104	85 - 118
Chloroethane	10.0	9.37		ug/L		94	71 - 132
Chloroform	10.0	10.8		ug/L		108	82 - 124
Chloromethane	10.0	9.83		ug/L		98	68 - 136
cis-1,2-Dichloroethene	10.0	10.2		ug/L		102	83 - 123
cis-1,3-Dichloropropene	10.0	11.6		ug/L		116	79 - 132
Dibromochloromethane	10.0	11.1		ug/L		111	81 - 129
Ethylbenzene	10.0	10.6		ug/L		106	85 - 125
Methylene Chloride	10.0	9.44		ug/L		94	70 - 127
Tetrachloroethene	10.0	10.6		ug/L		106	76 - 129
Toluene	10.0	10.5		ug/L		105	83 - 127
trans-1,2-Dichloroethene	10.0	9.66		ug/L		97	78 - 122
trans-1,3-Dichloropropene	10.0	11.0		ug/L		110	83 - 130
Trichloroethene	10.0	10.0		ug/L		100	81 - 123
Trichlorofluoromethane	10.0	11.4		ug/L		114	72 - 135
Vinyl chloride	10.0	10.3		ug/L		103	72 - 132
Xylenes, Total	30.0	33.3		ug/L		111	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*114*		*71 - 135*
4-Bromofluorobenzene (Surr)	*98*		*80 - 122*
Toluene-d8 (Surr)	*100*		*84 - 122*

Lab Sample ID: LCSD 160-56643/5
Matrix: Water
Analysis Batch: 56643

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	10.0	11.8		ug/L		118	82 - 127	7	20
1,1,2,2-Tetrachloroethane	10.0	10.1		ug/L		101	69 - 130	4	20
1,1,2-Trichloroethane	10.0	10.0		ug/L		100	78 - 122	6	20
1,1-Dichloroethane	10.0	10.5		ug/L		105	82 - 125	2	20
1,1-Dichloroethene	10.0	10.5		ug/L		105	77 - 127	5	20
1,2-Dichlorobenzene	10.0	10.4		ug/L		104	83 - 121	1	20
1,2-Dichloroethane	10.0	10.4		ug/L		104	78 - 127	8	20
1,2-Dichloropropane	10.0	10.4		ug/L		104	81 - 124	4	20

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-56643/5
Matrix: Water
Analysis Batch: 56643

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	10.0	10.8		ug/L		108	85 - 121	5	20
1,4-Dichlorobenzene	10.0	10.8		ug/L		108	83 - 116	5	20
2-Chloroethyl vinyl ether	10.0	15.6	*	ug/L		156	34 - 140	1	20
Benzene	10.0	10.6		ug/L		106	84 - 124	1	20
Bromodichloromethane	10.0	10.6		ug/L		106	81 - 127	1	20
Bromoform	10.0	10.7		ug/L		107	78 - 138	3	20
Bromomethane	10.0	9.43		ug/L		94	48 - 162	2	20
Carbon tetrachloride	10.0	11.8		ug/L		118	79 - 132	6	20
Chlorobenzene	10.0	10.3		ug/L		103	85 - 118	1	20
Chloroethane	10.0	8.96		ug/L		90	71 - 132	4	20
Chloroform	10.0	10.9		ug/L		109	82 - 124	1	20
Chloromethane	10.0	10.1		ug/L		101	68 - 136	2	20
cis-1,2-Dichloroethene	10.0	10.4		ug/L		104	83 - 123	1	20
cis-1,3-Dichloropropene	10.0	11.2		ug/L		112	79 - 132	4	20
Dibromochloromethane	10.0	10.4		ug/L		104	81 - 129	7	20
Ethylbenzene	10.0	10.8		ug/L		108	85 - 125	2	20
Methylene Chloride	10.0	9.08		ug/L		91	70 - 127	4	20
Tetrachloroethene	10.0	11.1		ug/L		111	76 - 129	4	20
Toluene	10.0	10.6		ug/L		106	83 - 127	1	20
trans-1,2-Dichloroethene	10.0	10.2		ug/L		102	78 - 122	5	20
trans-1,3-Dichloropropene	10.0	10.6		ug/L		106	83 - 130	4	20
Trichloroethene	10.0	10.2		ug/L		102	81 - 123	2	20
Trichlorofluoromethane	10.0	12.0		ug/L		120	72 - 135	6	20
Vinyl chloride	10.0	10.6		ug/L		106	72 - 132	3	20
Xylenes, Total	30.0	33.5		ug/L		112	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*71 - 135*
4-Bromofluorobenzene (Surr)	*105*		*80 - 122*
Toluene-d8 (Surr)	*103*		*84 - 122*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
bis (2-chloroisopropyl) ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4,6-Trichlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dichlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dimethylphenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dinitrophenol	ND		50	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dinitrotoluene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,6-Dinitrotoluene	ND		10	2.2	ug/L		06/26/13 13:09	06/26/13 17:50	1
2-Chloronaphthalene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2-Chlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		10	1.5	ug/L		06/26/13 13:09	06/26/13 17:50	1
3,3'-Dichlorobenzidine	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
4,6-Dinitro-2-methylphenol	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Bromophenyl phenyl ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Chlorophenyl phenyl ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Nitrophenol	ND		50	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Acenaphthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Acenaphthylene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzidine	ND		100	20	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[a]anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[a]pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[b]fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[g,h,i]perylene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[k]fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-chloroethoxy)methane	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-chloroethyl)ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-ethylhexyl) phthalate	ND		10	1.9	ug/L		06/26/13 13:09	06/26/13 17:50	1
Butyl benzyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Chrysene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Dibenz(a,h)anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Diethyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Dimethyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Di-n-butyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Di-n-octyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Fluorene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachloro-1,3-butadiene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachlorobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachlorocyclopentadiene	ND		50	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachloroethane	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Indeno[1,2,3-cd]pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Isophorone	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Naphthalene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Nitrobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodiphenylamine	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Pentachlorophenol	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
Phenanthrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Phenol	ND		10	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*76*		*41 - 109*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
2-Fluorobiphenyl (Surr)	*56*		*31 - 103*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
2-Fluorophenol (Surr)	*36*		*23 - 82*	*06/26/13 13:09*	*06/26/13 17:50*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	52		36 - 98	06/26/13 13:09	06/26/13 17:50	1
Phenol-d5 (Surr)	28		14 - 68	06/26/13 13:09	06/26/13 17:50	1
Terphenyl-d14 (Surr)	76		43 - 107	06/26/13 13:09	06/26/13 17:50	1

Lab Sample ID: LCS 160-57924/2-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	100	72.6		ug/L		72	44 - 84
bis (2-chloroisopropyl) ether	100	65.8		ug/L		66	42 - 102
2,4,6-Trichlorophenol	100	71.5		ug/L		71	54 - 105
2,4-Dichlorophenol	100	64.4		ug/L		64	46 - 103
2,4-Dimethylphenol	100	65.4		ug/L		65	40 - 105
2,4-Dinitrophenol	100	69.2		ug/L		69	42 - 146
2,4-Dinitrotoluene	100	79.0		ug/L		79	62 - 101
2,6-Dinitrotoluene	100	78.8		ug/L		79	62 - 103
2-Chloronaphthalene	100	75.5		ug/L		76	45 - 95
2-Chlorophenol	100	65.1		ug/L		65	56 - 93
2-Nitrophenol	101	71.7		ug/L		71	51 - 98
3,3'-Dichlorobenzidine	100	64.1		ug/L		64	26 - 77
4,6-Dinitro-2-methylphenol	100	82.6		ug/L		83	61 - 120
4-Bromophenyl phenyl ether	100	89.1		ug/L		89	54 - 111
4-Chloro-3-methylphenol	100	60.1		ug/L		60	45 - 106
4-Chlorophenyl phenyl ether	100	76.6		ug/L		77	53 - 100
4-Nitrophenol	100	34.8	J	ug/L		35	25 - 45
Acenaphthene	100	75.7		ug/L		76	51 - 89
Acenaphthylene	100	76.1		ug/L		76	46 - 98
Anthracene	100	83.5		ug/L		84	54 - 111
Benzo[a]anthracene	100	88.7		ug/L		89	68 - 108
Benzo[a]pyrene	100	83.5		ug/L		84	55 - 108
Benzo[b]fluoranthene	100	82.4		ug/L		82	57 - 114
Benzo[g,h,i]perylene	100	86.8		ug/L		87	58 - 120
Benzo[k]fluoranthene	100	89.3		ug/L		89	59 - 112
Bis(2-chloroethoxy)methane	100	67.0		ug/L		67	53 - 99
Bis(2-chloroethyl)ether	100	65.8		ug/L		66	50 - 97
Bis(2-ethylhexyl) phthalate	100	84.1		ug/L		84	54 - 116
Butyl benzyl phthalate	100	82.8		ug/L		83	52 - 126
Chrysene	100	77.5		ug/L		77	58 - 112
Dibenz(a,h)anthracene	100	87.9		ug/L		88	56 - 122
Diethyl phthalate	100	75.3		ug/L		75	60 - 101
Dimethyl phthalate	100	74.8		ug/L		75	57 - 101
Di-n-butyl phthalate	100	84.4		ug/L		84	57 - 108
Di-n-octyl phthalate	100	76.6		ug/L		77	57 - 118
Fluoranthene	100	81.8		ug/L		82	55 - 114
Fluorene	100	73.8		ug/L		74	59 - 96
Hexachloro-1,3-butadiene	100	77.5		ug/L		77	36 - 84
Hexachlorobenzene	100	90.1		ug/L		90	56 - 110

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-57924/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58253 — **Prep Batch: 57924**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	100	86.3		ug/L		86	16 - 86
Hexachloroethane	100	74.3		ug/L		74	40 - 77
Indeno[1,2,3-cd]pyrene	100	84.3		ug/L		84	55 - 124
Isophorone	100	64.8		ug/L		65	50 - 107
Naphthalene	100	69.0		ug/L		69	42 - 82
Nitrobenzene	100	69.1		ug/L		69	48 - 96
N-Nitrosodi-n-propylamine	101	77.0		ug/L		77	57 - 113
Pentachlorophenol	100	76.8		ug/L		77	56 - 126
Phenanthrene	100	80.9		ug/L		81	54 - 110
Phenol	100	33.0		ug/L		33	27 - 43
Pyrene	100	85.1		ug/L		85	53 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*89*		*41 - 109*
2-Fluorobiphenyl (Surr)	*76*		*31 - 103*
2-Fluorophenol (Surr)	*51*		*23 - 82*
Nitrobenzene-d5 (Surr)	*74*		*36 - 98*
Phenol-d5 (Surr)	*34*		*14 - 68*
Terphenyl-d14 (Surr)	*84*		*43 - 107*

Lab Sample ID: LCSD 160-57924/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58253 — **Prep Batch: 57924**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	100	72.0		ug/L		72	44 - 84	1	20
bis (2-chloroisopropyl) ether	100	69.4		ug/L		69	42 - 102	5	20
2,4,6-Trichlorophenol	100	70.8		ug/L		71	54 - 105	1	20
2,4-Dichlorophenol	100	64.3		ug/L		64	46 - 103	0	20
2,4-Dimethylphenol	100	65.0		ug/L		65	40 - 105	1	20
2,4-Dinitrophenol	100	68.9		ug/L		69	42 - 146	0	20
2,4-Dinitrotoluene	100	76.2		ug/L		76	62 - 101	4	20
2,6-Dinitrotoluene	100	78.8		ug/L		79	62 - 103	0	20
2-Chloronaphthalene	100	76.9		ug/L		77	45 - 95	2	20
2-Chlorophenol	100	65.0		ug/L		65	56 - 93	0	20
2-Nitrophenol	101	71.8		ug/L		71	51 - 98	0	20
3,3'-Dichlorobenzidine	100	63.5		ug/L		63	26 - 77	1	20
4,6-Dinitro-2-methylphenol	100	82.0		ug/L		82	61 - 120	1	20
4-Bromophenyl phenyl ether	100	86.2		ug/L		86	54 - 111	3	20
4-Chloro-3-methylphenol	100	60.6		ug/L		60	45 - 106	1	20
4-Chlorophenyl phenyl ether	100	73.3		ug/L		73	53 - 100	4	20
4-Nitrophenol	100	36.8	J	ug/L		37	25 - 45	5	20
Acenaphthene	100	73.8		ug/L		74	51 - 89	3	20
Acenaphthylene	100	75.6		ug/L		76	46 - 98	1	20
Anthracene	100	80.3		ug/L		80	54 - 111	4	20
Benzo[a]anthracene	100	86.5		ug/L		86	68 - 108	2	20
Benzo[a]pyrene	100	80.5		ug/L		80	55 - 108	4	20
Benzo[b]fluoranthene	100	78.6		ug/L		79	57 - 114	5	20

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-57924/3-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[g,h,i]perylene	100	83.6		ug/L		84	58 - 120	4	20
Benzo[k]fluoranthene	100	87.0		ug/L		87	59 - 112	3	20
Bis(2-chloroethoxy)methane	100	67.8		ug/L		68	53 - 99	1	20
Bis(2-chloroethyl)ether	100	67.7		ug/L		68	50 - 97	3	20
Bis(2-ethylhexyl) phthalate	100	83.5		ug/L		84	54 - 116	1	20
Butyl benzyl phthalate	100	83.4		ug/L		83	52 - 126	1	20
Chrysene	100	75.9		ug/L		76	58 - 112	2	20
Dibenz(a,h)anthracene	100	84.2		ug/L		84	56 - 122	4	20
Diethyl phthalate	100	73.2		ug/L		73	60 - 101	3	20
Dimethyl phthalate	100	73.5		ug/L		73	57 - 101	2	20
Di-n-butyl phthalate	100	82.6		ug/L		83	57 - 108	2	20
Di-n-octyl phthalate	100	76.4		ug/L		76	57 - 118	0	20
Fluoranthene	100	78.5		ug/L		79	55 - 114	4	20
Fluorene	100	70.7		ug/L		71	59 - 96	4	20
Hexachloro-1,3-butadiene	100	74.8		ug/L		75	36 - 84	4	20
Hexachlorobenzene	100	84.5		ug/L		85	56 - 110	6	20
Hexachlorocyclopentadiene	100	80.3		ug/L		80	16 - 86	7	20
Hexachloroethane	100	75.9		ug/L		76	40 - 77	2	20
Indeno[1,2,3-cd]pyrene	100	82.9		ug/L		83	55 - 124	2	20
Isophorone	100	67.2		ug/L		67	50 - 107	4	20
Naphthalene	100	68.8		ug/L		69	42 - 82	0	20
Nitrobenzene	100	71.0		ug/L		71	48 - 96	3	20
N-Nitrosodi-n-propylamine	101	79.5		ug/L		79	57 - 113	3	20
Pentachlorophenol	100	75.9		ug/L		76	56 - 126	1	20
Phenanthrene	100	79.2		ug/L		79	54 - 110	2	20
Phenol	100	34.9		ug/L		35	27 - 43	5	20
Pyrene	100	83.8		ug/L		84	53 - 117	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*82*		*41 - 109*
2-Fluorobiphenyl (Surr)	*77*		*31 - 103*
2-Fluorophenol (Surr)	*52*		*23 - 82*
Nitrobenzene-d5 (Surr)	*76*		*36 - 98*
Phenol-d5 (Surr)	*36*		*14 - 68*
Terphenyl-d14 (Surr)	*82*		*43 - 107*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 160-56734/1-A
Matrix: Water
Analysis Batch: 57097

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56734

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10	2.0	ug/L		06/19/13 16:18	06/20/13 18:24	1
Beryllium	ND		5.0	0.50	ug/L		06/19/13 16:18	06/20/13 18:24	1
Cadmium	ND		5.0	0.45	ug/L		06/19/13 16:18	06/20/13 18:24	1
Cobalt	ND		50	4.0	ug/L		06/19/13 16:18	06/20/13 18:24	1
Copper	ND		25	4.6	ug/L		06/19/13 16:18	06/20/13 18:24	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 160-56734/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57097 — **Prep Batch: 56734**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		100	16	ug/L		06/19/13 16:18	06/20/13 18:24	1
Lead	ND		10	1.3	ug/L		06/19/13 16:18	06/20/13 18:24	1
Nickel	ND		40	13	ug/L		06/19/13 16:18	06/20/13 18:24	1
Antimony	ND		10	4.0	ug/L		06/19/13 16:18	06/20/13 18:24	1
Selenium	ND		15	2.7	ug/L		06/19/13 16:18	06/20/13 18:24	1
Silver	ND		10	6.0	ug/L		06/19/13 16:18	06/20/13 18:24	1
Thallium	ND		20	0.88	ug/L		06/19/13 16:18	06/20/13 18:24	1
Zinc	ND		20	5.2	ug/L		06/19/13 16:18	06/20/13 18:24	1

Lab Sample ID: MB 160-56734/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57423 — **Prep Batch: 56734**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		06/19/13 16:18	06/21/13 14:38	1
Chromium	ND		10	3.1	ug/L		06/19/13 16:18	06/21/13 14:38	1

Lab Sample ID: LCS 160-56734/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57097 — **Prep Batch: 56734**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1000	966		ug/L		97	85 - 115
Beryllium	1000	1000		ug/L		100	85 - 115
Cadmium	1000	993		ug/L		99	85 - 115
Cobalt	1000	1030		ug/L		103	85 - 115
Copper	1000	988		ug/L		99	85 - 115
Iron	10000	10000		ug/L		100	85 - 115
Lead	1000	1020		ug/L		102	85 - 115
Nickel	1000	1020		ug/L		102	85 - 115
Antimony	500	495		ug/L		99	85 - 115
Selenium	1000	981		ug/L		98	85 - 115
Silver	100	89.0		ug/L		89	85 - 115
Thallium	200	215		ug/L		108	85 - 115
Zinc	1000	1000		ug/L		100	85 - 115

Lab Sample ID: LCS 160-56734/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57423 — **Prep Batch: 56734**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9520		ug/L		95	85 - 115
Chromium	1000	985		ug/L		99	85 - 115

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2734-1

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 160-56740/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56747 — **Prep Batch: 56740**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0573	J	0.20	0.050	ug/L		06/19/13 16:42	06/19/13 19:07	1

Lab Sample ID: LCS 160-56740/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56747 — **Prep Batch: 56740**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.32		ug/L		106	85 - 115

Lab Sample ID: 160-2734-1 MS — **Client Sample ID: 223/224 - MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56747 — **Prep Batch: 56740**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.3	J B	150	161		ug/L		104	70 - 130

Lab Sample ID: 160-2734-1 MSD — **Client Sample ID: 223/224 - MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56747 — **Prep Batch: 56740**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	5.3	J B	150	157		ug/L		101	70 - 130	3	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 480-124929/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124930 — **Prep Batch: 124929**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/20/13 02:00	06/20/13 02:19	1

Lab Sample ID: LCS 480-124929/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124930 — **Prep Batch: 124929**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	39.7		mg/L		99	78 - 114

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-124819/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124819

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/19/13 12:47	1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 480-124819/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124819

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.04		mg/L		104	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 480-124856/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124856

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			06/19/13 12:52	1

Lab Sample ID: LCS 480-124856/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124856

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	197		mg/L		99	90 - 110

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-124591/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124591

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			06/18/13 16:22	1

Lab Sample ID: LCS 480-124591/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124591

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	268	246		mg/L		92	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 160-56287/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56287

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	6.950		SU		99	99.0 - 101.0

Method: SM 4500 H+ B - pH (Continued)

Lab Sample ID: 160-2734-1 DU
Matrix: Water
Analysis Batch: 56287

Client Sample ID: 223/224 - MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	6.00	HF		6.000		SU				0	5

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2734-1

GC/MS VOA

Analysis Batch: 56643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2734-1	223/224 - MSD	Total/NA	Water	624	
160-2734-2	TRIP BLANK	Total/NA	Water	624	
LCS 160-56643/4	Lab Control Sample	Total/NA	Water	624	
LCSD 160-56643/5	Lab Control Sample Dup	Total/NA	Water	624	
MB 160-56643/2	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 57924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2734-1 - DL	223/224 - MSD	Total/NA	Water	625	
160-2734-1 - RE	223/224 - MSD	Total/NA	Water	625	
LCS 160-57924/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 160-57924/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 160-57924/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 58253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2734-1 - DL	223/224 - MSD	Total/NA	Water	625	57924
160-2734-1 - RE	223/224 - MSD	Total/NA	Water	625	57924
LCS 160-57924/2-A	Lab Control Sample	Total/NA	Water	625	57924
LCSD 160-57924/3-A	Lab Control Sample Dup	Total/NA	Water	625	57924
MB 160-57924/1-A	Method Blank	Total/NA	Water	625	57924

Metals

Prep Batch: 56734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2734-1	223/224 - MSD	Total/NA	Water	200.7/200.8	
160-2734-1	223/224 - MSD	Dissolved	Water	200.7/200.8	
LCS 160-56734/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
MB 160-56734/1-A	Method Blank	Total/NA	Water	200.7/200.8	

Prep Batch: 56740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2734-1	223/224 - MSD	Total/NA	Water	245.1	
160-2734-1	223/224 - MSD	Dissolved	Water	245.1	
160-2734-1 MS	223/224 - MSD	Total/NA	Water	245.1	
160-2734-1 MSD	223/224 - MSD	Total/NA	Water	245.1	
LCS 160-56740/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 160-56740/1-A	Method Blank	Total/NA	Water	245.1	

Analysis Batch: 56747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2734-1	223/224 - MSD	Total/NA	Water	245.1	56740
160-2734-1	223/224 - MSD	Dissolved	Water	245.1	56740
160-2734-1 MS	223/224 - MSD	Total/NA	Water	245.1	56740
160-2734-1 MSD	223/224 - MSD	Total/NA	Water	245.1	56740
LCS 160-56740/2-A	Lab Control Sample	Total/NA	Water	245.1	56740
MB 160-56740/1-A	Method Blank	Total/NA	Water	245.1	56740

Metals (Continued)

Analysis Batch: 57097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2734-1	223/224 - MSD	Total/NA	Water	200.7 Rev 4.4	56734
160-2734-1	223/224 - MSD	Dissolved	Water	200.7 Rev 4.4	56734
LCS 160-56734/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	56734
MB 160-56734/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	56734

Analysis Batch: 57423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2734-1	223/224 - MSD	Total/NA	Water	200.7 Rev 4.4	56734
160-2734-1	223/224 - MSD	Dissolved	Water	200.7 Rev 4.4	56734
LCS 160-56734/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	56734
MB 160-56734/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	56734

General Chemistry

Analysis Batch: 56287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2734-1	223/224 - MSD	Total/NA	Water	SM 4500 H+ B	
160-2734-1 DU	223/224 - MSD	Total/NA	Water	SM 4500 H+ B	
LCS 160-56287/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 124591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2734-1	223/224 - MSD	Total/NA	Water	SM 2540D	
LCS 480-124591/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-124591/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 124819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2734-1	223/224 - MSD	Total/NA	Water	350.1	
LCS 480-124819/4	Lab Control Sample	Total/NA	Water	350.1	
MB 480-124819/3	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 124856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2734-1	223/224 - MSD	Total/NA	Water	410.4	
LCS 480-124856/4	Lab Control Sample	Total/NA	Water	410.4	
MB 480-124856/3	Method Blank	Total/NA	Water	410.4	

Prep Batch: 124929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2734-1	223/224 - MSD	Total/NA	Water	1664A	
LCS 480-124929/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 480-124929/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 124930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2734-1	223/224 - MSD	Total/NA	Water	1664A	124929
LCS 480-124929/2-A	Lab Control Sample	Total/NA	Water	1664A	124929
MB 480-124929/1-A	Method Blank	Total/NA	Water	1664A	124929

Surrogate Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2734-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(71-135)	(80-122)	(84-122)
160-2734-1	223/224 - MSD	105	106	107
160-2734-2	TRIP BLANK	105	107	107
LCS 160-56643/4	Lab Control Sample	114	98	100
LCSD 160-56643/5	Lab Control Sample Dup	110	105	103
MB 160-56643/2	Method Blank	114	108	105

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(41-109)	(31-103)	(23-82)	(36-98)	(14-68)	(43-107)
160-2734-1 - DL	223/224 - MSD	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
160-2734-1 - RE	223/224 - MSD	57	52	0 X	0 X	0 X	23 X
LCS 160-57924/2-A	Lab Control Sample	89	76	51	74	34	84
LCSD 160-57924/3-A	Lab Control Sample Dup	82	77	52	76	36	82
MB 160-57924/1-A	Method Blank	76	56	36	52	28	76

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2734-2
Client Project/Site: Bridgeton Landfill
Revision: 1

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
7/3/2013 10:40:51 AM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

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Visit us at:
www.testamericainc.com

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.

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Job ID: 160-2734-2

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2734-2

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

Revision 1 - The COC was added to the report.

RECEIPT

The samples were received on 6/17/2013 12:14 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0º C.

BIOCHEMICAL OXYGEN DEMAND

Sample 223/224 - MSD (160-2734-1) was analyzed for Biochemical oxygen demand in accordance with SM 5210B. The samples were analyzed on 06/18/2013.

For batch # 124633, the USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results are reported. (USB 480-124633/1)

No difficulties were encountered during the BOD analysis.

Job ID: 160-2734-2 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

All quality control parameters were within the acceptance limits.

[redacted]

Chain of Custody Record

TAL-4124 (1007)

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

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ar 341

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY / FEI	6/16/13	197606
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 1
	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State)	Carrier/Waybill Number
BRIDGETON LF / MISSOURI	

Contract/Purchase Order/Quote No.

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): 624-VOCs	1664-HEM/TPH	8260B-BOD	625-SVOCs	200.7 245.1 T.	200.7 245.1 D.	2540D-TSS	410.4 350.1	7421				Special Instructions/ Conditions of Receipt
223/224-MSD	6/16/13	14:25		✓				5	1	1	4				3	1	1	1	1	1	1	1	1				
TRIP BLANK				✓							2				2												

Possible Hazard Identification

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

Sample Disposal

☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 DAYS

QC Requirements (Specify)

Relinquished By	Date	Time	Received By	Date	Time
1. [signature]	6/17/13	12:14	1. [signature]	6/17/13	1214
2.			2.		
3.			3.		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2734-2

Login Number: 2734

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
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	
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?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2734-2

Login Number: 2734
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/18/13 01:09 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	3.8 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Definitions/Glossary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2734-2

Qualifiers

General Chemistry

Qualifier	Qualifier Description
b	Result Detected in the Unseeded Control blank (USB).

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2734-2

Method	Method Description	Protocol	Laboratory
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2734-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2734-1	223/224 - MSD	Water	06/16/13 14:25	06/17/13 12:14

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2734-2

Client Sample ID: 223/224 - MSD

Lab Sample ID: 160-2734-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	34000	b	40	40	mg/L	20		SM 5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2734-2

Client Sample ID: 223/224 - MSD

Lab Sample ID: 160-2734-1

Date Collected: 06/16/13 14:25

Matrix: Water

Date Received: 06/17/13 12:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	34000	b	40	40	mg/L			06/18/13 14:22	20

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2734-2

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-124633/1 USB
Matrix: Water
Analysis Batch: 124633

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			06/18/13 14:22	1

Lab Sample ID: LCS 480-124633/2
Matrix: Water
Analysis Batch: 124633

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	205		mg/L		103	85 - 115		

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2734-2

General Chemistry

Analysis Batch: 124633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2734-1	223/224 - MSD	Total/NA	Water	SM 5210B	
LCS 480-124633/2	Lab Control Sample	Total/NA	Water	SM 5210B	
USB 480-124633/1 USB	Method Blank	Total/NA	Water	SM 5210B	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2748-1
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Rhonda Ridenhower

Authorized for release by:
6/28/2013 11:27:10 AM
Rhonda Ridenhower, Customer Service Manager
rhonda.ridenhower@testamericainc.com

Designee for

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

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Have a Question? Ask The Expert

Visit us at:
www.testamericainc.com

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.

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Job ID: 160-2748-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2748-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 06/18/2013; the samples arrived in good condition, properly preserved. The temperature of the coolers at receipt was 17.0 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples 228/229 MSD (160-2748-1) and TRIP BLANK (160-2748-2) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA Method 624. The samples were analyzed on 06/21/2013.

Analytical batch 57437

The laboratory control sample (LCS) for batch 57437 recovered outside control limits for the following analyte: Hexachlorobutadiene. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 57437 recovered outside control limits for the following analyte: 2- Chloroethylvinyl eether. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

Job ID: 160-2748-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 57437 recovered outside control limits for the following analytes: Methyl acetate.

Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 57437. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

The associated sample, 228/229 MSD (160-2748-1), was analyzed at a dilution based upon the samples' screened data. The reporting limit has been adjusted for the dilutions. No lesser dilutions were analyzed due to the high concentrations on non-requested analytes in the samples.

No other difficulties were encountered during the VOCs analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample 228/229 MSD (160-2748-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA Method 625. The samples were prepared on 06/26/2013 and analyzed on 06/26/2013 and 06/27/2013.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Analytical batch 58253

The following samples were diluted to bring the concentration of target analytes within the calibration range: 228/229 MSD (160-2748-1). Elevated reporting limits (RLs) are provided. Due to the level of dilution, surrogates were diluted out.

The continuing calibration verification (CCV) for Hexachlorocyclopentadiene associated with batch 58253 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Surrogate recoveries for the following samples were outside control limits: 228/229 MSD (160-2748-1). The samples show evidence of matrix interference; therefore, re-extraction and/or re-analysis was not performed. Chromatograms have been provided as supporting documentation

No other difficulties were encountered during the SVOC analysis.

All other quality control parameters were within the acceptance limits.

ICP-Total and Dissolved

Sample 228/229 MSD (160-2748-1) was analyzed for ICP in accordance with EPA SW-846 Method 6010C. The samples were prepared on 06/19/2013 and analyzed on 06/20/2013 and 06/21/2013.

Analytical batch 57097

Due to the high concentration of iron, the matrix spike / matrix spike duplicate (MS/MSD) for prep batch 56734 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

The following samples were diluted due to the nature of the sample matrix. The sample digestates were dark yellow in color: (160-2766-1 MS), (160-2766-1 MSD), (160-2766-1 SD), 228/229 MSD (160-2748-1), 232/233-MSD (160-2766-1). Elevated reporting limits (RLs) are provided.

Due to potential matrix interference, samples 228/229 MSD (160-2748-1) were prepped at a 30x dilution.

Analytical batch 57423

The following samples were diluted due to the nature of the sample matrix the sample digestates were dark yellow in color: (160-2766-1 MS), (160-2766-1 MSD), (160-2766-1 SD), 228/229 MSD (160-2748-1), 232/233-MSD (160-2766-1). Elevated reporting limits (RLs) are provided.

Job ID: 160-2748-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

No other difficulties were encountered during the ICP analysis.

All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)
Sample 228/229 MSD (160-2748-1) was analyzed for dissolved mercury (CVAA) in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/19/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

MERCURY
Sample 228/229 MSD (160-2748-1) was analyzed for mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/19/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

SGT-HEM
Sample 228/229 MSD (160-2748-1) was analyzed for SGT-HEM in accordance with EPA Method 1664A. The samples were prepared and analyzed on 06/20/2013.

No difficulties were encountered during the SGT-HEM analysis.

All quality control parameters were within the acceptance limits.

TOTAL SUSPENDED SOLIDS
Sample 228/229 MSD (160-2748-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 06/20/2013.

Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: 228/229 MSD (160-2748-1). The reporting limits (RLs) have been adjusted proportionately.

No other difficulties were encountered during the TSS analysis.

All quality control parameters were within the acceptance limits.

AMMONIA
Sample 228/229 MSD (160-2748-1) was analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/20/2013.

Sample 228/229 MSD (160-2748-1)[500X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the ammonia analysis.

All quality control parameters were within the acceptance limits.

CHEMICAL OXYGEN DEMAND
Sample 228/229 MSD (160-2748-1) was analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 06/21/2013.

Sample 228/229 MSD (160-2748-1)[40X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Job ID: 160-2748-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

No difficulties were encountered during the COD analysis.

All quality control parameters were within the acceptance limits.

PH

Sample 228/229 MSD (160-2748-1) was analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed on 06/18/2013.

For the analysis of the associated samples in pH batch 56495, this analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 228/229 MSD (160-2748-1)

For the analysis of the associated sample in pH batch #56495, the sample was analyzed using pH indicator strips due to the sample's matrix possibly damaging the pH probe. Indicator strips used were range 0-14 (Lot HC270245).228/229 MSD (160-2748-1)

No other difficulties were encountered during the pH analysis.

All other quality control parameters were within the acceptance limits

Chain of Custody Record

TAL-4124 (1007)

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

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CR 465

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY / FEI	6/16/13	197605
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State)	Carrier/Waybill Number
BRIDGETON LANDFILL / MISSOURI	

Contract/Purchase Order/Quote No.

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date DRF	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): 624-VOC's	1664-HEM/TPH	5210B-BOD	625-SVOC	200.7/245.1 T	200.7/245.1 D	2540D-TSS	410.4 350.1	pH				Special Instructions/ Conditions of Receipt
228/229 MSD	6/13/13	0641		✓			5	1	1	4			3	1	1	1	1	1	1	1	1				
TRIP BLANK	—	—		✓						2			2												

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 DAYS

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	6/18/13	1021	1. Received By	6/18/13	1021
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2748-1

Login Number: 2748

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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.	False	Received same day of collection; chilling process has begun.
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?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2748-1

Login Number: 2748
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/19/13 01:59 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	1.7 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2748-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SL
245.1	Mercury (CVAA)	EPA	TAL SL
1664A	HEM and SGT-HEM	1664A	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
410.4	COD	MCAWW	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL SL

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2748-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2748-1	228/229 MSD	Water	06/18/13 06:41	06/18/13 10:21
160-2748-2	TRIP BLANK	Water	06/18/13 00:00	06/18/13 10:21

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2748-1

Client Sample ID: 228/229 MSD — Lab Sample ID: 160-2748-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenol - DL	3100	H	990	200	ug/L	10		625	Total/NA
Naphthalene - RE	38	J H	99	9.9	ug/L	1		625	Total/NA
Phenanthrene - RE	24	J H	99	9.9	ug/L	1		625	Total/NA
Aluminum	7300		5000	2000	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	220	J	250	49	ug/L	5		200.7 Rev 4.4	Total/NA
Cobalt	240	J	1300	99	ug/L	5		200.7 Rev 4.4	Total/NA
Iron	500000		2500	400	ug/L	5		200.7 Rev 4.4	Total/NA
Lead	130	J	250	32	ug/L	5		200.7 Rev 4.4	Total/NA
Antimony	110	J	250	99	ug/L	5		200.7 Rev 4.4	Total/NA
Zinc	9400		500	130	ug/L	5		200.7 Rev 4.4	Total/NA
Aluminum	2300	J	5000	2000	ug/L	5		200.7 Rev 4.4	Dissolved
Arsenic	200	J	250	49	ug/L	5		200.7 Rev 4.4	Dissolved
Cobalt	150	J	1300	99	ug/L	5		200.7 Rev 4.4	Dissolved
Iron	390000		2500	400	ug/L	5		200.7 Rev 4.4	Dissolved
Lead	73	J	250	32	ug/L	5		200.7 Rev 4.4	Dissolved
Zinc	9200		500	130	ug/L	5		200.7 Rev 4.4	Dissolved
Mercury	4.8	J B	6.0	1.5	ug/L	1		245.1	Total/NA
Mercury	2.2	J B	6.0	1.5	ug/L	1		245.1	Dissolved
Ammonia	480		10	4.5	mg/L	500		350.1	Total/NA
Chemical Oxygen Demand	29000		400	200	mg/L	40		410.4	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	1200		110	110	mg/L	1		SM 2540D	Total/NA
pH	6.00	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 160-2748-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2748-1

Client Sample ID: 228/229 MSD

Lab Sample ID: 160-2748-1

Date Collected: 06/18/13 06:41
Matrix: Water
Date Received: 06/18/13 10:21

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.5	ug/L			06/21/13 11:30	1
1,1,2,2-Tetrachloroethane	ND		50	5.0	ug/L			06/21/13 11:30	1
1,1,2-Trichloroethane	ND		50	7.5	ug/L			06/21/13 11:30	1
1,1-Dichloroethane	ND		50	3.5	ug/L			06/21/13 11:30	1
1,1-Dichloroethene	ND		50	4.0	ug/L			06/21/13 11:30	1
1,2-Dichlorobenzene	ND		50	3.0	ug/L			06/21/13 11:30	1
1,2-Dichloroethane	ND		50	5.0	ug/L			06/21/13 11:30	1
1,2-Dichloropropane	ND		50	5.0	ug/L			06/21/13 11:30	1
1,3-Dichlorobenzene	ND		50	4.0	ug/L			06/21/13 11:30	1
1,4-Dichlorobenzene	ND		50	6.0	ug/L			06/21/13 11:30	1
2-Chloroethyl vinyl ether	ND	*	100	8.5	ug/L			06/21/13 11:30	1
Benzene	ND		50	3.0	ug/L			06/21/13 11:30	1
Bromodichloromethane	ND		50	4.5	ug/L			06/21/13 11:30	1
Bromoform	ND		50	8.5	ug/L			06/21/13 11:30	1
Bromomethane	ND		100	6.5	ug/L			06/21/13 11:30	1
Carbon tetrachloride	ND		50	6.5	ug/L			06/21/13 11:30	1
Chlorobenzene	ND		50	7.5	ug/L			06/21/13 11:30	1
Chloroethane	ND		100	5.0	ug/L			06/21/13 11:30	1
Chloroform	ND		50	5.0	ug/L			06/21/13 11:30	1
Chloromethane	ND		100	4.0	ug/L			06/21/13 11:30	1
cis-1,2-Dichloroethene	ND		50	4.5	ug/L			06/21/13 11:30	1
cis-1,3-Dichloropropene	ND		50	3.5	ug/L			06/21/13 11:30	1
Dibromochloromethane	ND		50	6.5	ug/L			06/21/13 11:30	1
Ethylbenzene	ND		50	4.5	ug/L			06/21/13 11:30	1
Methylene Chloride	ND		50	5.5	ug/L			06/21/13 11:30	1
Tetrachloroethene	ND		50	9.0	ug/L			06/21/13 11:30	1
Toluene	ND		50	3.5	ug/L			06/21/13 11:30	1
trans-1,2-Dichloroethene	ND		50	4.0	ug/L			06/21/13 11:30	1
trans-1,3-Dichloropropene	ND		50	4.0	ug/L			06/21/13 11:30	1
Trichloroethene	ND		50	11	ug/L			06/21/13 11:30	1
Trichlorofluoromethane	ND		50	5.5	ug/L			06/21/13 11:30	1
Vinyl chloride	ND		100	4.0	ug/L			06/21/13 11:30	1
Xylenes, Total	ND		150	10	ug/L			06/21/13 11:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*71 - 135*		*06/21/13 11:30*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 122*		*06/21/13 11:30*	*1*
Toluene-d8 (Surr)	*106*		*84 - 122*		*06/21/13 11:30*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**3100**	**H**	990	200	ug/L		06/26/13 13:09	06/26/13 23:02	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*D X*	*41 - 109*	*06/26/13 13:09*	*06/26/13 23:02*	*10*
2-Fluorobiphenyl (Surr)	*0*	*D X*	*31 - 103*	*06/26/13 13:09*	*06/26/13 23:02*	*10*
2-Fluorophenol (Surr)	*0*	*D X*	*23 - 82*	*06/26/13 13:09*	*06/26/13 23:02*	*10*
Nitrobenzene-d5 (Surr)	*0*	*D X*	*36 - 98*	*06/26/13 13:09*	*06/26/13 23:02*	*10*
Phenol-d5 (Surr)	*0*	*D X*	*14 - 68*	*06/26/13 13:09*	*06/26/13 23:02*	*10*
Terphenyl-d14 (Surr)	*0*	*D X*	*43 - 107*	*06/26/13 13:09*	*06/26/13 23:02*	*10*

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2748-1

Client Sample ID: 228/229 MSD

Lab Sample ID: 160-2748-1

Date Collected: 06/18/13 06:41

Matrix: Water

Date Received: 06/18/13 10:21

Method: 625 - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
bis (2-chloroisopropyl) ether	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
2,4,6-Trichlorophenol	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
2,4-Dichlorophenol	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
2,4-Dimethylphenol	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
2,4-Dinitrophenol	ND	H	500	20	ug/L		06/26/13 13:09	06/27/13 06:31	1
2,4-Dinitrotoluene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
2,6-Dinitrotoluene	ND	H	99	21	ug/L		06/26/13 13:09	06/27/13 06:31	1
2-Chloronaphthalene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
2-Chlorophenol	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
2-Nitrophenol	ND	H	99	15	ug/L		06/26/13 13:09	06/27/13 06:31	1
3,3'-Dichlorobenzidine	ND	H	500	13	ug/L		06/26/13 13:09	06/27/13 06:31	1
4,6-Dinitro-2-methylphenol	ND	H	500	12	ug/L		06/26/13 13:09	06/27/13 06:31	1
4-Bromophenyl phenyl ether	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
4-Chloro-3-methylphenol	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
4-Chlorophenyl phenyl ether	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
4-Nitrophenol	ND	H	500	20	ug/L		06/26/13 13:09	06/27/13 06:31	1
Acenaphthene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Acenaphthylene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Anthracene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Benzidine	ND	H	990	200	ug/L		06/26/13 13:09	06/27/13 06:31	1
Benzo[a]anthracene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Benzo[a]pyrene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Benzo[b]fluoranthene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Benzo[g,h,i]perylene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Benzo[k]fluoranthene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Bis(2-chloroethoxy)methane	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Bis(2-chloroethyl)ether	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Bis(2-ethylhexyl) phthalate	ND	H	99	18	ug/L		06/26/13 13:09	06/27/13 06:31	1
Butyl benzyl phthalate	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Chrysene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Dibenz(a,h)anthracene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Diethyl phthalate	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Dimethyl phthalate	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Di-n-butyl phthalate	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Di-n-octyl phthalate	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Fluoranthene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Fluorene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Hexachloro-1,3-butadiene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Hexachlorobenzene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Hexachlorocyclopentadiene	ND	H	500	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Hexachloroethane	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Indeno[1,2,3-cd]pyrene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Isophorone	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Naphthalene	**38**	**J H**	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Nitrobenzene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
N-Nitrosodimethylamine	ND	H	99	20	ug/L		06/26/13 13:09	06/27/13 06:31	1
N-Nitrosodi-n-propylamine	ND	H	99	15	ug/L		06/26/13 13:09	06/27/13 06:31	1
N-Nitrosodiphenylamine	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2748-1

Client Sample ID: 228/229 MSD

Date Collected: 06/18/13 06:41
Date Received: 06/18/13 10:21

Lab Sample ID: 160-2748-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND	H	500	13	ug/L		06/26/13 13:09	06/27/13 06:31	1
Phenanthrene	**24**	**J H**	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1
Pyrene	ND	H	99	9.9	ug/L		06/26/13 13:09	06/27/13 06:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*57*		*41 - 109*	*06/26/13 13:09*	*06/27/13 06:31*	*1*
2-Fluorobiphenyl (Surr)	*51*		*31 - 103*	*06/26/13 13:09*	*06/27/13 06:31*	*1*
2-Fluorophenol (Surr)	*0*	*X*	*23 - 82*	*06/26/13 13:09*	*06/27/13 06:31*	*1*
Nitrobenzene-d5 (Surr)	*0*	*X*	*36 - 98*	*06/26/13 13:09*	*06/27/13 06:31*	*1*
Phenol-d5 (Surr)	*0*	*X*	*14 - 68*	*06/26/13 13:09*	*06/27/13 06:31*	*1*
Terphenyl-d14 (Surr)	*25*	*X*	*43 - 107*	*06/26/13 13:09*	*06/27/13 06:31*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		250	150	ug/L		06/19/13 16:18	06/20/13 18:47	5
Aluminum	**7300**		5000	2000	ug/L		06/19/13 16:18	06/21/13 15:08	5
Arsenic	**220**	**J**	250	49	ug/L		06/19/13 16:18	06/20/13 18:47	5
Beryllium	ND		130	13	ug/L		06/19/13 16:18	06/20/13 18:47	5
Cadmium	ND		130	11	ug/L		06/19/13 16:18	06/20/13 18:47	5
Cobalt	**240**	**J**	1300	99	ug/L		06/19/13 16:18	06/20/13 18:47	5
Chromium	ND		250	79	ug/L		06/19/13 16:18	06/21/13 15:08	5
Copper	ND		630	110	ug/L		06/19/13 16:18	06/20/13 18:47	5
Iron	**500000**		2500	400	ug/L		06/19/13 16:18	06/20/13 18:47	5
Nickel	ND		1000	330	ug/L		06/19/13 16:18	06/20/13 18:47	5
Lead	**130**	**J**	250	32	ug/L		06/19/13 16:18	06/20/13 18:47	5
Antimony	**110**	**J**	250	99	ug/L		06/19/13 16:18	06/20/13 18:47	5
Selenium	ND		380	67	ug/L		06/19/13 16:18	06/20/13 18:47	5
Thallium	ND		500	22	ug/L		06/19/13 16:18	06/20/13 18:47	5
Zinc	**9400**		500	130	ug/L		06/19/13 16:18	06/20/13 18:47	5

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**2300**	**J**	5000	2000	ug/L		06/19/13 16:18	06/21/13 15:19	5
Antimony	ND		250	99	ug/L		06/19/13 16:18	06/20/13 18:58	5
Arsenic	**200**	**J**	250	49	ug/L		06/19/13 16:18	06/20/13 18:58	5
Beryllium	ND		130	13	ug/L		06/19/13 16:18	06/20/13 18:58	5
Cadmium	ND		130	11	ug/L		06/19/13 16:18	06/20/13 18:58	5
Chromium	ND		250	79	ug/L		06/19/13 16:18	06/21/13 15:19	5
Cobalt	**150**	**J**	1300	99	ug/L		06/19/13 16:18	06/20/13 18:58	5
Copper	ND		630	110	ug/L		06/19/13 16:18	06/20/13 18:58	5
Iron	**390000**		2500	400	ug/L		06/19/13 16:18	06/20/13 18:58	5
Lead	**73**	**J**	250	32	ug/L		06/19/13 16:18	06/20/13 18:58	5
Nickel	ND		1000	330	ug/L		06/19/13 16:18	06/20/13 18:58	5
Selenium	ND		380	67	ug/L		06/19/13 16:18	06/20/13 18:58	5
Silver	ND		250	150	ug/L		06/19/13 16:18	06/20/13 18:58	5
Thallium	ND		500	22	ug/L		06/19/13 16:18	06/20/13 18:58	5
Zinc	**9200**		500	130	ug/L		06/19/13 16:18	06/20/13 18:58	5

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2748-1

Client Sample ID: 228/229 MSD

Lab Sample ID: 160-2748-1
Matrix: Water

Date Collected: 06/18/13 06:41
Date Received: 06/18/13 10:21

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	4.8	J B	6.0	1.5	ug/L		06/19/13 16:42	06/19/13 19:20	1

Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.2	J B	6.0	1.5	ug/L		06/19/13 16:42	06/19/13 19:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		17	4.7	mg/L		06/20/13 02:00	06/20/13 02:19	1
Ammonia	480		10	4.5	mg/L			06/20/13 12:52	500
Chemical Oxygen Demand	29000		400	200	mg/L			06/21/13 14:55	40

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	1200		110	110	mg/L			06/20/13 17:20	1
pH	6.00	HF	0.100	0.100	SU			06/18/13 17:57	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2748-2
Matrix: Water

Date Collected: 06/18/13 00:00
Date Received: 06/18/13 10:21

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/21/13 11:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/21/13 11:04	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/21/13 11:04	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/21/13 11:04	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/21/13 11:04	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/21/13 11:04	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/21/13 11:04	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/21/13 11:04	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/21/13 11:04	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/21/13 11:04	1
2-Chloroethyl vinyl ether	ND	*	2.0	0.17	ug/L			06/21/13 11:04	1
Benzene	ND		1.0	0.060	ug/L			06/21/13 11:04	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/21/13 11:04	1
Bromoform	ND		1.0	0.17	ug/L			06/21/13 11:04	1
Bromomethane	ND		2.0	0.13	ug/L			06/21/13 11:04	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/21/13 11:04	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/21/13 11:04	1
Chloroethane	ND		2.0	0.10	ug/L			06/21/13 11:04	1
Chloroform	ND		1.0	0.10	ug/L			06/21/13 11:04	1
Chloromethane	ND		2.0	0.080	ug/L			06/21/13 11:04	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/21/13 11:04	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/21/13 11:04	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/21/13 11:04	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/21/13 11:04	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/21/13 11:04	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/21/13 11:04	1
Toluene	ND		1.0	0.070	ug/L			06/21/13 11:04	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/21/13 11:04	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/21/13 11:04	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2748-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2748-2

Date Collected: 06/18/13 00:00

Matrix: Water

Date Received: 06/18/13 10:21

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		1.0	0.21	ug/L			06/21/13 11:04	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/21/13 11:04	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/21/13 11:04	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/21/13 11:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*71 - 135*		*06/21/13 11:04*	*1*
4-Bromofluorobenzene (Surr)	*106*		*80 - 122*		*06/21/13 11:04*	*1*
Toluene-d8 (Surr)	*108*		*84 - 122*		*06/21/13 11:04*	*1*

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-57437/2
Matrix: Water
Analysis Batch: 57437

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/21/13 10:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/21/13 10:09	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/21/13 10:09	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/21/13 10:09	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/21/13 10:09	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/21/13 10:09	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/21/13 10:09	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/21/13 10:09	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/21/13 10:09	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/21/13 10:09	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/21/13 10:09	1
Benzene	ND		1.0	0.060	ug/L			06/21/13 10:09	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/21/13 10:09	1
Bromoform	ND		1.0	0.17	ug/L			06/21/13 10:09	1
Bromomethane	ND		2.0	0.13	ug/L			06/21/13 10:09	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/21/13 10:09	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/21/13 10:09	1
Chloroethane	ND		2.0	0.10	ug/L			06/21/13 10:09	1
Chloroform	ND		1.0	0.10	ug/L			06/21/13 10:09	1
Chloromethane	ND		2.0	0.080	ug/L			06/21/13 10:09	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/21/13 10:09	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/21/13 10:09	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/21/13 10:09	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/21/13 10:09	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/21/13 10:09	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/21/13 10:09	1
Toluene	ND		1.0	0.070	ug/L			06/21/13 10:09	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/21/13 10:09	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/21/13 10:09	1
Trichloroethene	ND		1.0	0.21	ug/L			06/21/13 10:09	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/21/13 10:09	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/21/13 10:09	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/21/13 10:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*71 - 135*		*06/21/13 10:09*	*1*
4-Bromofluorobenzene (Surr)	*111*		*80 - 122*		*06/21/13 10:09*	*1*
Toluene-d8 (Surr)	*106*		*84 - 122*		*06/21/13 10:09*	*1*

Lab Sample ID: LCS 160-57437/4
Matrix: Water
Analysis Batch: 57437

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	12.2		ug/L		122	82 - 127
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	69 - 130
1,1,2-Trichloroethane	10.0	10.8		ug/L		108	78 - 122
1,1-Dichloroethane	10.0	11.1		ug/L		111	82 - 125

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-57437/4
Matrix: Water
Analysis Batch: 57437

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	10.9		ug/L		109	77 - 127
1,2-Dichlorobenzene	10.0	10.3		ug/L		103	83 - 121
1,2-Dichloroethane	10.0	11.2		ug/L		112	78 - 127
1,2-Dichloropropane	10.0	10.7		ug/L		107	81 - 124
1,3-Dichlorobenzene	10.0	10.7		ug/L		107	85 - 121
1,4-Dichlorobenzene	10.0	10.3		ug/L		103	83 - 116
2-Chloroethyl vinyl ether	10.0	15.5	*	ug/L		155	34 - 140
Benzene	10.0	10.9		ug/L		109	84 - 124
Bromodichloromethane	10.0	10.7		ug/L		107	81 - 127
Bromoform	10.0	10.4		ug/L		104	78 - 138
Bromomethane	10.0	9.80		ug/L		98	48 - 162
Carbon tetrachloride	10.0	12.4		ug/L		124	79 - 132
Chlorobenzene	10.0	10.8		ug/L		108	85 - 118
Chloroethane	10.0	9.48		ug/L		95	71 - 132
Chloroform	10.0	11.7		ug/L		117	82 - 124
Chloromethane	10.0	10.3		ug/L		103	68 - 136
cis-1,2-Dichloroethene	10.0	11.0		ug/L		110	83 - 123
cis-1,3-Dichloropropene	10.0	11.9		ug/L		119	79 - 132
Dibromochloromethane	10.0	11.1		ug/L		111	81 - 129
Ethylbenzene	10.0	11.5		ug/L		115	85 - 125
Methylene Chloride	10.0	9.34		ug/L		93	70 - 127
Tetrachloroethene	10.0	11.9		ug/L		119	76 - 129
Toluene	10.0	11.2		ug/L		112	83 - 127
trans-1,2-Dichloroethene	10.0	10.4		ug/L		104	78 - 122
trans-1,3-Dichloropropene	10.0	11.4		ug/L		114	83 - 130
Trichloroethene	10.0	11.1		ug/L		111	81 - 123
Trichlorofluoromethane	10.0	12.9		ug/L		129	72 - 135
Vinyl chloride	10.0	10.9		ug/L		109	72 - 132
Xylenes, Total	30.0	35.3		ug/L		118	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*71 - 135*
4-Bromofluorobenzene (Surr)	*109*		*80 - 122*
Toluene-d8 (Surr)	*107*		*84 - 122*

Lab Sample ID: LCSD 160-57437/5
Matrix: Water
Analysis Batch: 57437

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	10.0	11.7		ug/L		117	82 - 127	4	20
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	69 - 130	0	20
1,1,2-Trichloroethane	10.0	10.3		ug/L		103	78 - 122	4	20
1,1-Dichloroethane	10.0	10.2		ug/L		102	82 - 125	8	20
1,1-Dichloroethene	10.0	10.3		ug/L		103	77 - 127	6	20
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	83 - 121	1	20
1,2-Dichloroethane	10.0	10.8		ug/L		108	78 - 127	3	20
1,2-Dichloropropane	10.0	10.3		ug/L		103	81 - 124	4	20

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-57437/5
Matrix: Water
Analysis Batch: 57437

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	10.0	10.7		ug/L		107	85 - 121	1	20
1,4-Dichlorobenzene	10.0	10.4		ug/L		104	83 - 116	0	20
2-Chloroethyl vinyl ether	10.0	15.6	*	ug/L		156	34 - 140	1	20
Benzene	10.0	10.4		ug/L		104	84 - 124	4	20
Bromodichloromethane	10.0	10.6		ug/L		106	81 - 127	1	20
Bromoform	10.0	10.8		ug/L		108	78 - 138	4	20
Bromomethane	10.0	9.22		ug/L		92	48 - 162	6	20
Carbon tetrachloride	10.0	11.7		ug/L		117	79 - 132	6	20
Chlorobenzene	10.0	10.4		ug/L		104	85 - 118	4	20
Chloroethane	10.0	9.15		ug/L		92	71 - 132	4	20
Chloroform	10.0	11.2		ug/L		112	82 - 124	4	20
Chloromethane	10.0	9.72		ug/L		97	68 - 136	6	20
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	83 - 123	7	20
cis-1,3-Dichloropropene	10.0	11.4		ug/L		114	79 - 132	5	20
Dibromochloromethane	10.0	11.1		ug/L		111	81 - 129	0	20
Ethylbenzene	10.0	10.9		ug/L		109	85 - 125	5	20
Methylene Chloride	10.0	8.88		ug/L		89	70 - 127	5	20
Tetrachloroethene	10.0	11.3		ug/L		113	76 - 129	5	20
Toluene	10.0	10.9		ug/L		109	83 - 127	3	20
trans-1,2-Dichloroethene	10.0	10.2		ug/L		102	78 - 122	2	20
trans-1,3-Dichloropropene	10.0	10.9		ug/L		109	83 - 130	4	20
Trichloroethene	10.0	10.3		ug/L		103	81 - 123	7	20
Trichlorofluoromethane	10.0	12.1		ug/L		121	72 - 135	7	20
Vinyl chloride	10.0	10.6		ug/L		106	72 - 132	2	20
Xylenes, Total	30.0	33.7		ug/L		112	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*71 - 135*
4-Bromofluorobenzene (Surr)	*107*		*80 - 122*
Toluene-d8 (Surr)	*106*		*84 - 122*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
bis (2-chloroisopropyl) ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4,6-Trichlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dichlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dimethylphenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dinitrophenol	ND		50	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dinitrotoluene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,6-Dinitrotoluene	ND		10	2.2	ug/L		06/26/13 13:09	06/26/13 17:50	1
2-Chloronaphthalene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2-Chlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		10	1.5	ug/L		06/26/13 13:09	06/26/13 17:50	1
3,3'-Dichlorobenzidine	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
4,6-Dinitro-2-methylphenol	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Bromophenyl phenyl ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Chlorophenyl phenyl ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Nitrophenol	ND		50	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Acenaphthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Acenaphthylene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzidine	ND		100	20	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[a]anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[a]pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[b]fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[g,h,i]perylene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[k]fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-chloroethoxy)methane	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-chloroethyl)ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-ethylhexyl) phthalate	ND		10	1.9	ug/L		06/26/13 13:09	06/26/13 17:50	1
Butyl benzyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Chrysene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Dibenz(a,h)anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Diethyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Dimethyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Di-n-butyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Di-n-octyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Fluorene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachloro-1,3-butadiene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachlorobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachlorocyclopentadiene	ND		50	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachloroethane	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Indeno[1,2,3-cd]pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Isophorone	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Naphthalene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Nitrobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodiphenylamine	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Pentachlorophenol	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
Phenanthrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Phenol	ND		10	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*76*		*41 - 109*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
2-Fluorobiphenyl (Surr)	*56*		*31 - 103*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
2-Fluorophenol (Surr)	*36*		*23 - 82*	*06/26/13 13:09*	*06/26/13 17:50*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*52*		*36 - 98*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
Phenol-d5 (Surr)	*28*		*14 - 68*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
Terphenyl-d14 (Surr)	*76*		*43 - 107*	*06/26/13 13:09*	*06/26/13 17:50*	*1*

Lab Sample ID: LCS 160-57924/2-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	100	72.6		ug/L		72	44 - 84
bis (2-chloroisopropyl) ether	100	65.8		ug/L		66	42 - 102
2,4,6-Trichlorophenol	100	71.5		ug/L		71	54 - 105
2,4-Dichlorophenol	100	64.4		ug/L		64	46 - 103
2,4-Dimethylphenol	100	65.4		ug/L		65	40 - 105
2,4-Dinitrophenol	100	69.2		ug/L		69	42 - 146
2,4-Dinitrotoluene	100	79.0		ug/L		79	62 - 101
2,6-Dinitrotoluene	100	78.8		ug/L		79	62 - 103
2-Chloronaphthalene	100	75.5		ug/L		76	45 - 95
2-Chlorophenol	100	65.1		ug/L		65	56 - 93
2-Nitrophenol	101	71.7		ug/L		71	51 - 98
3,3'-Dichlorobenzidine	100	64.1		ug/L		64	26 - 77
4,6-Dinitro-2-methylphenol	100	82.6		ug/L		83	61 - 120
4-Bromophenyl phenyl ether	100	89.1		ug/L		89	54 - 111
4-Chloro-3-methylphenol	100	60.1		ug/L		60	45 - 106
4-Chlorophenyl phenyl ether	100	76.6		ug/L		77	53 - 100
4-Nitrophenol	100	34.8	J	ug/L		35	25 - 45
Acenaphthene	100	75.7		ug/L		76	51 - 89
Acenaphthylene	100	76.1		ug/L		76	46 - 98
Anthracene	100	83.5		ug/L		84	54 - 111
Benzo[a]anthracene	100	88.7		ug/L		89	68 - 108
Benzo[a]pyrene	100	83.5		ug/L		84	55 - 108
Benzo[b]fluoranthene	100	82.4		ug/L		82	57 - 114
Benzo[g,h,i]perylene	100	86.8		ug/L		87	58 - 120
Benzo[k]fluoranthene	100	89.3		ug/L		89	59 - 112
Bis(2-chloroethoxy)methane	100	67.0		ug/L		67	53 - 99
Bis(2-chloroethyl)ether	100	65.8		ug/L		66	50 - 97
Bis(2-ethylhexyl) phthalate	100	84.1		ug/L		84	54 - 116
Butyl benzyl phthalate	100	82.8		ug/L		83	52 - 126
Chrysene	100	77.5		ug/L		77	58 - 112
Dibenz(a,h)anthracene	100	87.9		ug/L		88	56 - 122
Diethyl phthalate	100	75.3		ug/L		75	60 - 101
Dimethyl phthalate	100	74.8		ug/L		75	57 - 101
Di-n-butyl phthalate	100	84.4		ug/L		84	57 - 108
Di-n-octyl phthalate	100	76.6		ug/L		77	57 - 118
Fluoranthene	100	81.8		ug/L		82	55 - 114
Fluorene	100	73.8		ug/L		74	59 - 96
Hexachloro-1,3-butadiene	100	77.5		ug/L		77	36 - 84
Hexachlorobenzene	100	90.1		ug/L		90	56 - 110

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-57924/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58253 — **Prep Batch: 57924**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	100	86.3		ug/L		86	16 - 86
Hexachloroethane	100	74.3		ug/L		74	40 - 77
Indeno[1,2,3-cd]pyrene	100	84.3		ug/L		84	55 - 124
Isophorone	100	64.8		ug/L		65	50 - 107
Naphthalene	100	69.0		ug/L		69	42 - 82
Nitrobenzene	100	69.1		ug/L		69	48 - 96
N-Nitrosodi-n-propylamine	101	77.0		ug/L		77	57 - 113
Pentachlorophenol	100	76.8		ug/L		77	56 - 126
Phenanthrene	100	80.9		ug/L		81	54 - 110
Phenol	100	33.0		ug/L		33	27 - 43
Pyrene	100	85.1		ug/L		85	53 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*89*		*41 - 109*
2-Fluorobiphenyl (Surr)	*76*		*31 - 103*
2-Fluorophenol (Surr)	*51*		*23 - 82*
Nitrobenzene-d5 (Surr)	*74*		*36 - 98*
Phenol-d5 (Surr)	*34*		*14 - 68*
Terphenyl-d14 (Surr)	*84*		*43 - 107*

Lab Sample ID: LCSD 160-57924/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58253 — **Prep Batch: 57924**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	100	72.0		ug/L		72	44 - 84	1	20
bis (2-chloroisopropyl) ether	100	69.4		ug/L		69	42 - 102	5	20
2,4,6-Trichlorophenol	100	70.8		ug/L		71	54 - 105	1	20
2,4-Dichlorophenol	100	64.3		ug/L		64	46 - 103	0	20
2,4-Dimethylphenol	100	65.0		ug/L		65	40 - 105	1	20
2,4-Dinitrophenol	100	68.9		ug/L		69	42 - 146	0	20
2,4-Dinitrotoluene	100	76.2		ug/L		76	62 - 101	4	20
2,6-Dinitrotoluene	100	78.8		ug/L		79	62 - 103	0	20
2-Chloronaphthalene	100	76.9		ug/L		77	45 - 95	2	20
2-Chlorophenol	100	65.0		ug/L		65	56 - 93	0	20
2-Nitrophenol	101	71.8		ug/L		71	51 - 98	0	20
3,3'-Dichlorobenzidine	100	63.5		ug/L		63	26 - 77	1	20
4,6-Dinitro-2-methylphenol	100	82.0		ug/L		82	61 - 120	1	20
4-Bromophenyl phenyl ether	100	86.2		ug/L		86	54 - 111	3	20
4-Chloro-3-methylphenol	100	60.6		ug/L		60	45 - 106	1	20
4-Chlorophenyl phenyl ether	100	73.3		ug/L		73	53 - 100	4	20
4-Nitrophenol	100	36.8	J	ug/L		37	25 - 45	5	20
Acenaphthene	100	73.8		ug/L		74	51 - 89	3	20
Acenaphthylene	100	75.6		ug/L		76	46 - 98	1	20
Anthracene	100	80.3		ug/L		80	54 - 111	4	20
Benzo[a]anthracene	100	86.5		ug/L		86	68 - 108	2	20
Benzo[a]pyrene	100	80.5		ug/L		80	55 - 108	4	20
Benzo[b]fluoranthene	100	78.6		ug/L		79	57 - 114	5	20

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-57924/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58253 — **Prep Batch: 57924**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[g,h,i]perylene	100	83.6		ug/L		84	58 - 120	4	20
Benzo[k]fluoranthene	100	87.0		ug/L		87	59 - 112	3	20
Bis(2-chloroethoxy)methane	100	67.8		ug/L		68	53 - 99	1	20
Bis(2-chloroethyl)ether	100	67.7		ug/L		68	50 - 97	3	20
Bis(2-ethylhexyl) phthalate	100	83.5		ug/L		84	54 - 116	1	20
Butyl benzyl phthalate	100	83.4		ug/L		83	52 - 126	1	20
Chrysene	100	75.9		ug/L		76	58 - 112	2	20
Dibenz(a,h)anthracene	100	84.2		ug/L		84	56 - 122	4	20
Diethyl phthalate	100	73.2		ug/L		73	60 - 101	3	20
Dimethyl phthalate	100	73.5		ug/L		73	57 - 101	2	20
Di-n-butyl phthalate	100	82.6		ug/L		83	57 - 108	2	20
Di-n-octyl phthalate	100	76.4		ug/L		76	57 - 118	0	20
Fluoranthene	100	78.5		ug/L		79	55 - 114	4	20
Fluorene	100	70.7		ug/L		71	59 - 96	4	20
Hexachloro-1,3-butadiene	100	74.8		ug/L		75	36 - 84	4	20
Hexachlorobenzene	100	84.5		ug/L		85	56 - 110	6	20
Hexachlorocyclopentadiene	100	80.3		ug/L		80	16 - 86	7	20
Hexachloroethane	100	75.9		ug/L		76	40 - 77	2	20
Indeno[1,2,3-cd]pyrene	100	82.9		ug/L		83	55 - 124	2	20
Isophorone	100	67.2		ug/L		67	50 - 107	4	20
Naphthalene	100	68.8		ug/L		69	42 - 82	0	20
Nitrobenzene	100	71.0		ug/L		71	48 - 96	3	20
N-Nitrosodi-n-propylamine	101	79.5		ug/L		79	57 - 113	3	20
Pentachlorophenol	100	75.9		ug/L		76	56 - 126	1	20
Phenanthrene	100	79.2		ug/L		79	54 - 110	2	20
Phenol	100	34.9		ug/L		35	27 - 43	5	20
Pyrene	100	83.8		ug/L		84	53 - 117	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*82*		*41 - 109*
2-Fluorobiphenyl (Surr)	*77*		*31 - 103*
2-Fluorophenol (Surr)	*52*		*23 - 82*
Nitrobenzene-d5 (Surr)	*76*		*36 - 98*
Phenol-d5 (Surr)	*36*		*14 - 68*
Terphenyl-d14 (Surr)	*82*		*43 - 107*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 160-56734/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57097 — **Prep Batch: 56734**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10	2.0	ug/L		06/19/13 16:18	06/20/13 18:24	1
Beryllium	ND		5.0	0.50	ug/L		06/19/13 16:18	06/20/13 18:24	1
Cadmium	ND		5.0	0.45	ug/L		06/19/13 16:18	06/20/13 18:24	1
Cobalt	ND		50	4.0	ug/L		06/19/13 16:18	06/20/13 18:24	1
Copper	ND		25	4.6	ug/L		06/19/13 16:18	06/20/13 18:24	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 160-56734/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57097 — **Prep Batch: 56734**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		100	16	ug/L		06/19/13 16:18	06/20/13 18:24	1
Lead	ND		10	1.3	ug/L		06/19/13 16:18	06/20/13 18:24	1
Nickel	ND		40	13	ug/L		06/19/13 16:18	06/20/13 18:24	1
Antimony	ND		10	4.0	ug/L		06/19/13 16:18	06/20/13 18:24	1
Selenium	ND		15	2.7	ug/L		06/19/13 16:18	06/20/13 18:24	1
Silver	ND		10	6.0	ug/L		06/19/13 16:18	06/20/13 18:24	1
Thallium	ND		20	0.88	ug/L		06/19/13 16:18	06/20/13 18:24	1
Zinc	ND		20	5.2	ug/L		06/19/13 16:18	06/20/13 18:24	1

Lab Sample ID: MB 160-56734/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57423 — **Prep Batch: 56734**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		06/19/13 16:18	06/21/13 14:38	1
Chromium	ND		10	3.1	ug/L		06/19/13 16:18	06/21/13 14:38	1

Lab Sample ID: LCS 160-56734/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57097 — **Prep Batch: 56734**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1000	966		ug/L		97	85 - 115
Beryllium	1000	1000		ug/L		100	85 - 115
Cadmium	1000	993		ug/L		99	85 - 115
Cobalt	1000	1030		ug/L		103	85 - 115
Copper	1000	988		ug/L		99	85 - 115
Iron	10000	10000		ug/L		100	85 - 115
Lead	1000	1020		ug/L		102	85 - 115
Nickel	1000	1020		ug/L		102	85 - 115
Antimony	500	495		ug/L		99	85 - 115
Selenium	1000	981		ug/L		98	85 - 115
Silver	100	89.0		ug/L		89	85 - 115
Thallium	200	215		ug/L		108	85 - 115
Zinc	1000	1000		ug/L		100	85 - 115

Lab Sample ID: LCS 160-56734/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57423 — **Prep Batch: 56734**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9520		ug/L		95	85 - 115
Chromium	1000	985		ug/L		99	85 - 115

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2748-1

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 160-56740/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56747 — **Prep Batch: 56740**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0573	J	0.20	0.050	ug/L		06/19/13 16:42	06/19/13 19:07	1

Lab Sample ID: LCS 160-56740/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56747 — **Prep Batch: 56740**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.32		ug/L		106	85 - 115

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 480-124929/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124930 — **Prep Batch: 124929**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/20/13 02:00	06/20/13 02:19	1

Lab Sample ID: LCS 480-124929/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 124930 — **Prep Batch: 124929**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	39.7		mg/L		99	78 - 114

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-125153/219 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125153

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/20/13 16:21	1

Lab Sample ID: MB 480-125153/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125153

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/20/13 12:49	1

Lab Sample ID: LCS 480-125153/220 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125153

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.02		mg/L		102	90 - 110

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 480-125153/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125153

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.05		mg/L		105	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 480-125337/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125337

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			06/21/13 14:55	1

Lab Sample ID: LCS 480-125337/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125337

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	181		mg/L		91	90 - 110

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-125125/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125125

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			06/20/13 17:18	1

Lab Sample ID: LCS 480-125125/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	268	264		mg/L		99	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 160-56495/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56495

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	6.950		SU		99	99.0 - 101.0

Method: SM 4500 H+ B - pH (Continued)

Lab Sample ID: 160-2748-1 DU
Matrix: Water
Analysis Batch: 56495

Client Sample ID: 228/229 MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	6.00	HF		6.000		SU				0	5

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2748-1

GC/MS VOA

Analysis Batch: 57437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2748-1	228/229 MSD	Total/NA	Water	624	
160-2748-2	TRIP BLANK	Total/NA	Water	624	
LCS 160-57437/4	Lab Control Sample	Total/NA	Water	624	
LCSD 160-57437/5	Lab Control Sample Dup	Total/NA	Water	624	
MB 160-57437/2	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 57924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2748-1 - DL	228/229 MSD	Total/NA	Water	625	
160-2748-1 - RE	228/229 MSD	Total/NA	Water	625	
LCS 160-57924/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 160-57924/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 160-57924/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 58253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2748-1 - DL	228/229 MSD	Total/NA	Water	625	57924
160-2748-1 - RE	228/229 MSD	Total/NA	Water	625	57924
LCS 160-57924/2-A	Lab Control Sample	Total/NA	Water	625	57924
LCSD 160-57924/3-A	Lab Control Sample Dup	Total/NA	Water	625	57924
MB 160-57924/1-A	Method Blank	Total/NA	Water	625	57924

Metals

Prep Batch: 56734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2748-1	228/229 MSD	Total/NA	Water	200.7/200.8	
160-2748-1	228/229 MSD	Dissolved	Water	200.7/200.8	
LCS 160-56734/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
MB 160-56734/1-A	Method Blank	Total/NA	Water	200.7/200.8	

Prep Batch: 56740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2748-1	228/229 MSD	Total/NA	Water	245.1	
160-2748-1	228/229 MSD	Dissolved	Water	245.1	
LCS 160-56740/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 160-56740/1-A	Method Blank	Total/NA	Water	245.1	

Analysis Batch: 56747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2748-1	228/229 MSD	Total/NA	Water	245.1	56740
160-2748-1	228/229 MSD	Dissolved	Water	245.1	56740
LCS 160-56740/2-A	Lab Control Sample	Total/NA	Water	245.1	56740
MB 160-56740/1-A	Method Blank	Total/NA	Water	245.1	56740

Analysis Batch: 57097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2748-1	228/229 MSD	Total/NA	Water	200.7 Rev 4.4	56734

Metals (Continued)

Analysis Batch: 57097 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2748-1	228/229 MSD	Dissolved	Water	200.7 Rev 4.4	56734
LCS 160-56734/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	56734
MB 160-56734/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	56734

Analysis Batch: 57423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2748-1	228/229 MSD	Total/NA	Water	200.7 Rev 4.4	56734
160-2748-1	228/229 MSD	Dissolved	Water	200.7 Rev 4.4	56734
LCS 160-56734/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	56734
MB 160-56734/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	56734

General Chemistry

Analysis Batch: 56495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2748-1	228/229 MSD	Total/NA	Water	SM 4500 H+ B	
160-2748-1 DU	228/229 MSD	Total/NA	Water	SM 4500 H+ B	
LCS 160-56495/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Prep Batch: 124929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2748-1	228/229 MSD	Total/NA	Water	1664A	
LCS 480-124929/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 480-124929/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 124930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2748-1	228/229 MSD	Total/NA	Water	1664A	124929
LCS 480-124929/2-A	Lab Control Sample	Total/NA	Water	1664A	124929
MB 480-124929/1-A	Method Blank	Total/NA	Water	1664A	124929

Analysis Batch: 125125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2748-1	228/229 MSD	Total/NA	Water	SM 2540D	
LCS 480-125125/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-125125/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 125153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2748-1	228/229 MSD	Total/NA	Water	350.1	
LCS 480-125153/220	Lab Control Sample	Total/NA	Water	350.1	
LCS 480-125153/4	Lab Control Sample	Total/NA	Water	350.1	
MB 480-125153/219	Method Blank	Total/NA	Water	350.1	
MB 480-125153/3	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 125337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2748-1	228/229 MSD	Total/NA	Water	410.4	
LCS 480-125337/4	Lab Control Sample	Total/NA	Water	410.4	
MB 480-125337/3	Method Blank	Total/NA	Water	410.4	

Surrogate Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2748-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(71-135)	(80-122)	(84-122)
160-2748-1	228/229 MSD	105	105	106
160-2748-2	TRIP BLANK	111	106	108
LCS 160-57437/4	Lab Control Sample	112	109	107
LCSD 160-57437/5	Lab Control Sample Dup	110	107	106
MB 160-57437/2	Method Blank	112	111	106

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(41-109)	(31-103)	(23-82)	(36-98)	(14-68)	(43-107)
160-2748-1 - DL	228/229 MSD	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
160-2748-1 - RE	228/229 MSD	57	51	0 X	0 X	0 X	25 X
LCS 160-57924/2-A	Lab Control Sample	89	76	51	74	34	84
LCSD 160-57924/3-A	Lab Control Sample Dup	82	77	52	76	36	82
MB 160-57924/1-A	Method Blank	76	56	36	52	28	76

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2748-2
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/26/2013 3:11:53 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

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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.

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Job ID: 160-2748-2

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2748-2

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 6/18/2013 10:21 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 17.0º C.

BIOCHEMICAL OXYGEN DEMAND

Sample 228/229 MSD (160-2748-1) was analyzed for Biochemical oxygen demand in accordance with SM 5210B. The samples were analyzed on 06/19/2013.

No other difficulties were encountered during the BOD analysis.

All other quality control parameters were within the acceptance limits.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CR 465

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY / FEI	6/16/13	197605
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State)	Carrier/Waybill Number
BRIDGETON LANDFILL / MISSOURI	

Contract/Purchase Order/Quote No.

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date DRF	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	624-VOC's	1664-HEM/TPH	5210B-BOD	625-SVOC	200.7/245.1 T	200.7/245.1 D	2540D-TSS	410.4 350.1	pH				Special Instructions/ Conditions of Receipt
228/229 MSD	6/13/13	0641		✓			5	1	1	4			3	1	1	1	1	1	1	1	1				
TRIP BLANK	—	—		✓						2			2												

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 DAYS

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	6/18/13	1021	1. Received By: [signature]	6/18/13	1021
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2748-2

Login Number: 2748

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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.	False	Received same day of collection; chilling process has begun.
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?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2748-2

Login Number: 2748
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/19/13 01:59 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	1.7 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2748-2

Method	Method Description	Protocol	Laboratory
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2748-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2748-1	228/229 MSD	Water	06/18/13 06:41	06/18/13 10:21

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2748-2

Client Sample ID: 228/229 MSD

Lab Sample ID: 160-2748-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	11000		40	40	mg/L	20		SM 5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2748-2

Client Sample ID: 228/229 MSD

Lab Sample ID: 160-2748-1

Date Collected: 06/18/13 06:41

Matrix: Water

Date Received: 06/18/13 10:21

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	11000		40	40	mg/L			06/19/13 14:42	20

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2748-2

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-124887/1 USB
Matrix: Water
Analysis Batch: 124887

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			06/19/13 14:42	1

Lab Sample ID: LCS 480-124887/2
Matrix: Water
Analysis Batch: 124887

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	171		mg/L		87	85 - 115		

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2748-2

General Chemistry

Analysis Batch: 124887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2748-1	228/229 MSD	Total/NA	Water	SM 5210B	
LCS 480-124887/2	Lab Control Sample	Total/NA	Water	SM 5210B	
USB 480-124887/1 USB	Method Blank	Total/NA	Water	SM 5210B	

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2766-1
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/30/2013 3:17:19 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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.

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Job ID: 160-2766-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2766-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The sample was received on 6/19/2013 9:22 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 18.0º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample 232/233-MSD (160-2766-1) was analyzed for volatile organic compounds (GC-MS) in accordance with EPA Method 624. The samples were analyzed on 06/21/2013.

Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 57437. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

2-Chloroethyl vinyl ether failed the recovery criteria high for LCS 160-57437/4 and LCSD 160-57437/5. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

The continuing calibration verification ZCCV8684 for Trichlorofluoromethane, Carbon Tetrachloride, 1,1,1- Trichloroethane, and

Job ID: 160-2766-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

2-Chloroethyl vinyl ether associated with batch 57437 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The associated samples were analyzed at a dilution based upon the samples' screened data. The calculation was done using an initial volume adjustment rather than a dilution factor. The reporting limits have been elevated by the appropriate factor.

No other difficulties were encountered during the VOCs analysis.

All other quality control parameters were within the acceptance limits.

Organic Prep
Emulsion was observed during extraction requiring vigorous stirring and/or centrifugation for the samples in batch 56898.

Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 57924. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 232/233-MSD (160-2766-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA Method 625. The samples were prepared on 06/26/2013 and analyzed on 06/27/2013.

Several analytes failed the surrogate recovery criteria low for 232/233-MSD (160-2766-1). The samples show evidence of matrix interference; therefore, re-extraction and/or re-analysis was not performed.

The laboratory control sample (LCS) for batch 57510 recovered outside control limits. The associated samples were re-prepared and/or re-analyzed outside holding time. With a passing LCS/LCSD, the re-extract batch 58253 is set to be reported.

The continuing calibration verification (CCV) for Hexachlorocyclopentadiene associated with batch 58253 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The following samples were diluted to bring the concentration of target analytes within the calibration range: 232/233-MSD (160-2766-1) [10X]. Elevated reporting limits (RLs) are provided. Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

No other difficulties were encountered during the SVOC analysis.

All other quality control parameters were within the acceptance limits.

ICP total and dissolved
Sample 232/233-MSD (160-2766-1) was analyzed for ICP in accordance with EPA Method 200.7, Rev. 4.4. The samples were prepared on 06/19/2013 and analyzed on 06/20/2013 and 06/21/2013.

Iron failed the recovery criteria high for the MS of sample 232/233-MSDMS (160-2766-1) in batch 160-57097. The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Due to the high concentration of iron, the matrix spike / matrix spike duplicate (MS/MSD) for batch 56734 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

The following samples were diluted due to the nature of the sample matrix. The sample digestates were dark yellow in color: (160-2766-1 MS), (160-2766-1 MSD), (160-2766-1 SD), 232/233-MSD (160-2766-1) [5X]. Elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the ICP analysis.

All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)

Job ID: 160-2766-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Sample 232/233-MSD (160-2766-1) was analyzed for dissolved mercury (CVAA) in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/19/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

MERCURY
Sample 232/233-MSD (160-2766-1) was analyzed for mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/19/2013.

Mercury was detected in method blank MB 160-56740/1-A at a level that was above the method detection limit but below the reporting limit.

Due to potential matrix interference, samples 232/233-MSD (160-2766-1) were prepped at a 30x dilution.

No other difficulties were encountered during the mercury analysis.

All other quality control parameters were within the acceptance limits.

SGT-HEM
Sample 232/233-MSD (160-2766-1) was analyzed for SGT-HEM in accordance with EPA Method 1664A. The samples were prepared on 06/26/2013 and analyzed on 06/27/2013.

SGT-HEM was detected in method blank MB 480-126204/1-A at a level that was above the method detection limit but below the reporting limit.

No other difficulties were encountered during the SGT-HEM analysis.

All other quality control parameters were within the acceptance limits.

TOTAL SUSPENDED SOLIDS
Sample 232/233-MSD (160-2766-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 06/20/2013.

Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: 232/233-MSD (160-2766-1). The reporting limits (RLs) have been adjusted proportionately.

No difficulties were encountered during the TSS analysis.

All quality control parameters were within the acceptance limits.

AMMONIA
Sample 232/233-MSD (160-2766-1) was analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/24/2013.

Sample 232/233-MSD (160-2766-1)[1000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the ammonia analysis.

All quality control parameters were within the acceptance limits.

CHEMICAL OXYGEN DEMAND
Sample 232/233-MSD (160-2766-1) was analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 06/25/2013.

Job ID: 160-2766-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Sample 232/233-MSD (160-2766-1)[100X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the COD analysis.

All quality control parameters were within the acceptance limits.

PH

Sample 232/233-MSD (160-2766-1) was analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed on 06/19/2013.

For the analysis of the associated sample in pH batch #56726, this analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 232/233-MSD (160-2766-1)

For the analysis of the associated sample in pH batch #56726, pH indicator strips were used to prevent potential damage to the pH probe. The indicator strips used were range 0-14 (Lot HC270245).232/233-MSD (160-2766-1)

No difficulties were encountered during the pH analysis.

All quality control parameters were within the acceptance limits.

Chain of Custody Record

TestAmerica
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CK 111

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TAL-4124 (1007)

Client: BARR ENGINEERING/ED GALBRAITH	Project Manager: BILL ABERNATHY	Date: 6/19/13	Chain of Custody Number: 197607
Address	Telephone Number (Area Code)/Fax Number: 314-502-1299	Lab Number	Page 1 of 1
City / State / Zip Code	Site Contact	Lab Contact	
Project Name and Location (State): BRIDGETON LANDFILL/MISSOURI	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): 624-VOCs	1664 HEM/TPH	5210B-BOD	625-SVOCs	200.7 245.1 T	200.7 245.1 D	2540D-TSS	410.4 350.1	pH				Special Instructions/ Conditions of Receipt
232/233-MSD	6/19/13	0721		✓				5	1	1	4				3	1	1	1	1	1	1	1	1				

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 Days

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	6/19/13	0922	1. Received By: Jill Clarke	6-19-13	0922
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2766-1

Login Number: 2766

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	Received same day of collection; chilling process has begun.
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?	False	Not requested on COC.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2766-1

Login Number: 2766
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/20/13 02:40 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	2.8 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2766-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SL
245.1	Mercury (CVAA)	EPA	TAL SL
1664A	HEM and SGT-HEM	1664A	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
410.4	COD	MCAWW	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL SL

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2766-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2766-1	232/233-MSD	Water	06/19/13 07:21	06/19/13 09:22

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2766-1

Client Sample ID: 232/233-MSD

Lab Sample ID: 160-2766-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	18	J	50	6.0	ug/L	1		624	Total/NA
Phenol - DL	6000		860	170	ug/L	10		625	Total/NA
Anthracene - RE	33	J	86	8.6	ug/L	1		625	Total/NA
Naphthalene - RE	68	J	86	8.6	ug/L	1		625	Total/NA
Phenanthrene - RE	23	J	86	8.6	ug/L	1		625	Total/NA
Aluminum	14000		5000	2000	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	440		250	49	ug/L	5		200.7 Rev 4.4	Total/NA
Cobalt	210	J	1300	99	ug/L	5		200.7 Rev 4.4	Total/NA
Chromium	190	J	250	79	ug/L	5		200.7 Rev 4.4	Total/NA
Iron	1000000		2500	400	ug/L	5		200.7 Rev 4.4	Total/NA
Lead	260		250	32	ug/L	5		200.7 Rev 4.4	Total/NA
Antimony	100	J	250	99	ug/L	5		200.7 Rev 4.4	Total/NA
Selenium	83	J	380	67	ug/L	5		200.7 Rev 4.4	Total/NA
Thallium	48	J	500	22	ug/L	5		200.7 Rev 4.4	Total/NA
Zinc	20000		500	130	ug/L	5		200.7 Rev 4.4	Total/NA
Aluminum	4400	J	5000	2000	ug/L	5		200.7 Rev 4.4	Dissolved
Arsenic	410		250	49	ug/L	5		200.7 Rev 4.4	Dissolved
Cobalt	190	J	1300	99	ug/L	5		200.7 Rev 4.4	Dissolved
Iron	810000		2500	400	ug/L	5		200.7 Rev 4.4	Dissolved
Lead	160	J	250	32	ug/L	5		200.7 Rev 4.4	Dissolved
Selenium	68	J	380	67	ug/L	5		200.7 Rev 4.4	Dissolved
Thallium	48	J	500	22	ug/L	5		200.7 Rev 4.4	Dissolved
Zinc	19000		500	130	ug/L	5		200.7 Rev 4.4	Dissolved
Mercury	13	B	6.0	1.5	ug/L	1		245.1	Total/NA
Mercury	2.0	J B	6.0	1.5	ug/L	1		245.1	Dissolved
Oil & Grease	33		17	4.7	mg/L	1		1664A	Total/NA
SGT-HEM	8.7	J B	17	6.5	mg/L	1		1664A	Total/NA
Ammonia	660		20	9.0	mg/L	1000		350.1	Total/NA
Chemical Oxygen Demand	59000		1000	500	mg/L	100		410.4	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
Total Suspended Solids	1800		200	200	mg/L	1		SM 2540D	Total/NA
pH	6.00	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2766-1

Client Sample ID: 232/233-MSD

Date Collected: 06/19/13 07:21
Date Received: 06/19/13 09:22

Lab Sample ID: 160-2766-1

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.5	ug/L			06/21/13 12:18	1
1,1,2,2-Tetrachloroethane	ND		50	5.0	ug/L			06/21/13 12:18	1
1,1,2-Trichloroethane	ND		50	7.5	ug/L			06/21/13 12:18	1
1,1-Dichloroethane	ND		50	3.5	ug/L			06/21/13 12:18	1
1,1-Dichloroethene	ND		50	4.0	ug/L			06/21/13 12:18	1
1,2-Dichlorobenzene	ND		50	3.0	ug/L			06/21/13 12:18	1
1,2-Dichloroethane	ND		50	5.0	ug/L			06/21/13 12:18	1
1,2-Dichloropropane	ND		50	5.0	ug/L			06/21/13 12:18	1
1,3-Dichlorobenzene	ND		50	4.0	ug/L			06/21/13 12:18	1
1,4-Dichlorobenzene	**18**	**J**	50	6.0	ug/L			06/21/13 12:18	1
2-Chloroethyl vinyl ether	ND	*	100	8.5	ug/L			06/21/13 12:18	1
Benzene	ND		50	3.0	ug/L			06/21/13 12:18	1
Bromodichloromethane	ND		50	4.5	ug/L			06/21/13 12:18	1
Bromoform	ND		50	8.5	ug/L			06/21/13 12:18	1
Bromomethane	ND		100	6.5	ug/L			06/21/13 12:18	1
Carbon tetrachloride	ND		50	6.5	ug/L			06/21/13 12:18	1
Chlorobenzene	ND		50	7.5	ug/L			06/21/13 12:18	1
Chloroethane	ND		100	5.0	ug/L			06/21/13 12:18	1
Chloroform	ND		50	5.0	ug/L			06/21/13 12:18	1
Chloromethane	ND		100	4.0	ug/L			06/21/13 12:18	1
cis-1,2-Dichloroethene	ND		50	4.5	ug/L			06/21/13 12:18	1
cis-1,3-Dichloropropene	ND		50	3.5	ug/L			06/21/13 12:18	1
Dibromochloromethane	ND		50	6.5	ug/L			06/21/13 12:18	1
Ethylbenzene	ND		50	4.5	ug/L			06/21/13 12:18	1
Methylene Chloride	ND		50	5.5	ug/L			06/21/13 12:18	1
Tetrachloroethene	ND		50	9.0	ug/L			06/21/13 12:18	1
Toluene	ND		50	3.5	ug/L			06/21/13 12:18	1
trans-1,2-Dichloroethene	ND		50	4.0	ug/L			06/21/13 12:18	1
trans-1,3-Dichloropropene	ND		50	4.0	ug/L			06/21/13 12:18	1
Trichloroethene	ND		50	11	ug/L			06/21/13 12:18	1
Trichlorofluoromethane	ND		50	5.5	ug/L			06/21/13 12:18	1
Vinyl chloride	ND		100	4.0	ug/L			06/21/13 12:18	1
Xylenes, Total	ND		150	10	ug/L			06/21/13 12:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*71 - 135*		*06/21/13 12:18*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 122*		*06/21/13 12:18*	*1*
Toluene-d8 (Surr)	*110*		*84 - 122*		*06/21/13 12:18*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**6000**		860	170	ug/L		06/26/13 13:09	06/27/13 00:11	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*D X*	*41 - 109*	*06/26/13 13:09*	*06/27/13 00:11*	*10*
2-Fluorobiphenyl (Surr)	*0*	*D X*	*31 - 103*	*06/26/13 13:09*	*06/27/13 00:11*	*10*
2-Fluorophenol (Surr)	*0*	*D X*	*23 - 82*	*06/26/13 13:09*	*06/27/13 00:11*	*10*
Nitrobenzene-d5 (Surr)	*0*	*D X*	*36 - 98*	*06/26/13 13:09*	*06/27/13 00:11*	*10*
Phenol-d5 (Surr)	*0*	*D X*	*14 - 68*	*06/26/13 13:09*	*06/27/13 00:11*	*10*
Terphenyl-d14 (Surr)	*0*	*D X*	*43 - 107*	*06/26/13 13:09*	*06/27/13 00:11*	*10*

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2766-1

Client Sample ID: 232/233-MSD

Date Collected: 06/19/13 07:21
Date Received: 06/19/13 09:22

Lab Sample ID: 160-2766-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
bis (2-chloroisopropyl) ether	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
2,4,6-Trichlorophenol	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
2,4-Dichlorophenol	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
2,4-Dimethylphenol	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
2,4-Dinitrophenol	ND		430	17	ug/L		06/26/13 13:09	06/27/13 08:51	1
2,4-Dinitrotoluene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
2,6-Dinitrotoluene	ND		86	19	ug/L		06/26/13 13:09	06/27/13 08:51	1
2-Chloronaphthalene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
2-Chlorophenol	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
2-Nitrophenol	ND		86	13	ug/L		06/26/13 13:09	06/27/13 08:51	1
3,3'-Dichlorobenzidine	ND		430	11	ug/L		06/26/13 13:09	06/27/13 08:51	1
4,6-Dinitro-2-methylphenol	ND		430	11	ug/L		06/26/13 13:09	06/27/13 08:51	1
4-Bromophenyl phenyl ether	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
4-Chloro-3-methylphenol	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
4-Chlorophenyl phenyl ether	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
4-Nitrophenol	ND		430	17	ug/L		06/26/13 13:09	06/27/13 08:51	1
Acenaphthene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Acenaphthylene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Anthracene	**33**	**J**	86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Benzidine	ND		860	170	ug/L		06/26/13 13:09	06/27/13 08:51	1
Benzo[a]anthracene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Benzo[a]pyrene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Benzo[b]fluoranthene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Benzo[g,h,i]perylene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Benzo[k]fluoranthene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Bis(2-chloroethoxy)methane	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Bis(2-chloroethyl)ether	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Bis(2-ethylhexyl) phthalate	ND		86	16	ug/L		06/26/13 13:09	06/27/13 08:51	1
Butyl benzyl phthalate	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Chrysene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Dibenz(a,h)anthracene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Diethyl phthalate	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Dimethyl phthalate	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Di-n-butyl phthalate	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Di-n-octyl phthalate	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Fluoranthene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Fluorene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Hexachloro-1,3-butadiene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Hexachlorobenzene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Hexachlorocyclopentadiene	ND		430	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Hexachloroethane	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Indeno[1,2,3-cd]pyrene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Isophorone	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Naphthalene	**68**	**J**	86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Nitrobenzene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
N-Nitrosodimethylamine	ND		86	17	ug/L		06/26/13 13:09	06/27/13 08:51	1
N-Nitrosodi-n-propylamine	ND		86	13	ug/L		06/26/13 13:09	06/27/13 08:51	1
N-Nitrosodiphenylamine	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1

Client Sample ID: 232/233-MSD

Lab Sample ID: 160-2766-1

Date Collected: 06/19/13 07:21

Matrix: Water

Date Received: 06/19/13 09:22

Method: 625 - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		430	11	ug/L		06/26/13 13:09	06/27/13 08:51	1
Phenanthrene	**23**	**J**	86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1
Pyrene	ND		86	8.6	ug/L		06/26/13 13:09	06/27/13 08:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*48*		*41 - 109*	*06/26/13 13:09*	*06/27/13 08:51*	*1*
2-Fluorobiphenyl (Surr)	*42*		*31 - 103*	*06/26/13 13:09*	*06/27/13 08:51*	*1*
2-Fluorophenol (Surr)	*0*	*X*	*23 - 82*	*06/26/13 13:09*	*06/27/13 08:51*	*1*
Nitrobenzene-d5 (Surr)	*0*	*X*	*36 - 98*	*06/26/13 13:09*	*06/27/13 08:51*	*1*
Phenol-d5 (Surr)	*0*	*X*	*14 - 68*	*06/26/13 13:09*	*06/27/13 08:51*	*1*
Terphenyl-d14 (Surr)	*23*	*X*	*43 - 107*	*06/26/13 13:09*	*06/27/13 08:51*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		250	150	ug/L		06/19/13 16:18	06/20/13 18:32	5
Aluminum	**14000**		5000	2000	ug/L		06/19/13 16:18	06/21/13 14:45	5
Arsenic	**440**		250	49	ug/L		06/19/13 16:18	06/20/13 18:32	5
Beryllium	ND		130	13	ug/L		06/19/13 16:18	06/20/13 18:32	5
Cadmium	ND		130	11	ug/L		06/19/13 16:18	06/20/13 18:32	5
Cobalt	**210**	**J**	1300	99	ug/L		06/19/13 16:18	06/20/13 18:32	5
Chromium	**190**	**J**	250	79	ug/L		06/19/13 16:18	06/21/13 14:45	5
Copper	ND		630	110	ug/L		06/19/13 16:18	06/20/13 18:32	5
Iron	**1000000**		2500	400	ug/L		06/19/13 16:18	06/20/13 18:32	5
Nickel	ND		1000	330	ug/L		06/19/13 16:18	06/20/13 18:32	5
Lead	**260**		250	32	ug/L		06/19/13 16:18	06/20/13 18:32	5
Antimony	**100**	**J**	250	99	ug/L		06/19/13 16:18	06/20/13 18:32	5
Selenium	**83**	**J**	380	67	ug/L		06/19/13 16:18	06/20/13 18:32	5
Thallium	**48**	**J**	500	22	ug/L		06/19/13 16:18	06/20/13 18:32	5
Zinc	**20000**		500	130	ug/L		06/19/13 16:18	06/20/13 18:32	5

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**4400**	**J**	5000	2000	ug/L		06/19/13 16:18	06/21/13 15:15	5
Antimony	ND		250	99	ug/L		06/19/13 16:18	06/20/13 18:54	5
Arsenic	**410**		250	49	ug/L		06/19/13 16:18	06/20/13 18:54	5
Beryllium	ND		130	13	ug/L		06/19/13 16:18	06/20/13 18:54	5
Cadmium	ND		130	11	ug/L		06/19/13 16:18	06/20/13 18:54	5
Chromium	ND		250	79	ug/L		06/19/13 16:18	06/21/13 15:15	5
Cobalt	**190**	**J**	1300	99	ug/L		06/19/13 16:18	06/20/13 18:54	5
Copper	ND		630	110	ug/L		06/19/13 16:18	06/20/13 18:54	5
Iron	**810000**		2500	400	ug/L		06/19/13 16:18	06/20/13 18:54	5
Lead	**160**	**J**	250	32	ug/L		06/19/13 16:18	06/20/13 18:54	5
Nickel	ND		1000	330	ug/L		06/19/13 16:18	06/20/13 18:54	5
Selenium	**68**	**J**	380	67	ug/L		06/19/13 16:18	06/20/13 18:54	5
Silver	ND		250	150	ug/L		06/19/13 16:18	06/20/13 18:54	5
Thallium	**48**	**J**	500	22	ug/L		06/19/13 16:18	06/20/13 18:54	5
Zinc	**19000**		500	130	ug/L		06/19/13 16:18	06/20/13 18:54	5

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2766-1

Client Sample ID: 232/233-MSD

Lab Sample ID: 160-2766-1

Date Collected: 06/19/13 07:21
Matrix: Water
Date Received: 06/19/13 09:22

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	13	B	6.0	1.5	ug/L		06/19/13 16:42	06/19/13 19:22	1

Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.0	J B	6.0	1.5	ug/L		06/19/13 16:42	06/19/13 19:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	33		17	4.7	mg/L		06/26/13 23:47	06/27/13 00:28	1
SGT-HEM	8.7	J B	17	6.5	mg/L		06/26/13 23:47	06/27/13 00:28	1
Ammonia	660		20	9.0	mg/L			06/24/13 12:07	1000
Chemical Oxygen Demand	59000		1000	500	mg/L			06/25/13 20:05	100

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	1800		200	200	mg/L			06/20/13 17:21	1
pH	6.00	HF	0.100	0.100	SU			06/19/13 15:19	1

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-57437/2
Matrix: Water
Analysis Batch: 57437

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/21/13 10:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/21/13 10:09	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/21/13 10:09	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/21/13 10:09	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/21/13 10:09	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/21/13 10:09	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/21/13 10:09	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/21/13 10:09	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/21/13 10:09	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/21/13 10:09	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/21/13 10:09	1
Benzene	ND		1.0	0.060	ug/L			06/21/13 10:09	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/21/13 10:09	1
Bromoform	ND		1.0	0.17	ug/L			06/21/13 10:09	1
Bromomethane	ND		2.0	0.13	ug/L			06/21/13 10:09	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/21/13 10:09	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/21/13 10:09	1
Chloroethane	ND		2.0	0.10	ug/L			06/21/13 10:09	1
Chloroform	ND		1.0	0.10	ug/L			06/21/13 10:09	1
Chloromethane	ND		2.0	0.080	ug/L			06/21/13 10:09	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/21/13 10:09	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/21/13 10:09	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/21/13 10:09	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/21/13 10:09	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/21/13 10:09	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/21/13 10:09	1
Toluene	ND		1.0	0.070	ug/L			06/21/13 10:09	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/21/13 10:09	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/21/13 10:09	1
Trichloroethene	ND		1.0	0.21	ug/L			06/21/13 10:09	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/21/13 10:09	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/21/13 10:09	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/21/13 10:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*71 - 135*		*06/21/13 10:09*	*1*
4-Bromofluorobenzene (Surr)	*111*		*80 - 122*		*06/21/13 10:09*	*1*
Toluene-d8 (Surr)	*106*		*84 - 122*		*06/21/13 10:09*	*1*

Lab Sample ID: LCS 160-57437/4
Matrix: Water
Analysis Batch: 57437

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	12.2		ug/L		122	82 - 127
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	69 - 130
1,1,2-Trichloroethane	10.0	10.8		ug/L		108	78 - 122
1,1-Dichloroethane	10.0	11.1		ug/L		111	82 - 125

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-57437/4
Matrix: Water
Analysis Batch: 57437

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	10.9		ug/L		109	77 - 127
1,2-Dichlorobenzene	10.0	10.3		ug/L		103	83 - 121
1,2-Dichloroethane	10.0	11.2		ug/L		112	78 - 127
1,2-Dichloropropane	10.0	10.7		ug/L		107	81 - 124
1,3-Dichlorobenzene	10.0	10.7		ug/L		107	85 - 121
1,4-Dichlorobenzene	10.0	10.3		ug/L		103	83 - 116
2-Chloroethyl vinyl ether	10.0	15.5	*	ug/L		155	34 - 140
Benzene	10.0	10.9		ug/L		109	84 - 124
Bromodichloromethane	10.0	10.7		ug/L		107	81 - 127
Bromoform	10.0	10.4		ug/L		104	78 - 138
Bromomethane	10.0	9.80		ug/L		98	48 - 162
Carbon tetrachloride	10.0	12.4		ug/L		124	79 - 132
Chlorobenzene	10.0	10.8		ug/L		108	85 - 118
Chloroethane	10.0	9.48		ug/L		95	71 - 132
Chloroform	10.0	11.7		ug/L		117	82 - 124
Chloromethane	10.0	10.3		ug/L		103	68 - 136
cis-1,2-Dichloroethene	10.0	11.0		ug/L		110	83 - 123
cis-1,3-Dichloropropene	10.0	11.9		ug/L		119	79 - 132
Dibromochloromethane	10.0	11.1		ug/L		111	81 - 129
Ethylbenzene	10.0	11.5		ug/L		115	85 - 125
Methylene Chloride	10.0	9.34		ug/L		93	70 - 127
Tetrachloroethene	10.0	11.9		ug/L		119	76 - 129
Toluene	10.0	11.2		ug/L		112	83 - 127
trans-1,2-Dichloroethene	10.0	10.4		ug/L		104	78 - 122
trans-1,3-Dichloropropene	10.0	11.4		ug/L		114	83 - 130
Trichloroethene	10.0	11.1		ug/L		111	81 - 123
Trichlorofluoromethane	10.0	12.9		ug/L		129	72 - 135
Vinyl chloride	10.0	10.9		ug/L		109	72 - 132
Xylenes, Total	30.0	35.3		ug/L		118	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*71 - 135*
4-Bromofluorobenzene (Surr)	*109*		*80 - 122*
Toluene-d8 (Surr)	*107*		*84 - 122*

Lab Sample ID: LCSD 160-57437/5
Matrix: Water
Analysis Batch: 57437

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	10.0	11.7		ug/L		117	82 - 127	4	20
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	69 - 130	0	20
1,1,2-Trichloroethane	10.0	10.3		ug/L		103	78 - 122	4	20
1,1-Dichloroethane	10.0	10.2		ug/L		102	82 - 125	8	20
1,1-Dichloroethene	10.0	10.3		ug/L		103	77 - 127	6	20
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	83 - 121	1	20
1,2-Dichloroethane	10.0	10.8		ug/L		108	78 - 127	3	20
1,2-Dichloropropane	10.0	10.3		ug/L		103	81 - 124	4	20

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-57437/5
Matrix: Water
Analysis Batch: 57437

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	10.0	10.7		ug/L		107	85 - 121	1	20
1,4-Dichlorobenzene	10.0	10.4		ug/L		104	83 - 116	0	20
2-Chloroethyl vinyl ether	10.0	15.6	*	ug/L		156	34 - 140	1	20
Benzene	10.0	10.4		ug/L		104	84 - 124	4	20
Bromodichloromethane	10.0	10.6		ug/L		106	81 - 127	1	20
Bromoform	10.0	10.8		ug/L		108	78 - 138	4	20
Bromomethane	10.0	9.22		ug/L		92	48 - 162	6	20
Carbon tetrachloride	10.0	11.7		ug/L		117	79 - 132	6	20
Chlorobenzene	10.0	10.4		ug/L		104	85 - 118	4	20
Chloroethane	10.0	9.15		ug/L		92	71 - 132	4	20
Chloroform	10.0	11.2		ug/L		112	82 - 124	4	20
Chloromethane	10.0	9.72		ug/L		97	68 - 136	6	20
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	83 - 123	7	20
cis-1,3-Dichloropropene	10.0	11.4		ug/L		114	79 - 132	5	20
Dibromochloromethane	10.0	11.1		ug/L		111	81 - 129	0	20
Ethylbenzene	10.0	10.9		ug/L		109	85 - 125	5	20
Methylene Chloride	10.0	8.88		ug/L		89	70 - 127	5	20
Tetrachloroethene	10.0	11.3		ug/L		113	76 - 129	5	20
Toluene	10.0	10.9		ug/L		109	83 - 127	3	20
trans-1,2-Dichloroethene	10.0	10.2		ug/L		102	78 - 122	2	20
trans-1,3-Dichloropropene	10.0	10.9		ug/L		109	83 - 130	4	20
Trichloroethene	10.0	10.3		ug/L		103	81 - 123	7	20
Trichlorofluoromethane	10.0	12.1		ug/L		121	72 - 135	7	20
Vinyl chloride	10.0	10.6		ug/L		106	72 - 132	2	20
Xylenes, Total	30.0	33.7		ug/L		112	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*71 - 135*
4-Bromofluorobenzene (Surr)	*107*		*80 - 122*
Toluene-d8 (Surr)	*106*		*84 - 122*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
bis (2-chloroisopropyl) ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4,6-Trichlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dichlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dimethylphenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dinitrophenol	ND		50	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dinitrotoluene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,6-Dinitrotoluene	ND		10	2.2	ug/L		06/26/13 13:09	06/26/13 17:50	1
2-Chloronaphthalene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2-Chlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		10	1.5	ug/L		06/26/13 13:09	06/26/13 17:50	1
3,3'-Dichlorobenzidine	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
4,6-Dinitro-2-methylphenol	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Bromophenyl phenyl ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Chlorophenyl phenyl ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Nitrophenol	ND		50	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Acenaphthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Acenaphthylene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzidine	ND		100	20	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[a]anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[a]pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[b]fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[g,h,i]perylene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[k]fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-chloroethoxy)methane	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-chloroethyl)ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-ethylhexyl) phthalate	ND		10	1.9	ug/L		06/26/13 13:09	06/26/13 17:50	1
Butyl benzyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Chrysene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Dibenz(a,h)anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Diethyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Dimethyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Di-n-butyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Di-n-octyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Fluorene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachloro-1,3-butadiene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachlorobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachlorocyclopentadiene	ND		50	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachloroethane	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Indeno[1,2,3-cd]pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Isophorone	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Naphthalene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Nitrobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodiphenylamine	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Pentachlorophenol	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
Phenanthrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Phenol	ND		10	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*76*		*41 - 109*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
2-Fluorobiphenyl (Surr)	*56*		*31 - 103*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
2-Fluorophenol (Surr)	*36*		*23 - 82*	*06/26/13 13:09*	*06/26/13 17:50*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	52		36 - 98	06/26/13 13:09	06/26/13 17:50	1
Phenol-d5 (Surr)	28		14 - 68	06/26/13 13:09	06/26/13 17:50	1
Terphenyl-d14 (Surr)	76		43 - 107	06/26/13 13:09	06/26/13 17:50	1

Lab Sample ID: LCS 160-57924/2-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	100	72.6		ug/L		72	44 - 84
bis (2-chloroisopropyl) ether	100	65.8		ug/L		66	42 - 102
2,4,6-Trichlorophenol	100	71.5		ug/L		71	54 - 105
2,4-Dichlorophenol	100	64.4		ug/L		64	46 - 103
2,4-Dimethylphenol	100	65.4		ug/L		65	40 - 105
2,4-Dinitrophenol	100	69.2		ug/L		69	42 - 146
2,4-Dinitrotoluene	100	79.0		ug/L		79	62 - 101
2,6-Dinitrotoluene	100	78.8		ug/L		79	62 - 103
2-Chloronaphthalene	100	75.5		ug/L		76	45 - 95
2-Chlorophenol	100	65.1		ug/L		65	56 - 93
2-Nitrophenol	101	71.7		ug/L		71	51 - 98
3,3'-Dichlorobenzidine	100	64.1		ug/L		64	26 - 77
4,6-Dinitro-2-methylphenol	100	82.6		ug/L		83	61 - 120
4-Bromophenyl phenyl ether	100	89.1		ug/L		89	54 - 111
4-Chloro-3-methylphenol	100	60.1		ug/L		60	45 - 106
4-Chlorophenyl phenyl ether	100	76.6		ug/L		77	53 - 100
4-Nitrophenol	100	34.8	J	ug/L		35	25 - 45
Acenaphthene	100	75.7		ug/L		76	51 - 89
Acenaphthylene	100	76.1		ug/L		76	46 - 98
Anthracene	100	83.5		ug/L		84	54 - 111
Benzo[a]anthracene	100	88.7		ug/L		89	68 - 108
Benzo[a]pyrene	100	83.5		ug/L		84	55 - 108
Benzo[b]fluoranthene	100	82.4		ug/L		82	57 - 114
Benzo[g,h,i]perylene	100	86.8		ug/L		87	58 - 120
Benzo[k]fluoranthene	100	89.3		ug/L		89	59 - 112
Bis(2-chloroethoxy)methane	100	67.0		ug/L		67	53 - 99
Bis(2-chloroethyl)ether	100	65.8		ug/L		66	50 - 97
Bis(2-ethylhexyl) phthalate	100	84.1		ug/L		84	54 - 116
Butyl benzyl phthalate	100	82.8		ug/L		83	52 - 126
Chrysene	100	77.5		ug/L		77	58 - 112
Dibenz(a,h)anthracene	100	87.9		ug/L		88	56 - 122
Diethyl phthalate	100	75.3		ug/L		75	60 - 101
Dimethyl phthalate	100	74.8		ug/L		75	57 - 101
Di-n-butyl phthalate	100	84.4		ug/L		84	57 - 108
Di-n-octyl phthalate	100	76.6		ug/L		77	57 - 118
Fluoranthene	100	81.8		ug/L		82	55 - 114
Fluorene	100	73.8		ug/L		74	59 - 96
Hexachloro-1,3-butadiene	100	77.5		ug/L		77	36 - 84
Hexachlorobenzene	100	90.1		ug/L		90	56 - 110

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-57924/2-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	100	86.3		ug/L		86	16 - 86
Hexachloroethane	100	74.3		ug/L		74	40 - 77
Indeno[1,2,3-cd]pyrene	100	84.3		ug/L		84	55 - 124
Isophorone	100	64.8		ug/L		65	50 - 107
Naphthalene	100	69.0		ug/L		69	42 - 82
Nitrobenzene	100	69.1		ug/L		69	48 - 96
N-Nitrosodi-n-propylamine	101	77.0		ug/L		77	57 - 113
Pentachlorophenol	100	76.8		ug/L		77	56 - 126
Phenanthrene	100	80.9		ug/L		81	54 - 110
Phenol	100	33.0		ug/L		33	27 - 43
Pyrene	100	85.1		ug/L		85	53 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*89*		*41 - 109*
2-Fluorobiphenyl (Surr)	*76*		*31 - 103*
2-Fluorophenol (Surr)	*51*		*23 - 82*
Nitrobenzene-d5 (Surr)	*74*		*36 - 98*
Phenol-d5 (Surr)	*34*		*14 - 68*
Terphenyl-d14 (Surr)	*84*		*43 - 107*

Lab Sample ID: LCSD 160-57924/3-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	100	72.0		ug/L		72	44 - 84	1	20
bis (2-chloroisopropyl) ether	100	69.4		ug/L		69	42 - 102	5	20
2,4,6-Trichlorophenol	100	70.8		ug/L		71	54 - 105	1	20
2,4-Dichlorophenol	100	64.3		ug/L		64	46 - 103	0	20
2,4-Dimethylphenol	100	65.0		ug/L		65	40 - 105	1	20
2,4-Dinitrophenol	100	68.9		ug/L		69	42 - 146	0	20
2,4-Dinitrotoluene	100	76.2		ug/L		76	62 - 101	4	20
2,6-Dinitrotoluene	100	78.8		ug/L		79	62 - 103	0	20
2-Chloronaphthalene	100	76.9		ug/L		77	45 - 95	2	20
2-Chlorophenol	100	65.0		ug/L		65	56 - 93	0	20
2-Nitrophenol	101	71.8		ug/L		71	51 - 98	0	20
3,3'-Dichlorobenzidine	100	63.5		ug/L		63	26 - 77	1	20
4,6-Dinitro-2-methylphenol	100	82.0		ug/L		82	61 - 120	1	20
4-Bromophenyl phenyl ether	100	86.2		ug/L		86	54 - 111	3	20
4-Chloro-3-methylphenol	100	60.6		ug/L		60	45 - 106	1	20
4-Chlorophenyl phenyl ether	100	73.3		ug/L		73	53 - 100	4	20
4-Nitrophenol	100	36.8	J	ug/L		37	25 - 45	5	20
Acenaphthene	100	73.8		ug/L		74	51 - 89	3	20
Acenaphthylene	100	75.6		ug/L		76	46 - 98	1	20
Anthracene	100	80.3		ug/L		80	54 - 111	4	20
Benzo[a]anthracene	100	86.5		ug/L		86	68 - 108	2	20
Benzo[a]pyrene	100	80.5		ug/L		80	55 - 108	4	20
Benzo[b]fluoranthene	100	78.6		ug/L		79	57 - 114	5	20

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-57924/3-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[g,h,i]perylene	100	83.6		ug/L		84	58 - 120	4	20
Benzo[k]fluoranthene	100	87.0		ug/L		87	59 - 112	3	20
Bis(2-chloroethoxy)methane	100	67.8		ug/L		68	53 - 99	1	20
Bis(2-chloroethyl)ether	100	67.7		ug/L		68	50 - 97	3	20
Bis(2-ethylhexyl) phthalate	100	83.5		ug/L		84	54 - 116	1	20
Butyl benzyl phthalate	100	83.4		ug/L		83	52 - 126	1	20
Chrysene	100	75.9		ug/L		76	58 - 112	2	20
Dibenz(a,h)anthracene	100	84.2		ug/L		84	56 - 122	4	20
Diethyl phthalate	100	73.2		ug/L		73	60 - 101	3	20
Dimethyl phthalate	100	73.5		ug/L		73	57 - 101	2	20
Di-n-butyl phthalate	100	82.6		ug/L		83	57 - 108	2	20
Di-n-octyl phthalate	100	76.4		ug/L		76	57 - 118	0	20
Fluoranthene	100	78.5		ug/L		79	55 - 114	4	20
Fluorene	100	70.7		ug/L		71	59 - 96	4	20
Hexachloro-1,3-butadiene	100	74.8		ug/L		75	36 - 84	4	20
Hexachlorobenzene	100	84.5		ug/L		85	56 - 110	6	20
Hexachlorocyclopentadiene	100	80.3		ug/L		80	16 - 86	7	20
Hexachloroethane	100	75.9		ug/L		76	40 - 77	2	20
Indeno[1,2,3-cd]pyrene	100	82.9		ug/L		83	55 - 124	2	20
Isophorone	100	67.2		ug/L		67	50 - 107	4	20
Naphthalene	100	68.8		ug/L		69	42 - 82	0	20
Nitrobenzene	100	71.0		ug/L		71	48 - 96	3	20
N-Nitrosodi-n-propylamine	101	79.5		ug/L		79	57 - 113	3	20
Pentachlorophenol	100	75.9		ug/L		76	56 - 126	1	20
Phenanthrene	100	79.2		ug/L		79	54 - 110	2	20
Phenol	100	34.9		ug/L		35	27 - 43	5	20
Pyrene	100	83.8		ug/L		84	53 - 117	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*82*		*41 - 109*
2-Fluorobiphenyl (Surr)	*77*		*31 - 103*
2-Fluorophenol (Surr)	*52*		*23 - 82*
Nitrobenzene-d5 (Surr)	*76*		*36 - 98*
Phenol-d5 (Surr)	*36*		*14 - 68*
Terphenyl-d14 (Surr)	*82*		*43 - 107*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 160-56734/1-A
Matrix: Water
Analysis Batch: 57097

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56734

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10	2.0	ug/L		06/19/13 16:18	06/20/13 18:24	1
Beryllium	ND		5.0	0.50	ug/L		06/19/13 16:18	06/20/13 18:24	1
Cadmium	ND		5.0	0.45	ug/L		06/19/13 16:18	06/20/13 18:24	1
Cobalt	ND		50	4.0	ug/L		06/19/13 16:18	06/20/13 18:24	1
Copper	ND		25	4.6	ug/L		06/19/13 16:18	06/20/13 18:24	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 160-56734/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57097 — **Prep Batch: 56734**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		100	16	ug/L		06/19/13 16:18	06/20/13 18:24	1
Lead	ND		10	1.3	ug/L		06/19/13 16:18	06/20/13 18:24	1
Nickel	ND		40	13	ug/L		06/19/13 16:18	06/20/13 18:24	1
Antimony	ND		10	4.0	ug/L		06/19/13 16:18	06/20/13 18:24	1
Selenium	ND		15	2.7	ug/L		06/19/13 16:18	06/20/13 18:24	1
Silver	ND		10	6.0	ug/L		06/19/13 16:18	06/20/13 18:24	1
Thallium	ND		20	0.88	ug/L		06/19/13 16:18	06/20/13 18:24	1
Zinc	ND		20	5.2	ug/L		06/19/13 16:18	06/20/13 18:24	1

Lab Sample ID: MB 160-56734/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57423 — **Prep Batch: 56734**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		06/19/13 16:18	06/21/13 14:38	1
Chromium	ND		10	3.1	ug/L		06/19/13 16:18	06/21/13 14:38	1

Lab Sample ID: LCS 160-56734/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57097 — **Prep Batch: 56734**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1000	966		ug/L		97	85 - 115
Beryllium	1000	1000		ug/L		100	85 - 115
Cadmium	1000	993		ug/L		99	85 - 115
Cobalt	1000	1030		ug/L		103	85 - 115
Copper	1000	988		ug/L		99	85 - 115
Iron	10000	10000		ug/L		100	85 - 115
Lead	1000	1020		ug/L		102	85 - 115
Nickel	1000	1020		ug/L		102	85 - 115
Antimony	500	495		ug/L		99	85 - 115
Selenium	1000	981		ug/L		98	85 - 115
Silver	100	89.0		ug/L		89	85 - 115
Thallium	200	215		ug/L		108	85 - 115
Zinc	1000	1000		ug/L		100	85 - 115

Lab Sample ID: LCS 160-56734/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57423 — **Prep Batch: 56734**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9520		ug/L		95	85 - 115
Chromium	1000	985		ug/L		99	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 160-2766-1 MS — **Client Sample ID: 232/233-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57097 — **Prep Batch: 56734**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	440		5000	5350		ug/L		98	70 - 130
Beryllium	ND		5000	5090		ug/L		102	70 - 130
Cadmium	ND		5000	4920		ug/L		98	70 - 130
Cobalt	210	J	5000	5080		ug/L		97	70 - 130
Copper	ND		5000	4780		ug/L		96	70 - 130
Iron	1000000		50000	1140000	4	ug/L		193	70 - 130
Lead	260		5000	5020		ug/L		95	70 - 130
Nickel	ND		5000	4970		ug/L		99	70 - 130
Antimony	100	J	2500	2530		ug/L		97	70 - 130
Selenium	83	J	5000	5090		ug/L		100	70 - 130
Silver	ND		500	430		ug/L		86	70 - 130
Thallium	48	J	1000	1020		ug/L		98	70 - 130
Zinc	20000		5000	25700		ug/L		115	70 - 130

Lab Sample ID: 160-2766-1 MS — **Client Sample ID: 232/233-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57423 — **Prep Batch: 56734**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	14000		50000	72800		ug/L		118	70 - 130
Chromium	190	J	5000	5380		ug/L		104	70 - 130

Lab Sample ID: 160-2766-1 MSD — **Client Sample ID: 232/233-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57097 — **Prep Batch: 56734**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	440		5000	5400		ug/L		99	70 - 130	1	20
Beryllium	ND		5000	5020		ug/L		100	70 - 130	1	20
Cadmium	ND		5000	4970		ug/L		99	70 - 130	1	20
Cobalt	210	J	5000	5070		ug/L		97	70 - 130	0	20
Copper	ND		5000	4830		ug/L		97	70 - 130	1	20
Iron	1000000		50000	1090000	4	ug/L		102	70 - 130	4	20
Lead	260		5000	5060		ug/L		96	70 - 130	1	20
Nickel	ND		5000	5020		ug/L		100	70 - 130	1	20
Antimony	100	J	2500	2580		ug/L		99	70 - 130	2	20
Selenium	83	J	5000	5150		ug/L		101	70 - 130	1	20
Silver	ND		500	435		ug/L		87	70 - 130	1	20
Thallium	48	J	1000	1070		ug/L		102	70 - 130	4	20
Zinc	20000		5000	25500		ug/L		111	70 - 130	1	20

Lab Sample ID: 160-2766-1 MSD — **Client Sample ID: 232/233-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57423 — **Prep Batch: 56734**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	14000		50000	69800		ug/L		112	70 - 130	4	20
Chromium	190	J	5000	5280		ug/L		102	70 - 130	2	20

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2766-1

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 160-56740/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56747 — **Prep Batch: 56740**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0573	J	0.20	0.050	ug/L		06/19/13 16:42	06/19/13 19:07	1

Lab Sample ID: LCS 160-56740/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56747 — **Prep Batch: 56740**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.32		ug/L		106	85 - 115

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 480-126204/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126208 — **Prep Batch: 126204**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/26/13 23:47	06/27/13 00:28	1
SGT-HEM	1.90	J	5.0	1.9	mg/L		06/26/13 23:47	06/27/13 00:28	1

Lab Sample ID: LCS 480-126204/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126208 — **Prep Batch: 126204**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	38.4		mg/L		96	78 - 114
SGT-HEM	20.0	16.3		mg/L		81	64 - 132

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-125658/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125658

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/24/13 12:05	1

Lab Sample ID: MB 480-125658/75 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125658

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/24/13 13:14	1

Lab Sample ID: LCS 480-125658/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125658

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.02		mg/L		102	90 - 110

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 480-125658/76 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125658

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.03		mg/L		103	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 480-125924/27 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			06/25/13 20:05	1

Lab Sample ID: LCS 480-125924/28 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	197		mg/L		99	90 - 110

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-125125/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125125

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			06/20/13 17:18	1

Lab Sample ID: LCS 480-125125/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	268	264		mg/L		99	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 160-56726/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 56726

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.000		SU		100	99.0 - 101.0

Method: SM 4500 H+ B - pH (Continued)

Lab Sample ID: 160-2766-1 DU
Matrix: Water
Analysis Batch: 56726

Client Sample ID: 232/233-MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	6.00	HF		6.000		SU				0	5

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2766-1

GC/MS VOA

Analysis Batch: 57437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2766-1	232/233-MSD	Total/NA	Water	624	
LCS 160-57437/4	Lab Control Sample	Total/NA	Water	624	
LCSD 160-57437/5	Lab Control Sample Dup	Total/NA	Water	624	
MB 160-57437/2	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 57924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2766-1 - DL	232/233-MSD	Total/NA	Water	625	
160-2766-1 - RE	232/233-MSD	Total/NA	Water	625	
LCS 160-57924/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 160-57924/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 160-57924/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 58253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2766-1 - DL	232/233-MSD	Total/NA	Water	625	57924
160-2766-1 - RE	232/233-MSD	Total/NA	Water	625	57924
LCS 160-57924/2-A	Lab Control Sample	Total/NA	Water	625	57924
LCSD 160-57924/3-A	Lab Control Sample Dup	Total/NA	Water	625	57924
MB 160-57924/1-A	Method Blank	Total/NA	Water	625	57924

Metals

Prep Batch: 56734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2766-1	232/233-MSD	Total/NA	Water	200.7/200.8	
160-2766-1	232/233-MSD	Dissolved	Water	200.7/200.8	
160-2766-1 MS	232/233-MSD	Total/NA	Water	200.7/200.8	
160-2766-1 MSD	232/233-MSD	Total/NA	Water	200.7/200.8	
LCS 160-56734/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
MB 160-56734/1-A	Method Blank	Total/NA	Water	200.7/200.8	

Prep Batch: 56740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2766-1	232/233-MSD	Total/NA	Water	245.1	
160-2766-1	232/233-MSD	Dissolved	Water	245.1	
LCS 160-56740/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 160-56740/1-A	Method Blank	Total/NA	Water	245.1	

Analysis Batch: 56747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2766-1	232/233-MSD	Total/NA	Water	245.1	56740
160-2766-1	232/233-MSD	Dissolved	Water	245.1	56740
LCS 160-56740/2-A	Lab Control Sample	Total/NA	Water	245.1	56740
MB 160-56740/1-A	Method Blank	Total/NA	Water	245.1	56740

Metals (Continued)

Analysis Batch: 57097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2766-1	232/233-MSD	Total/NA	Water	200.7 Rev 4.4	56734
160-2766-1	232/233-MSD	Dissolved	Water	200.7 Rev 4.4	56734
160-2766-1 MS	232/233-MSD	Total/NA	Water	200.7 Rev 4.4	56734
160-2766-1 MSD	232/233-MSD	Total/NA	Water	200.7 Rev 4.4	56734
LCS 160-56734/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	56734
MB 160-56734/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	56734

Analysis Batch: 57423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2766-1	232/233-MSD	Total/NA	Water	200.7 Rev 4.4	56734
160-2766-1	232/233-MSD	Dissolved	Water	200.7 Rev 4.4	56734
160-2766-1 MS	232/233-MSD	Total/NA	Water	200.7 Rev 4.4	56734
160-2766-1 MSD	232/233-MSD	Total/NA	Water	200.7 Rev 4.4	56734
LCS 160-56734/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	56734
MB 160-56734/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	56734

General Chemistry

Analysis Batch: 56726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2766-1	232/233-MSD	Total/NA	Water	SM 4500 H+ B	
160-2766-1 DU	232/233-MSD	Total/NA	Water	SM 4500 H+ B	
LCS 160-56726/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 125125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2766-1	232/233-MSD	Total/NA	Water	SM 2540D	
LCS 480-125125/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-125125/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 125658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2766-1	232/233-MSD	Total/NA	Water	350.1	
LCS 480-125658/4	Lab Control Sample	Total/NA	Water	350.1	
LCS 480-125658/76	Lab Control Sample	Total/NA	Water	350.1	
MB 480-125658/3	Method Blank	Total/NA	Water	350.1	
MB 480-125658/75	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 125924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2766-1	232/233-MSD	Total/NA	Water	410.4	
LCS 480-125924/28	Lab Control Sample	Total/NA	Water	410.4	
MB 480-125924/27	Method Blank	Total/NA	Water	410.4	

Prep Batch: 126204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2766-1	232/233-MSD	Total/NA	Water	1664A	
LCS 480-126204/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 480-126204/1-A	Method Blank	Total/NA	Water	1664A	

General Chemistry (Continued)

Analysis Batch: 126208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2766-1	232/233-MSD	Total/NA	Water	1664A	126204
LCS 480-126204/2-A	Lab Control Sample	Total/NA	Water	1664A	126204
MB 480-126204/1-A	Method Blank	Total/NA	Water	1664A	126204

Surrogate Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2766-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(71-135)	(80-122)	(84-122)
160-2766-1	232/233-MSD	109	105	110
LCS 160-57437/4	Lab Control Sample	112	109	107
LCSD 160-57437/5	Lab Control Sample Dup	110	107	106
MB 160-57437/2	Method Blank	112	111	106

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(41-109)	(31-103)	(23-82)	(36-98)	(14-68)	(43-107)
160-2766-1 - DL	232/233-MSD	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
160-2766-1 - RE	232/233-MSD	48	42	0 X	0 X	0 X	23 X
LCS 160-57924/2-A	Lab Control Sample	89	76	51	74	34	84
LCSD 160-57924/3-A	Lab Control Sample Dup	82	77	52	76	36	82
MB 160-57924/1-A	Method Blank	76	56	36	52	28	76

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2766-2
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/26/2013 3:13:56 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

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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.

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Job ID: 160-2766-2

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2766-2

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The sample was received on 6/19/2013 9:22 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 18.0º C.

BIOCHEMICAL OXYGEN DEMAND

Sample 232/233-MSD (160-2766-1) was analyzed for Biochemical oxygen demand in accordance with SM 5210B. The samples were analyzed on 06/20/2013.

The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results are reported. (USB 480-125160/1)

No difficulties were encountered during the BOD analysis.

All quality control parameters were within the acceptance limits.

Chain of Custody Record

TAL-4124 (1007)

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

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CK 111

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING/ED GALBRAITH	BILL ABERNATHY	6/19/13	197607
Address	Telephone Number (Area Code)/Fax Number: 314-502-1299	Lab Number	Page 1 of 1
City / State / Zip Code	Site Contact	Lab Contact	
Project Name and Location (State): BRIDGETON LANDFILL/MISSOURI	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): 624-VOCs	1664 HEM/TPH	5210B-BOD	625-SVOCs	200.7 245.1 T	200.7 245.1 D	2540D-TSS	410.4 350.1	pH				Special Instructions/ Conditions of Receipt
232/233-MSD	6/19/13	0721		✓				5	1	1	4				3	1	1	1	1	1	1	1	1				

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 Days

QC Requirements (Specify)

Relinquished By	Date	Time	Received By	Date	Time
1. [signature]	6/19/13	0922	1. [signature] Clarke	6-19-13	0922
2.			2.		
3.			3.		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2766-2

Login Number: 2766

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	Received same day of collection; chilling process has begun.
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?	False	Not requested on COC.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2766-2

Login Number: 2766
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/20/13 02:40 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	2.8 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Definitions/Glossary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2766-2

Qualifiers

General Chemistry

Qualifier	Qualifier Description
b	Result Detected in the Unseeded Control blank (USB).

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2766-2

Method	Method Description	Protocol	Laboratory
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2766-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2766-1	232/233-MSD	Water	06/19/13 07:21	06/19/13 09:22

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2766-2

Client Sample ID: 232/233-MSD

Lab Sample ID: 160-2766-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	41000	b	40	40	mg/L	20		SM 5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2766-2

Client Sample ID: 232/233-MSD

Lab Sample ID: 160-2766-1

Date Collected: 06/19/13 07:21

Matrix: Water

Date Received: 06/19/13 09:22

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	41000	b	40	40	mg/L			06/20/13 14:48	20

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2766-2

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-125160/1 USB
Matrix: Water
Analysis Batch: 125160

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			06/20/13 14:48	1

Lab Sample ID: LCS 480-125160/2
Matrix: Water
Analysis Batch: 125160

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	192		mg/L		97	85 - 115		

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2766-2

General Chemistry

Analysis Batch: 125160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2766-1	232/233-MSD	Total/NA	Water	SM 5210B	
LCS 480-125160/2	Lab Control Sample	Total/NA	Water	SM 5210B	
USB 480-125160/1 USB	Method Blank	Total/NA	Water	SM 5210B	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2783-1
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/28/2013 1:25:35 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

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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.

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Job ID: 160-2783-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2783-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The sample was received on 6/20/2013 11:15 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample 235/236-MSD (160-2783-1) was analyzed for volatile organic compounds (GC-MS) in accordance with EPA Method 624. The samples were analyzed on 06/21/2013.

The associated samples were analyzed at a dilution based upon the samples' screened data. The reporting limit has been adjusted for the dilutions. No lesser dilutions were analyzed due to the high concentrations on non-requested analytes in the samples. The calculation was done using an initial volume adjustment rather than a dilution factor. The reporting limits have been elevated by the appropriate factor.

Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 57437. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Job ID: 160-2783-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

2-Chloroethyl vinyl ether failed the recovery criteria high for LCS 160-57437/4 and LCSD 160-57437/5. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

The continuing calibration verification ZCCV8684 for Trichlorofluoromethane, Carbon Tetrachloride, 1,1,1- Trichloroethane, and 2-Chloroethyl vinyl ether associated with batch 57437 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other difficulties were encountered during the VOCs analysis.

All other quality control parameters were within the acceptance limits.

Organic Prep
Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 57924. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 235/236-MSD (160-2783-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA Method 625. The samples were prepared on 06/26/2013 and analyzed on 06/26/2013 and 06/27/2013.

The following samples were diluted to bring the concentration of target analytes within the calibration range: 235/236-MSD (160-2783-1) [10X]. Elevated reporting limits (RLs) are provided. Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Surrogate recoveries for the following samples were outside control limits: 235/236-MSD (160-2783-1). The samples show evidence of matrix interference; therefore, re-extraction and/or re-analysis was not performed.

No other difficulties were encountered during the SVOC analysis.

All other quality control parameters were within the acceptance limits.

ICP total and dissolved
Sample 235/236-MSD (160-2783-1) was analyzed for ICP in accordance with EPA Method 200.7, Rev. 4.4. The samples were prepared on 06/24/2013 and analyzed on 06/26/2013.

The samples were digested at a 10x dilution due to being an opaque color.

The following samples were diluted due to the nature of the sample matrix. The sample digestates were dark yellow in color: 235/236-MSD (160-2783-1)[5X]. Elevated reporting limits (RLs) are provided.

The initial calibration verification (ICV) for analytical batch 57473 was outside control criteria for thallium. The affected samples were ND. The data have been qualified and reported.

No other difficulties were encountered during the ICP analysis.

All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)
Sample 235/236-MSD (160-2783-1) was analyzed for dissolved mercury (CVAA) in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/26/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

Job ID: 160-2783-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

MERCURY
Sample 235/236-MSD (160-2783-1) was analyzed for mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/26/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

SGT-HEM
Sample 235/236-MSD (160-2783-1) was analyzed for SGT-HEM in accordance with EPA Method 1664A. The samples were prepared on 06/26/2013 and analyzed on 06/27/2013.

SGT-HEM was detected in method blank MB 480-126204/1-A at a level that was above the method detection limit but below the reporting limit.

No other difficulties were encountered during the SGT-HEM analysis.

All other quality control parameters were within the acceptance limits.

TOTAL SUSPENDED SOLIDS
Sample 235/236-MSD (160-2783-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 06/21/2013.

Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: 235/236-MSD (160-2783-1). The reporting limits (RLs) have been adjusted proportionately.

No difficulties were encountered during the TSS analysis.

All quality control parameters were within the acceptance limits.

AMMONIA
Sample 235/236-MSD (160-2783-1) was analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/24/2013.

Sample 235/236-MSD (160-2783-1)[1000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the ammonia analysis.

All quality control parameters were within the acceptance limits.

CHEMICAL OXYGEN DEMAND
Sample 235/236-MSD (160-2783-1) was analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 06/25/2013.

Sample 235/236-MSD (160-2783-1)[200X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the COD analysis.

All other quality control parameters were within the acceptance limits.

PH
Sample 235/236-MSD (160-2783-1) was analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed on 06/20/2013.

For the analysis of the associated sample in pH batch 56927, this analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the

Job ID: 160-2783-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

laboratory outside the 15 minute timeframe: 235/236-MSD (160-2783-1)

For the analysis of the associated sample in pH batch 56927, the sample was analyzed using pH indicator strips due to the sample's matrix possibly damaging the pH probe. Indicator strips used were ranged 0-14 (Lot HC270245). 235/236-MSD (160-2783-1)

No difficulties were encountered during the pH analysis.

All quality control parameters were within the acceptance limits.

COL 114

[redacted]

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY / FEI	6/20/13	197608
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 1
	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State): BRIDGETON LF / MISSOURI

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.:

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis: 624-VOCs	1664 HEM-FPH	5210B-BOD	625-SVOCs	200.7 245.1 T	200.7 245.1 D	2540D-TSS	410.4	pH				Special Instructions/ Conditions of Receipt
235/236-MSD	6/20/13	0803		✓				5	1	1	4				3	1	1	1	1	1	1	1	1				

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 Days

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	6/20/13	1115	1. Received By: [signature]	6/20/13	1115
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2783-1

Login Number: 2783

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	
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?	False	Not requested on COC.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2783-1

Login Number: 2783
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/21/13 01:53 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	2.7 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2783-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SL
245.1	Mercury (CVAA)	EPA	TAL SL
1664A	HEM and SGT-HEM	1664A	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
410.4	COD	MCAWW	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL SL

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2783-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2783-1	235/236-MSD	Water	06/20/13 08:03	06/20/13 11:15

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2783-1

Client Sample ID: 235/236-MSD

Lab Sample ID: 160-2783-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	14	J	100	10	ug/L	1		625	Total/NA
Naphthalene	88	J	100	10	ug/L	1		625	Total/NA
Phenanthrene	27	J	100	10	ug/L	1		625	Total/NA
Phenol - DL	7400		1000	210	ug/L	10		625	Total/NA
Aluminum	9900	J	10000	4000	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	380	J	500	99	ug/L	5		200.7 Rev 4.4	Total/NA
Cobalt	270	J	2500	200	ug/L	5		200.7 Rev 4.4	Total/NA
Chromium	160	J	500	160	ug/L	5		200.7 Rev 4.4	Total/NA
Iron	1000000		5000	800	ug/L	5		200.7 Rev 4.4	Total/NA
Lead	250	J	500	64	ug/L	5		200.7 Rev 4.4	Total/NA
Zinc	20000		1000	260	ug/L	5		200.7 Rev 4.4	Total/NA
Aluminum	5100	J	10000	4000	ug/L	5		200.7 Rev 4.4	Dissolved
Arsenic	380	J	500	99	ug/L	5		200.7 Rev 4.4	Dissolved
Cobalt	300	J	2500	200	ug/L	5		200.7 Rev 4.4	Dissolved
Iron	890000		5000	800	ug/L	5		200.7 Rev 4.4	Dissolved
Lead	180	J	500	64	ug/L	5		200.7 Rev 4.4	Dissolved
Selenium	130	J	750	130	ug/L	5		200.7 Rev 4.4	Dissolved
Zinc	19000		1000	260	ug/L	5		200.7 Rev 4.4	Dissolved
Mercury	5.1	J	6.0	1.5	ug/L	1		245.1	Total/NA
Oil & Grease	30		17	4.7	mg/L	1		1664A	Total/NA
SGT-HEM	9.7	J B	17	6.5	mg/L	1		1664A	Total/NA
Ammonia	730		20	9.0	mg/L	1000		350.1	Total/NA
Chemical Oxygen Demand	60000		2000	1000	mg/L	200		410.4	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
Total Suspended Solids	2500		100	100	mg/L	1		SM 2540D	Total/NA
pH	6.00	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2783-1

Client Sample ID: 235/236-MSD

Date Collected: 06/20/13 08:03
Date Received: 06/20/13 11:15

Lab Sample ID: 160-2783-1

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.5	ug/L			06/21/13 13:05	1
1,1,2,2-Tetrachloroethane	ND		50	5.0	ug/L			06/21/13 13:05	1
1,1,2-Trichloroethane	ND		50	7.5	ug/L			06/21/13 13:05	1
1,1-Dichloroethane	ND		50	3.5	ug/L			06/21/13 13:05	1
1,1-Dichloroethene	ND		50	4.0	ug/L			06/21/13 13:05	1
1,2-Dichlorobenzene	ND		50	3.0	ug/L			06/21/13 13:05	1
1,2-Dichloroethane	ND		50	5.0	ug/L			06/21/13 13:05	1
1,2-Dichloropropane	ND		50	5.0	ug/L			06/21/13 13:05	1
1,3-Dichlorobenzene	ND		50	4.0	ug/L			06/21/13 13:05	1
1,4-Dichlorobenzene	ND		50	6.0	ug/L			06/21/13 13:05	1
2-Chloroethyl vinyl ether	ND	*	100	8.5	ug/L			06/21/13 13:05	1
Benzene	ND		50	3.0	ug/L			06/21/13 13:05	1
Bromodichloromethane	ND		50	4.5	ug/L			06/21/13 13:05	1
Bromoform	ND		50	8.5	ug/L			06/21/13 13:05	1
Bromomethane	ND		100	6.5	ug/L			06/21/13 13:05	1
Carbon tetrachloride	ND		50	6.5	ug/L			06/21/13 13:05	1
Chlorobenzene	ND		50	7.5	ug/L			06/21/13 13:05	1
Chloroethane	ND		100	5.0	ug/L			06/21/13 13:05	1
Chloroform	ND		50	5.0	ug/L			06/21/13 13:05	1
Chloromethane	ND		100	4.0	ug/L			06/21/13 13:05	1
cis-1,2-Dichloroethene	ND		50	4.5	ug/L			06/21/13 13:05	1
cis-1,3-Dichloropropene	ND		50	3.5	ug/L			06/21/13 13:05	1
Dibromochloromethane	ND		50	6.5	ug/L			06/21/13 13:05	1
Ethylbenzene	ND		50	4.5	ug/L			06/21/13 13:05	1
Methylene Chloride	ND		50	5.5	ug/L			06/21/13 13:05	1
Tetrachloroethene	ND		50	9.0	ug/L			06/21/13 13:05	1
Toluene	ND		50	3.5	ug/L			06/21/13 13:05	1
trans-1,2-Dichloroethene	ND		50	4.0	ug/L			06/21/13 13:05	1
trans-1,3-Dichloropropene	ND		50	4.0	ug/L			06/21/13 13:05	1
Trichloroethene	ND		50	11	ug/L			06/21/13 13:05	1
Trichlorofluoromethane	ND		50	5.5	ug/L			06/21/13 13:05	1
Vinyl chloride	ND		100	4.0	ug/L			06/21/13 13:05	1
Xylenes, Total	ND		150	10	ug/L			06/21/13 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*71 - 135*		*06/21/13 13:05*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 122*		*06/21/13 13:05*	*1*
Toluene-d8 (Surr)	*106*		*84 - 122*		*06/21/13 13:05*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
bis (2-chloroisopropyl) ether	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
2,4,6-Trichlorophenol	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
2,4-Dichlorophenol	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
2,4-Dimethylphenol	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
2,4-Dinitrophenol	ND		520	21	ug/L		06/26/13 13:09	06/27/13 00:46	1
2,4-Dinitrotoluene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
2,6-Dinitrotoluene	ND		100	22	ug/L		06/26/13 13:09	06/27/13 00:46	1
2-Chloronaphthalene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2783-1

Client Sample ID: 235/236-MSD

Date Collected: 06/20/13 08:03
Date Received: 06/20/13 11:15

Lab Sample ID: 160-2783-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
2-Nitrophenol	ND		100	16	ug/L		06/26/13 13:09	06/27/13 00:46	1
3,3'-Dichlorobenzidine	ND		520	13	ug/L		06/26/13 13:09	06/27/13 00:46	1
4,6-Dinitro-2-methylphenol	ND		520	13	ug/L		06/26/13 13:09	06/27/13 00:46	1
4-Bromophenyl phenyl ether	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
4-Chloro-3-methylphenol	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
4-Chlorophenyl phenyl ether	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
4-Nitrophenol	ND		520	21	ug/L		06/26/13 13:09	06/27/13 00:46	1
Acenaphthene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Acenaphthylene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Anthracene	**14**	**J**	100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Benzidine	ND		1000	210	ug/L		06/26/13 13:09	06/27/13 00:46	1
Benzo[a]anthracene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Benzo[a]pyrene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Benzo[b]fluoranthene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Benzo[g,h,i]perylene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Benzo[k]fluoranthene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Bis(2-chloroethoxy)methane	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Bis(2-chloroethyl)ether	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Bis(2-ethylhexyl) phthalate	ND		100	19	ug/L		06/26/13 13:09	06/27/13 00:46	1
Butyl benzyl phthalate	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Chrysene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Dibenz(a,h)anthracene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Diethyl phthalate	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Dimethyl phthalate	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Di-n-butyl phthalate	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Di-n-octyl phthalate	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Fluoranthene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Fluorene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Hexachloro-1,3-butadiene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Hexachlorobenzene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Hexachlorocyclopentadiene	ND		520	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Hexachloroethane	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Indeno[1,2,3-cd]pyrene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Isophorone	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Naphthalene	**88**	**J**	100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Nitrobenzene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
N-Nitrosodimethylamine	ND		100	21	ug/L		06/26/13 13:09	06/27/13 00:46	1
N-Nitrosodi-n-propylamine	ND		100	16	ug/L		06/26/13 13:09	06/27/13 00:46	1
N-Nitrosodiphenylamine	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Pentachlorophenol	ND		520	13	ug/L		06/26/13 13:09	06/27/13 00:46	1
Phenanthrene	**27**	**J**	100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1
Pyrene	ND		100	10	ug/L		06/26/13 13:09	06/27/13 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*64*		*41 - 109*	*06/26/13 13:09*	*06/27/13 00:46*	*1*
2-Fluorobiphenyl (Surr)	*57*		*31 - 103*	*06/26/13 13:09*	*06/27/13 00:46*	*1*
2-Fluorophenol (Surr)	*0*	*X*	*23 - 82*	*06/26/13 13:09*	*06/27/13 00:46*	*1*
Nitrobenzene-d5 (Surr)	*0*	*X*	*36 - 98*	*06/26/13 13:09*	*06/27/13 00:46*	*1*
Phenol-d5 (Surr)	*0*	*X*	*14 - 68*	*06/26/13 13:09*	*06/27/13 00:46*	*1*

Client Sample ID: 235/236-MSD

Lab Sample ID: 160-2783-1

Date Collected: 06/20/13 08:03

Matrix: Water

Date Received: 06/20/13 11:15

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14 (Surr)	23	X	43 - 107	06/26/13 13:09	06/27/13 00:46	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**7400**		1000	210	ug/L		06/26/13 13:09	06/26/13 20:09	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	0	D X	41 - 109	06/26/13 13:09	06/26/13 20:09	10
2-Fluorobiphenyl (Surr)	0	D X	31 - 103	06/26/13 13:09	06/26/13 20:09	10
2-Fluorophenol (Surr)	0	D X	23 - 82	06/26/13 13:09	06/26/13 20:09	10
Nitrobenzene-d5 (Surr)	0	D X	36 - 98	06/26/13 13:09	06/26/13 20:09	10
Phenol-d5 (Surr)	0	D X	14 - 68	06/26/13 13:09	06/26/13 20:09	10
Terphenyl-d14 (Surr)	0	D X	43 - 107	06/26/13 13:09	06/26/13 20:09	10

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		500	300	ug/L		06/24/13 12:35	06/26/13 17:43	5
Aluminum	**9900**	**J**	10000	4000	ug/L		06/24/13 12:35	06/26/13 17:43	5
Arsenic	**380**	**J**	500	99	ug/L		06/24/13 12:35	06/26/13 17:43	5
Beryllium	ND		250	25	ug/L		06/24/13 12:35	06/26/13 17:43	5
Cadmium	ND		250	23	ug/L		06/24/13 12:35	06/26/13 17:43	5
Cobalt	**270**	**J**	2500	200	ug/L		06/24/13 12:35	06/26/13 17:43	5
Chromium	**160**	**J**	500	160	ug/L		06/24/13 12:35	06/26/13 17:43	5
Copper	ND		1300	230	ug/L		06/24/13 12:35	06/26/13 17:43	5
Iron	**1000000**		5000	800	ug/L		06/24/13 12:35	06/26/13 17:43	5
Nickel	ND		2000	670	ug/L		06/24/13 12:35	06/26/13 17:43	5
Lead	**250**	**J**	500	64	ug/L		06/24/13 12:35	06/26/13 17:43	5
Antimony	ND		500	200	ug/L		06/24/13 12:35	06/26/13 17:43	5
Selenium	ND		750	130	ug/L		06/24/13 12:35	06/26/13 17:43	5
Thallium	ND	^	1000	44	ug/L		06/24/13 12:35	06/26/13 17:43	5
Zinc	**20000**		1000	260	ug/L		06/24/13 12:35	06/26/13 17:43	5

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5100**	**J**	10000	4000	ug/L		06/24/13 12:35	06/26/13 17:47	5
Antimony	ND		500	200	ug/L		06/24/13 12:35	06/26/13 17:47	5
Arsenic	**380**	**J**	500	99	ug/L		06/24/13 12:35	06/26/13 17:47	5
Beryllium	ND		250	25	ug/L		06/24/13 12:35	06/26/13 17:47	5
Cadmium	ND		250	23	ug/L		06/24/13 12:35	06/26/13 17:47	5
Chromium	ND		500	160	ug/L		06/24/13 12:35	06/26/13 17:47	5
Cobalt	**300**	**J**	2500	200	ug/L		06/24/13 12:35	06/26/13 17:47	5
Copper	ND		1300	230	ug/L		06/24/13 12:35	06/26/13 17:47	5
Iron	**890000**		5000	800	ug/L		06/24/13 12:35	06/26/13 17:47	5
Lead	**180**	**J**	500	64	ug/L		06/24/13 12:35	06/26/13 17:47	5
Nickel	ND		2000	670	ug/L		06/24/13 12:35	06/26/13 17:47	5
Selenium	**130**	**J**	750	130	ug/L		06/24/13 12:35	06/26/13 17:47	5
Silver	ND		500	300	ug/L		06/24/13 12:35	06/26/13 17:47	5
Thallium	ND	^	1000	44	ug/L		06/24/13 12:35	06/26/13 17:47	5
Zinc	**19000**		1000	260	ug/L		06/24/13 12:35	06/26/13 17:47	5

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2783-1

Client Sample ID: 235/236-MSD

Lab Sample ID: 160-2783-1

Date Collected: 06/20/13 08:03

Matrix: Water

Date Received: 06/20/13 11:15

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	5.1	J	6.0	1.5	ug/L		06/26/13 10:51	06/26/13 12:33	1

Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		6.0	1.5	ug/L		06/26/13 10:51	06/26/13 12:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	30		17	4.7	mg/L		06/26/13 23:47	06/27/13 00:28	1
SGT-HEM	9.7	J B	17	6.5	mg/L		06/26/13 23:47	06/27/13 00:28	1
Ammonia	730		20	9.0	mg/L			06/24/13 12:08	1000
Chemical Oxygen Demand	60000		2000	1000	mg/L			06/25/13 13:29	200

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	2500		100	100	mg/L			06/21/13 15:23	1
pH	6.00	HF	0.100	0.100	SU			06/20/13 12:43	1

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-57437/2
Matrix: Water
Analysis Batch: 57437

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/21/13 10:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/21/13 10:09	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/21/13 10:09	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/21/13 10:09	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/21/13 10:09	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/21/13 10:09	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/21/13 10:09	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/21/13 10:09	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/21/13 10:09	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/21/13 10:09	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/21/13 10:09	1
Benzene	ND		1.0	0.060	ug/L			06/21/13 10:09	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/21/13 10:09	1
Bromoform	ND		1.0	0.17	ug/L			06/21/13 10:09	1
Bromomethane	ND		2.0	0.13	ug/L			06/21/13 10:09	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/21/13 10:09	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/21/13 10:09	1
Chloroethane	ND		2.0	0.10	ug/L			06/21/13 10:09	1
Chloroform	ND		1.0	0.10	ug/L			06/21/13 10:09	1
Chloromethane	ND		2.0	0.080	ug/L			06/21/13 10:09	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/21/13 10:09	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/21/13 10:09	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/21/13 10:09	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/21/13 10:09	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/21/13 10:09	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/21/13 10:09	1
Toluene	ND		1.0	0.070	ug/L			06/21/13 10:09	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/21/13 10:09	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/21/13 10:09	1
Trichloroethene	ND		1.0	0.21	ug/L			06/21/13 10:09	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/21/13 10:09	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/21/13 10:09	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/21/13 10:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*71 - 135*		*06/21/13 10:09*	*1*
4-Bromofluorobenzene (Surr)	*111*		*80 - 122*		*06/21/13 10:09*	*1*
Toluene-d8 (Surr)	*106*		*84 - 122*		*06/21/13 10:09*	*1*

Lab Sample ID: LCS 160-57437/4
Matrix: Water
Analysis Batch: 57437

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	12.2		ug/L		122	82 - 127
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	69 - 130
1,1,2-Trichloroethane	10.0	10.8		ug/L		108	78 - 122
1,1-Dichloroethane	10.0	11.1		ug/L		111	82 - 125

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-57437/4
Matrix: Water
Analysis Batch: 57437

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	10.9		ug/L		109	77 - 127
1,2-Dichlorobenzene	10.0	10.3		ug/L		103	83 - 121
1,2-Dichloroethane	10.0	11.2		ug/L		112	78 - 127
1,2-Dichloropropane	10.0	10.7		ug/L		107	81 - 124
1,3-Dichlorobenzene	10.0	10.7		ug/L		107	85 - 121
1,4-Dichlorobenzene	10.0	10.3		ug/L		103	83 - 116
2-Chloroethyl vinyl ether	10.0	15.5	*	ug/L		155	34 - 140
Benzene	10.0	10.9		ug/L		109	84 - 124
Bromodichloromethane	10.0	10.7		ug/L		107	81 - 127
Bromoform	10.0	10.4		ug/L		104	78 - 138
Bromomethane	10.0	9.80		ug/L		98	48 - 162
Carbon tetrachloride	10.0	12.4		ug/L		124	79 - 132
Chlorobenzene	10.0	10.8		ug/L		108	85 - 118
Chloroethane	10.0	9.48		ug/L		95	71 - 132
Chloroform	10.0	11.7		ug/L		117	82 - 124
Chloromethane	10.0	10.3		ug/L		103	68 - 136
cis-1,2-Dichloroethene	10.0	11.0		ug/L		110	83 - 123
cis-1,3-Dichloropropene	10.0	11.9		ug/L		119	79 - 132
Dibromochloromethane	10.0	11.1		ug/L		111	81 - 129
Ethylbenzene	10.0	11.5		ug/L		115	85 - 125
Methylene Chloride	10.0	9.34		ug/L		93	70 - 127
Tetrachloroethene	10.0	11.9		ug/L		119	76 - 129
Toluene	10.0	11.2		ug/L		112	83 - 127
trans-1,2-Dichloroethene	10.0	10.4		ug/L		104	78 - 122
trans-1,3-Dichloropropene	10.0	11.4		ug/L		114	83 - 130
Trichloroethene	10.0	11.1		ug/L		111	81 - 123
Trichlorofluoromethane	10.0	12.9		ug/L		129	72 - 135
Vinyl chloride	10.0	10.9		ug/L		109	72 - 132
Xylenes, Total	30.0	35.3		ug/L		118	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*71 - 135*
4-Bromofluorobenzene (Surr)	*109*		*80 - 122*
Toluene-d8 (Surr)	*107*		*84 - 122*

Lab Sample ID: LCSD 160-57437/5
Matrix: Water
Analysis Batch: 57437

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	10.0	11.7		ug/L		117	82 - 127	4	20
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	69 - 130	0	20
1,1,2-Trichloroethane	10.0	10.3		ug/L		103	78 - 122	4	20
1,1-Dichloroethane	10.0	10.2		ug/L		102	82 - 125	8	20
1,1-Dichloroethene	10.0	10.3		ug/L		103	77 - 127	6	20
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	83 - 121	1	20
1,2-Dichloroethane	10.0	10.8		ug/L		108	78 - 127	3	20
1,2-Dichloropropane	10.0	10.3		ug/L		103	81 - 124	4	20

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-57437/5
Matrix: Water
Analysis Batch: 57437

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	10.0	10.7		ug/L		107	85 - 121	1	20
1,4-Dichlorobenzene	10.0	10.4		ug/L		104	83 - 116	0	20
2-Chloroethyl vinyl ether	10.0	15.6	*	ug/L		156	34 - 140	1	20
Benzene	10.0	10.4		ug/L		104	84 - 124	4	20
Bromodichloromethane	10.0	10.6		ug/L		106	81 - 127	1	20
Bromoform	10.0	10.8		ug/L		108	78 - 138	4	20
Bromomethane	10.0	9.22		ug/L		92	48 - 162	6	20
Carbon tetrachloride	10.0	11.7		ug/L		117	79 - 132	6	20
Chlorobenzene	10.0	10.4		ug/L		104	85 - 118	4	20
Chloroethane	10.0	9.15		ug/L		92	71 - 132	4	20
Chloroform	10.0	11.2		ug/L		112	82 - 124	4	20
Chloromethane	10.0	9.72		ug/L		97	68 - 136	6	20
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	83 - 123	7	20
cis-1,3-Dichloropropene	10.0	11.4		ug/L		114	79 - 132	5	20
Dibromochloromethane	10.0	11.1		ug/L		111	81 - 129	0	20
Ethylbenzene	10.0	10.9		ug/L		109	85 - 125	5	20
Methylene Chloride	10.0	8.88		ug/L		89	70 - 127	5	20
Tetrachloroethene	10.0	11.3		ug/L		113	76 - 129	5	20
Toluene	10.0	10.9		ug/L		109	83 - 127	3	20
trans-1,2-Dichloroethene	10.0	10.2		ug/L		102	78 - 122	2	20
trans-1,3-Dichloropropene	10.0	10.9		ug/L		109	83 - 130	4	20
Trichloroethene	10.0	10.3		ug/L		103	81 - 123	7	20
Trichlorofluoromethane	10.0	12.1		ug/L		121	72 - 135	7	20
Vinyl chloride	10.0	10.6		ug/L		106	72 - 132	2	20
Xylenes, Total	30.0	33.7		ug/L		112	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*71 - 135*
4-Bromofluorobenzene (Surr)	*107*		*80 - 122*
Toluene-d8 (Surr)	*106*		*84 - 122*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
bis (2-chloroisopropyl) ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4,6-Trichlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dichlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dimethylphenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dinitrophenol	ND		50	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dinitrotoluene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,6-Dinitrotoluene	ND		10	2.2	ug/L		06/26/13 13:09	06/26/13 17:50	1
2-Chloronaphthalene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2-Chlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		10	1.5	ug/L		06/26/13 13:09	06/26/13 17:50	1
3,3'-Dichlorobenzidine	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
4,6-Dinitro-2-methylphenol	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Bromophenyl phenyl ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Chlorophenyl phenyl ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Nitrophenol	ND		50	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Acenaphthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Acenaphthylene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzidine	ND		100	20	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[a]anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[a]pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[b]fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[g,h,i]perylene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[k]fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-chloroethoxy)methane	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-chloroethyl)ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-ethylhexyl) phthalate	ND		10	1.9	ug/L		06/26/13 13:09	06/26/13 17:50	1
Butyl benzyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Chrysene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Dibenz(a,h)anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Diethyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Dimethyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Di-n-butyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Di-n-octyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Fluorene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachloro-1,3-butadiene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachlorobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachlorocyclopentadiene	ND		50	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachloroethane	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Indeno[1,2,3-cd]pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Isophorone	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Naphthalene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Nitrobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodiphenylamine	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Pentachlorophenol	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
Phenanthrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Phenol	ND		10	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*76*		*41 - 109*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
2-Fluorobiphenyl (Surr)	*56*		*31 - 103*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
2-Fluorophenol (Surr)	*36*		*23 - 82*	*06/26/13 13:09*	*06/26/13 17:50*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	52		36 - 98	06/26/13 13:09	06/26/13 17:50	1
Phenol-d5 (Surr)	28		14 - 68	06/26/13 13:09	06/26/13 17:50	1
Terphenyl-d14 (Surr)	76		43 - 107	06/26/13 13:09	06/26/13 17:50	1

Lab Sample ID: LCS 160-57924/2-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	100	72.6		ug/L		72	44 - 84
bis (2-chloroisopropyl) ether	100	65.8		ug/L		66	42 - 102
2,4,6-Trichlorophenol	100	71.5		ug/L		71	54 - 105
2,4-Dichlorophenol	100	64.4		ug/L		64	46 - 103
2,4-Dimethylphenol	100	65.4		ug/L		65	40 - 105
2,4-Dinitrophenol	100	69.2		ug/L		69	42 - 146
2,4-Dinitrotoluene	100	79.0		ug/L		79	62 - 101
2,6-Dinitrotoluene	100	78.8		ug/L		79	62 - 103
2-Chloronaphthalene	100	75.5		ug/L		76	45 - 95
2-Chlorophenol	100	65.1		ug/L		65	56 - 93
2-Nitrophenol	101	71.7		ug/L		71	51 - 98
3,3'-Dichlorobenzidine	100	64.1		ug/L		64	26 - 77
4,6-Dinitro-2-methylphenol	100	82.6		ug/L		83	61 - 120
4-Bromophenyl phenyl ether	100	89.1		ug/L		89	54 - 111
4-Chloro-3-methylphenol	100	60.1		ug/L		60	45 - 106
4-Chlorophenyl phenyl ether	100	76.6		ug/L		77	53 - 100
4-Nitrophenol	100	34.8	J	ug/L		35	25 - 45
Acenaphthene	100	75.7		ug/L		76	51 - 89
Acenaphthylene	100	76.1		ug/L		76	46 - 98
Anthracene	100	83.5		ug/L		84	54 - 111
Benzo[a]anthracene	100	88.7		ug/L		89	68 - 108
Benzo[a]pyrene	100	83.5		ug/L		84	55 - 108
Benzo[b]fluoranthene	100	82.4		ug/L		82	57 - 114
Benzo[g,h,i]perylene	100	86.8		ug/L		87	58 - 120
Benzo[k]fluoranthene	100	89.3		ug/L		89	59 - 112
Bis(2-chloroethoxy)methane	100	67.0		ug/L		67	53 - 99
Bis(2-chloroethyl)ether	100	65.8		ug/L		66	50 - 97
Bis(2-ethylhexyl) phthalate	100	84.1		ug/L		84	54 - 116
Butyl benzyl phthalate	100	82.8		ug/L		83	52 - 126
Chrysene	100	77.5		ug/L		77	58 - 112
Dibenz(a,h)anthracene	100	87.9		ug/L		88	56 - 122
Diethyl phthalate	100	75.3		ug/L		75	60 - 101
Dimethyl phthalate	100	74.8		ug/L		75	57 - 101
Di-n-butyl phthalate	100	84.4		ug/L		84	57 - 108
Di-n-octyl phthalate	100	76.6		ug/L		77	57 - 118
Fluoranthene	100	81.8		ug/L		82	55 - 114
Fluorene	100	73.8		ug/L		74	59 - 96
Hexachloro-1,3-butadiene	100	77.5		ug/L		77	36 - 84
Hexachlorobenzene	100	90.1		ug/L		90	56 - 110

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-57924/2-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	100	86.3		ug/L		86	16 - 86
Hexachloroethane	100	74.3		ug/L		74	40 - 77
Indeno[1,2,3-cd]pyrene	100	84.3		ug/L		84	55 - 124
Isophorone	100	64.8		ug/L		65	50 - 107
Naphthalene	100	69.0		ug/L		69	42 - 82
Nitrobenzene	100	69.1		ug/L		69	48 - 96
N-Nitrosodi-n-propylamine	101	77.0		ug/L		77	57 - 113
Pentachlorophenol	100	76.8		ug/L		77	56 - 126
Phenanthrene	100	80.9		ug/L		81	54 - 110
Phenol	100	33.0		ug/L		33	27 - 43
Pyrene	100	85.1		ug/L		85	53 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*89*		*41 - 109*
2-Fluorobiphenyl (Surr)	*76*		*31 - 103*
2-Fluorophenol (Surr)	*51*		*23 - 82*
Nitrobenzene-d5 (Surr)	*74*		*36 - 98*
Phenol-d5 (Surr)	*34*		*14 - 68*
Terphenyl-d14 (Surr)	*84*		*43 - 107*

Lab Sample ID: LCSD 160-57924/3-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	100	72.0		ug/L		72	44 - 84	1	20
bis (2-chloroisopropyl) ether	100	69.4		ug/L		69	42 - 102	5	20
2,4,6-Trichlorophenol	100	70.8		ug/L		71	54 - 105	1	20
2,4-Dichlorophenol	100	64.3		ug/L		64	46 - 103	0	20
2,4-Dimethylphenol	100	65.0		ug/L		65	40 - 105	1	20
2,4-Dinitrophenol	100	68.9		ug/L		69	42 - 146	0	20
2,4-Dinitrotoluene	100	76.2		ug/L		76	62 - 101	4	20
2,6-Dinitrotoluene	100	78.8		ug/L		79	62 - 103	0	20
2-Chloronaphthalene	100	76.9		ug/L		77	45 - 95	2	20
2-Chlorophenol	100	65.0		ug/L		65	56 - 93	0	20
2-Nitrophenol	101	71.8		ug/L		71	51 - 98	0	20
3,3'-Dichlorobenzidine	100	63.5		ug/L		63	26 - 77	1	20
4,6-Dinitro-2-methylphenol	100	82.0		ug/L		82	61 - 120	1	20
4-Bromophenyl phenyl ether	100	86.2		ug/L		86	54 - 111	3	20
4-Chloro-3-methylphenol	100	60.6		ug/L		60	45 - 106	1	20
4-Chlorophenyl phenyl ether	100	73.3		ug/L		73	53 - 100	4	20
4-Nitrophenol	100	36.8	J	ug/L		37	25 - 45	5	20
Acenaphthene	100	73.8		ug/L		74	51 - 89	3	20
Acenaphthylene	100	75.6		ug/L		76	46 - 98	1	20
Anthracene	100	80.3		ug/L		80	54 - 111	4	20
Benzo[a]anthracene	100	86.5		ug/L		86	68 - 108	2	20
Benzo[a]pyrene	100	80.5		ug/L		80	55 - 108	4	20
Benzo[b]fluoranthene	100	78.6		ug/L		79	57 - 114	5	20

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-57924/3-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[g,h,i]perylene	100	83.6		ug/L		84	58 - 120	4	20
Benzo[k]fluoranthene	100	87.0		ug/L		87	59 - 112	3	20
Bis(2-chloroethoxy)methane	100	67.8		ug/L		68	53 - 99	1	20
Bis(2-chloroethyl)ether	100	67.7		ug/L		68	50 - 97	3	20
Bis(2-ethylhexyl) phthalate	100	83.5		ug/L		84	54 - 116	1	20
Butyl benzyl phthalate	100	83.4		ug/L		83	52 - 126	1	20
Chrysene	100	75.9		ug/L		76	58 - 112	2	20
Dibenz(a,h)anthracene	100	84.2		ug/L		84	56 - 122	4	20
Diethyl phthalate	100	73.2		ug/L		73	60 - 101	3	20
Dimethyl phthalate	100	73.5		ug/L		73	57 - 101	2	20
Di-n-butyl phthalate	100	82.6		ug/L		83	57 - 108	2	20
Di-n-octyl phthalate	100	76.4		ug/L		76	57 - 118	0	20
Fluoranthene	100	78.5		ug/L		79	55 - 114	4	20
Fluorene	100	70.7		ug/L		71	59 - 96	4	20
Hexachloro-1,3-butadiene	100	74.8		ug/L		75	36 - 84	4	20
Hexachlorobenzene	100	84.5		ug/L		85	56 - 110	6	20
Hexachlorocyclopentadiene	100	80.3		ug/L		80	16 - 86	7	20
Hexachloroethane	100	75.9		ug/L		76	40 - 77	2	20
Indeno[1,2,3-cd]pyrene	100	82.9		ug/L		83	55 - 124	2	20
Isophorone	100	67.2		ug/L		67	50 - 107	4	20
Naphthalene	100	68.8		ug/L		69	42 - 82	0	20
Nitrobenzene	100	71.0		ug/L		71	48 - 96	3	20
N-Nitrosodi-n-propylamine	101	79.5		ug/L		79	57 - 113	3	20
Pentachlorophenol	100	75.9		ug/L		76	56 - 126	1	20
Phenanthrene	100	79.2		ug/L		79	54 - 110	2	20
Phenol	100	34.9		ug/L		35	27 - 43	5	20
Pyrene	100	83.8		ug/L		84	53 - 117	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*82*		*41 - 109*
2-Fluorobiphenyl (Surr)	*77*		*31 - 103*
2-Fluorophenol (Surr)	*52*		*23 - 82*
Nitrobenzene-d5 (Surr)	*76*		*36 - 98*
Phenol-d5 (Surr)	*36*		*14 - 68*
Terphenyl-d14 (Surr)	*82*		*43 - 107*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 160-57473/1-A
Matrix: Water
Analysis Batch: 58206

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57473

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		06/24/13 12:35	06/26/13 17:09	1
Arsenic	ND		10	2.0	ug/L		06/24/13 12:35	06/26/13 17:09	1
Beryllium	ND		5.0	0.50	ug/L		06/24/13 12:35	06/26/13 17:09	1
Cadmium	ND		5.0	0.45	ug/L		06/24/13 12:35	06/26/13 17:09	1
Chromium	ND		10	3.1	ug/L		06/24/13 12:35	06/26/13 17:09	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 160-57473/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58206 — **Prep Batch: 57473**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		50	4.0	ug/L		06/24/13 12:35	06/26/13 17:09	1
Copper	ND		25	4.6	ug/L		06/24/13 12:35	06/26/13 17:09	1
Iron	ND		100	16	ug/L		06/24/13 12:35	06/26/13 17:09	1
Lead	ND		10	1.3	ug/L		06/24/13 12:35	06/26/13 17:09	1
Nickel	ND		40	13	ug/L		06/24/13 12:35	06/26/13 17:09	1
Antimony	ND		10	4.0	ug/L		06/24/13 12:35	06/26/13 17:09	1
Selenium	ND		15	2.7	ug/L		06/24/13 12:35	06/26/13 17:09	1
Silver	ND		10	6.0	ug/L		06/24/13 12:35	06/26/13 17:09	1
Thallium	ND	^	20	0.88	ug/L		06/24/13 12:35	06/26/13 17:09	1
Zinc	ND		20	5.2	ug/L		06/24/13 12:35	06/26/13 17:09	1

Lab Sample ID: LCS 160-57473/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58206 — **Prep Batch: 57473**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	10000		ug/L		100	85 - 115
Arsenic	1000	1020		ug/L		102	85 - 115
Beryllium	1000	1050		ug/L		105	85 - 115
Cadmium	1000	1030		ug/L		103	85 - 115
Chromium	1000	1060		ug/L		106	85 - 115
Cobalt	1000	1080		ug/L		108	85 - 115
Copper	1000	1060		ug/L		106	85 - 115
Iron	10000	10500		ug/L		105	85 - 115
Lead	1000	1080		ug/L		108	85 - 115
Nickel	1000	1070		ug/L		107	85 - 115
Antimony	500	527		ug/L		105	85 - 115
Selenium	1000	1040		ug/L		104	85 - 115
Silver	100	100		ug/L		100	85 - 115
Thallium	200	230	^	ug/L		115	85 - 115
Zinc	1000	1040		ug/L		104	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 160-57903/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57922 — **Prep Batch: 57903**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.050	ug/L		06/26/13 10:51	06/26/13 12:30	1

Lab Sample ID: LCS 160-57903/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57922 — **Prep Batch: 57903**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.21		ug/L		104	85 - 115

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 160-2783-1 MS — **Client Sample ID: 235/236-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57922 — **Prep Batch: 57903**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.1	J	150	139		ug/L		89	70 - 130

Lab Sample ID: 160-2783-1 MSD — **Client Sample ID: 235/236-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57922 — **Prep Batch: 57903**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	5.1	J	150	141		ug/L		90	70 - 130	1	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 480-126204/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126208 — **Prep Batch: 126204**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/26/13 23:47	06/27/13 00:28	1
SGT-HEM	1.90	J	5.0	1.9	mg/L		06/26/13 23:47	06/27/13 00:28	1

Lab Sample ID: LCS 480-126204/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126208 — **Prep Batch: 126204**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	38.4		mg/L		96	78 - 114
SGT-HEM	20.0	16.3		mg/L		81	64 - 132

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-125658/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125658

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/24/13 12:05	1

Lab Sample ID: MB 480-125658/75 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125658

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/24/13 13:14	1

Lab Sample ID: LCS 480-125658/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125658

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.02		mg/L		102	90 - 110

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 480-125658/76 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125658

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.03		mg/L		103	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 480-125876/27 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			06/25/13 13:29	1

Lab Sample ID: MB 480-125876/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			06/25/13 13:29	1

Lab Sample ID: LCS 480-125876/28 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	192		mg/L		96	90 - 110

Lab Sample ID: LCS 480-125876/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	192		mg/L		96	90 - 110

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-125357/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125357

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			06/21/13 15:23	1

Lab Sample ID: LCS 480-125357/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125357

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	221	208		mg/L		94	88 - 110

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2783-1

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 160-56927/5
Matrix: Water
Analysis Batch: 56927

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
pH			7.00	7.000		SU		100	99.0 - 101.0		

Lab Sample ID: 160-2783-1 DU
Matrix: Water
Analysis Batch: 56927

Client Sample ID: 235/236-MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	6.00	HF		6.000		SU				0	5

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2783-1

GC/MS VOA

Analysis Batch: 57437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2783-1	235/236-MSD	Total/NA	Water	624	
LCS 160-57437/4	Lab Control Sample	Total/NA	Water	624	
LCSD 160-57437/5	Lab Control Sample Dup	Total/NA	Water	624	
MB 160-57437/2	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 57924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2783-1	235/236-MSD	Total/NA	Water	625	
160-2783-1 - DL	235/236-MSD	Total/NA	Water	625	
LCS 160-57924/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 160-57924/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 160-57924/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 58253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2783-1	235/236-MSD	Total/NA	Water	625	57924
160-2783-1 - DL	235/236-MSD	Total/NA	Water	625	57924
LCS 160-57924/2-A	Lab Control Sample	Total/NA	Water	625	57924
LCSD 160-57924/3-A	Lab Control Sample Dup	Total/NA	Water	625	57924
MB 160-57924/1-A	Method Blank	Total/NA	Water	625	57924

Metals

Prep Batch: 57473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2783-1	235/236-MSD	Total/NA	Water	200.7/200.8	
160-2783-1	235/236-MSD	Dissolved	Water	200.7/200.8	
LCS 160-57473/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
MB 160-57473/1-A	Method Blank	Total/NA	Water	200.7/200.8	

Prep Batch: 57903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2783-1	235/236-MSD	Total/NA	Water	245.1	
160-2783-1	235/236-MSD	Dissolved	Water	245.1	
160-2783-1 MS	235/236-MSD	Total/NA	Water	245.1	
160-2783-1 MSD	235/236-MSD	Total/NA	Water	245.1	
LCS 160-57903/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 160-57903/1-A	Method Blank	Total/NA	Water	245.1	

Analysis Batch: 57922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2783-1	235/236-MSD	Total/NA	Water	245.1	57903
160-2783-1	235/236-MSD	Dissolved	Water	245.1	57903
160-2783-1 MS	235/236-MSD	Total/NA	Water	245.1	57903
160-2783-1 MSD	235/236-MSD	Total/NA	Water	245.1	57903
LCS 160-57903/2-A	Lab Control Sample	Total/NA	Water	245.1	57903
MB 160-57903/1-A	Method Blank	Total/NA	Water	245.1	57903

Metals (Continued)

Analysis Batch: 58206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2783-1	235/236-MSD	Total/NA	Water	200.7 Rev 4.4	57473
160-2783-1	235/236-MSD	Dissolved	Water	200.7 Rev 4.4	57473
LCS 160-57473/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	57473
MB 160-57473/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	57473

General Chemistry

Analysis Batch: 56927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2783-1	235/236-MSD	Total/NA	Water	SM 4500 H+ B	
160-2783-1 DU	235/236-MSD	Total/NA	Water	SM 4500 H+ B	
LCS 160-56927/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 125357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2783-1	235/236-MSD	Total/NA	Water	SM 2540D	
LCS 480-125357/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-125357/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 125658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2783-1	235/236-MSD	Total/NA	Water	350.1	
LCS 480-125658/4	Lab Control Sample	Total/NA	Water	350.1	
LCS 480-125658/76	Lab Control Sample	Total/NA	Water	350.1	
MB 480-125658/3	Method Blank	Total/NA	Water	350.1	
MB 480-125658/75	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 125876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2783-1	235/236-MSD	Total/NA	Water	410.4	
LCS 480-125876/28	Lab Control Sample	Total/NA	Water	410.4	
LCS 480-125876/4	Lab Control Sample	Total/NA	Water	410.4	
MB 480-125876/27	Method Blank	Total/NA	Water	410.4	
MB 480-125876/3	Method Blank	Total/NA	Water	410.4	

Prep Batch: 126204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2783-1	235/236-MSD	Total/NA	Water	1664A	
LCS 480-126204/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 480-126204/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 126208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2783-1	235/236-MSD	Total/NA	Water	1664A	126204
LCS 480-126204/2-A	Lab Control Sample	Total/NA	Water	1664A	126204
MB 480-126204/1-A	Method Blank	Total/NA	Water	1664A	126204

Surrogate Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2783-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(71-135)	(80-122)	(84-122)
160-2783-1	235/236-MSD	110	104	106
LCS 160-57437/4	Lab Control Sample	112	109	107
LCSD 160-57437/5	Lab Control Sample Dup	110	107	106
MB 160-57437/2	Method Blank	112	111	106

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(41-109)	(31-103)	(23-82)	(36-98)	(14-68)	(43-107)
160-2783-1	235/236-MSD	64	57	0 X	0 X	0 X	23 X
160-2783-1 - DL	235/236-MSD	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
LCS 160-57924/2-A	Lab Control Sample	89	76	51	74	34	84
LCSD 160-57924/3-A	Lab Control Sample Dup	82	77	52	76	36	82
MB 160-57924/1-A	Method Blank	76	56	36	52	28	76

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2783-2
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/27/2013 4:54:44 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

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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.

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Job ID: 160-2783-2

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2783-2

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT
The sample was received on 6/20/2013 11:15 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0º C.

BIOCHEMICAL OXYGEN DEMAND
Sample 235/236-MSD (160-2783-1) was analyzed for Biochemical oxygen demand in accordance with SM 5210B. The samples were analyzed on 06/21/2013.

No difficulties were encountered during the BOD analysis.

All quality control parameters were within the acceptance limits.

Job ID: 160-2783-2 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

[redacted] CUL 114

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

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TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY / FEI	6/20/13	197608
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 1
	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State): BRIDGETON LF / MISSOURI

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.:

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis: 624-VOCs	1664 HEM/FPH	5210B-BOD	625-SVOCs	200.7 245.1 T	200.7 245.1 D	2540D-TSS	410.4	pH				Special Instructions/ Conditions of Receipt
235/236-MSD	6/20/13	0803		✓				5	1	1	4				3	1	1	1	1	1	1	1	1				

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 Days

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	6/20/13	1115	1. Received By: [signature]	6/20/13	1115
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

6/27/2013

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2783-2

Login Number: 2783

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	
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?	False	Not requested on COC.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2783-2

Login Number: 2783
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/21/13 01:53 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	2.7 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2783-2

Method	Method Description	Protocol	Laboratory
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2783-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2783-1	235/236-MSD	Water	06/20/13 08:03	06/20/13 11:15

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2783-2

Client Sample ID: 235/236-MSD

Lab Sample ID: 160-2783-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	34000		40	40	mg/L	20		SM 5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2783-2

Client Sample ID: 235/236-MSD

Lab Sample ID: 160-2783-1

Date Collected: 06/20/13 08:03

Matrix: Water

Date Received: 06/20/13 11:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	34000		40	40	mg/L			06/21/13 14:07	20

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2783-2

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-125366/1 USB
Matrix: Water
Analysis Batch: 125366

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			06/21/13 14:07	1

Lab Sample ID: LCS 480-125366/2
Matrix: Water
Analysis Batch: 125366

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	188		mg/L		95	85 - 115		

Lab Sample ID: 160-2783-1 DU
Matrix: Water
Analysis Batch: 125366

Client Sample ID: 235/236-MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Biochemical Oxygen Demand	34000			36600		mg/L				8	20

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2783-2

General Chemistry

Analysis Batch: 125366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2783-1	235/236-MSD	Total/NA	Water	SM 5210B	
160-2783-1 DU	235/236-MSD	Total/NA	Water	SM 5210B	
LCS 480-125366/2	Lab Control Sample	Total/NA	Water	SM 5210B	
USB 480-125366/1 USB	Method Blank	Total/NA	Water	SM 5210B	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2797-1
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/30/2013 2:53:47 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

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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.

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Job ID: 160-2797-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2797-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 06/21/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 5.0 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample 237/238-MSD (160-2797-1) was analyzed for volatile organic compounds (GC-MS) in accordance with EPA Method 624. The samples were analyzed on 06/26/2013.

Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 58207. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

The following sample(s) were analyzed at reduced volumes due to high concentrations of target analytes: 237/238-MSD (160-2797-1). The calculation was done using an initial volume adjustment rather than a dilution factor. The reporting limits have been elevated by the appropriate factor.

Job ID: 160-2797-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 58207 recovered outside control limits for 2-Chloroethyl vinyl ether. This analyte was not observed above the reporting limit in any of the associated samples.

The following samples were observed to have pH's greater than 2 237/238-MSD (160-2797-1). The samples were analyzed within seven days of sampling in the field. Therefore, this excursion does not affect the reported data.

Refer to the QC report for details. No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample 237/238-MSD (160-2797-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA Method 625. The samples were prepared on 06/26/2013 and analyzed on 06/26/2013 and 06/27/2013.

Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with prep batch 57924. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

The continuing calibration verification (CCV) for Hexachlorocyclopentadiene associated with batch 58253 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The following samples were diluted to bring the concentration of target analytes within the calibration range: 237/238-MSD (160-2797-1) - DL. Elevated reporting limits (RLs) are provided. Due to the level of dilution, surrogates were diluted out.

Surrogate recoveries for the following samples were outside control limits: 237/238-MSD (160-2797-1). The samples show evidence of matrix interference; therefore, re-extraction and/or re-analysis was not performed.

No other difficulties were encountered during the SVOC analysis. All other quality control parameters were within the acceptance limits.

ICP total and dissolved

Sample 237/238-MSD (160-2797-1) was analyzed for ICP in accordance with EPA Method 200.7, Rev. 4.4. The samples were prepared on 06/24/2013 and analyzed on 06/26/2013.

Due to the high concentration of iron, the matrix spike / matrix spike duplicate (MS/MSD) for batch 57473 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

The samples were digested at a 10x dilution due to being an opaque color.

The following samples were diluted due to the nature of the sample matrix. The sample digestates were dark yellow in color: (160-2797-1 MS), (160-2797-1 MSD), (160-2797-1 SD), 237/238-MSD (160-2797-1). Elevated reporting limits (RLs) are provided.

The initial calibration verification (ICV) for analytical batch 57473 was outside control criteria for thallium. The affected samples were ND. The data have been qualified and reported.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details. No other difficulties were encountered during the ICP analysis. All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)

Sample 237/238-MSD (160-2797-1) was analyzed for dissolved mercury (CVAA) in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/26/2013.

No difficulties were encountered during the mercury analysis. All quality control parameters were within the acceptance limits.

Job ID: 160-2797-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

MERCURY

Sample 237/238-MSD (160-2797-1) was analyzed for mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/26/2013.

No difficulties were encountered during the mercury analysis. All quality control parameters were within the acceptance limits.

SGT-HEM

Sample 237/238-MSD (160-2797-1) was analyzed for SGT-HEM in accordance with EPA Method 1664A. The samples were prepared on 06/26/2013 and analyzed on 06/27/2013.

SGT-HEM was detected in method blank MB 480-126204/1-A at a level that was above the method detection limit but below the reporting limit.

No other difficulties were encountered during the SGT-HEM analysis. All other quality control parameters were within the acceptance limits.

TOTAL SUSPENDED SOLIDS

Sample 237/238-MSD (160-2797-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 06/24/2013.

Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: 237/238-MSD (160-2797-1). The reporting limits (RLs) have been adjusted proportionately.

No other difficulties were encountered during the TSS analysis. All quality control parameters were within the acceptance limits.

AMMONIA

Sample 237/238-MSD (160-2797-1) was analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/24/2013.

No difficulties were encountered during the ammonia analysis. All quality control parameters were within the acceptance limits.

CHEMICAL OXYGEN DEMAND

Sample 237/238-MSD (160-2797-1) was analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 06/25/2013.

No other difficulties were encountered during the COD analysis. All other quality control parameters were within the acceptance limits.

PH

Sample 237/238-MSD (160-2797-1) was analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed on 06/21/2013.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 237/238-MSD (160-2797-1)

The sample was analyzed using pH indicator strips to prevent possible damage to the pH probe. The indicator strips used were range 0-14, Lot HC270245.237/238-MSD (160-2797-1)

No other difficulties were encountered during the pH analysis. All quality control parameters were within the acceptance limits.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CUF 379

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY	6/21/13	197609
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 1
	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State): BRIDGETON LF / MISSOURI

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.:

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 624-VOCs	1664 HEM/TPH	5210B-BOD	625-SVOCs	200.7 245.1 T	200.7 245.1 D	2540D-TSS	410.4 350.1	pH	Special Instructions/ Conditions of Receipt
237/238-MSD	6/21/13	7:45		✓			5	1	1	4			3	1	1	1	1	1	1	1	1	

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 Days

QC Requirements (Specify):

Relinquished By	Date	Time	Received By	Date	Time
1. [signature]	6/21/13	1115	1. [signature]	6/21/13	1115
2.			2.		
3.			3.		

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2797-1

Login Number: 2797

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	
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?	False	Not requested on COC.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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").	False	Headspace larger than 1/4" in all 3 vials.
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2797-1

Login Number: 2797
List Number: 1
Creator: Stau, Brandon

List Source: TestAmerica Buffalo
List Creation: 06/22/13 10:05 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2797-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SL
245.1	Mercury (CVAA)	EPA	TAL SL
1664A	HEM and SGT-HEM	1664A	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
410.4	COD	MCAWW	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL SL

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2797-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2797-1	237/238-MSD	Water	06/21/13 07:45	06/21/13 11:15

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2797-1

Client Sample ID: 237/238-MSD

Lab Sample ID: 160-2797-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene - DL	27	J	50	6.0	ug/L	1		624	Total/NA
Benzene - DL	55		50	3.0	ug/L	1		624	Total/NA
Toluene - DL	11	J	50	3.5	ug/L	1		624	Total/NA
Xylenes, Total - DL	20	J	150	10	ug/L	1		624	Total/NA
Anthracene	61	J	87	8.7	ug/L	1		625	Total/NA
Naphthalene	73	J	87	8.7	ug/L	1		625	Total/NA
Phenanthrene	25	J	87	8.7	ug/L	1		625	Total/NA
Phenol - DL	7700		870	170	ug/L	10		625	Total/NA
Aluminum	11000		10000	4000	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	430	J	500	99	ug/L	5		200.7 Rev 4.4	Total/NA
Cobalt	450	J	2500	200	ug/L	5		200.7 Rev 4.4	Total/NA
Copper	320	J	1300	230	ug/L	5		200.7 Rev 4.4	Total/NA
Iron	1100000		5000	800	ug/L	5		200.7 Rev 4.4	Total/NA
Lead	320	J	500	64	ug/L	5		200.7 Rev 4.4	Total/NA
Zinc	19000		1000	260	ug/L	5		200.7 Rev 4.4	Total/NA
Aluminum	4900	J	10000	4000	ug/L	5		200.7 Rev 4.4	Dissolved
Arsenic	410	J	500	99	ug/L	5		200.7 Rev 4.4	Dissolved
Chromium	280	J	500	160	ug/L	5		200.7 Rev 4.4	Dissolved
Iron	920000		5000	800	ug/L	5		200.7 Rev 4.4	Dissolved
Lead	190	J	500	64	ug/L	5		200.7 Rev 4.4	Dissolved
Zinc	19000		1000	260	ug/L	5		200.7 Rev 4.4	Dissolved
Mercury	8.1		6.0	1.5	ug/L	1		245.1	Total/NA
Oil & Grease	56		17	4.7	mg/L	1		1664A	Total/NA
SGT-HEM	8.3	J B	17	6.5	mg/L	1		1664A	Total/NA
Ammonia	1000		20	9.0	mg/L	1000		350.1	Total/NA
Chemical Oxygen Demand	56000		2000	1000	mg/L	200		410.4	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	1200		100	100	mg/L	1		SM 2540D	Total/NA
pH	6.00	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2797-1

Client Sample ID: 237/238-MSD

Date Collected: 06/21/13 07:45
Date Received: 06/21/13 11:15

Lab Sample ID: 160-2797-1

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.5	ug/L			06/26/13 13:04	1
1,1,2,2-Tetrachloroethane	ND		50	5.0	ug/L			06/26/13 13:04	1
1,1,2-Trichloroethane	ND		50	7.5	ug/L			06/26/13 13:04	1
1,1-Dichloroethane	ND		50	3.5	ug/L			06/26/13 13:04	1
1,1-Dichloroethene	ND		50	4.0	ug/L			06/26/13 13:04	1
1,2-Dichlorobenzene	ND		50	3.0	ug/L			06/26/13 13:04	1
1,2-Dichloroethane	ND		50	5.0	ug/L			06/26/13 13:04	1
1,2-Dichloropropane	ND		50	5.0	ug/L			06/26/13 13:04	1
1,3-Dichlorobenzene	ND		50	4.0	ug/L			06/26/13 13:04	1
1,4-Dichlorobenzene	**27**	**J**	50	6.0	ug/L			06/26/13 13:04	1
2-Chloroethyl vinyl ether	ND	*	100	8.5	ug/L			06/26/13 13:04	1
Benzene	**55**		50	3.0	ug/L			06/26/13 13:04	1
Bromodichloromethane	ND		50	4.5	ug/L			06/26/13 13:04	1
Bromoform	ND		50	8.5	ug/L			06/26/13 13:04	1
Bromomethane	ND		100	6.5	ug/L			06/26/13 13:04	1
Carbon tetrachloride	ND		50	6.5	ug/L			06/26/13 13:04	1
Chlorobenzene	ND		50	7.5	ug/L			06/26/13 13:04	1
Chloroethane	ND		100	5.0	ug/L			06/26/13 13:04	1
Chloroform	ND		50	5.0	ug/L			06/26/13 13:04	1
Chloromethane	ND		100	4.0	ug/L			06/26/13 13:04	1
cis-1,2-Dichloroethene	ND		50	4.5	ug/L			06/26/13 13:04	1
cis-1,3-Dichloropropene	ND		50	3.5	ug/L			06/26/13 13:04	1
Dibromochloromethane	ND		50	6.5	ug/L			06/26/13 13:04	1
Ethylbenzene	ND		50	4.5	ug/L			06/26/13 13:04	1
Methylene Chloride	ND		50	5.5	ug/L			06/26/13 13:04	1
Tetrachloroethene	ND		50	9.0	ug/L			06/26/13 13:04	1
Toluene	**11**	**J**	50	3.5	ug/L			06/26/13 13:04	1
trans-1,2-Dichloroethene	ND		50	4.0	ug/L			06/26/13 13:04	1
trans-1,3-Dichloropropene	ND		50	4.0	ug/L			06/26/13 13:04	1
Trichloroethene	ND		50	11	ug/L			06/26/13 13:04	1
Trichlorofluoromethane	ND		50	5.5	ug/L			06/26/13 13:04	1
Vinyl chloride	ND		100	4.0	ug/L			06/26/13 13:04	1
Xylenes, Total	**20**	**J**	150	10	ug/L			06/26/13 13:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*71 - 135*		*06/26/13 13:04*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 122*		*06/26/13 13:04*	*1*
Toluene-d8 (Surr)	*101*		*84 - 122*		*06/26/13 13:04*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
bis (2-chloroisopropyl) ether	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
2,4,6-Trichlorophenol	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
2,4-Dichlorophenol	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
2,4-Dimethylphenol	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
2,4-Dinitrophenol	ND		440	17	ug/L		06/26/13 13:09	06/27/13 01:55	1
2,4-Dinitrotoluene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
2,6-Dinitrotoluene	ND		87	19	ug/L		06/26/13 13:09	06/27/13 01:55	1
2-Chloronaphthalene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2797-1

Client Sample ID: 237/238-MSD
Date Collected: 06/21/13 07:45
Date Received: 06/21/13 11:15

Lab Sample ID: 160-2797-1
Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
2-Nitrophenol	ND		87	13	ug/L		06/26/13 13:09	06/27/13 01:55	1
3,3'-Dichlorobenzidine	ND		440	11	ug/L		06/26/13 13:09	06/27/13 01:55	1
4,6-Dinitro-2-methylphenol	ND		440	11	ug/L		06/26/13 13:09	06/27/13 01:55	1
4-Bromophenyl phenyl ether	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
4-Chloro-3-methylphenol	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
4-Chlorophenyl phenyl ether	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
4-Nitrophenol	ND		440	17	ug/L		06/26/13 13:09	06/27/13 01:55	1
Acenaphthene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Acenaphthylene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Anthracene	**61**	**J**	87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Benzidine	ND		870	170	ug/L		06/26/13 13:09	06/27/13 01:55	1
Benzo[a]anthracene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Benzo[a]pyrene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Benzo[b]fluoranthene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Benzo[g,h,i]perylene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Benzo[k]fluoranthene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Bis(2-chloroethoxy)methane	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Bis(2-chloroethyl)ether	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Bis(2-ethylhexyl) phthalate	ND		87	16	ug/L		06/26/13 13:09	06/27/13 01:55	1
Butyl benzyl phthalate	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Chrysene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Dibenz(a,h)anthracene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Diethyl phthalate	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Dimethyl phthalate	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Di-n-butyl phthalate	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Di-n-octyl phthalate	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Fluoranthene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Fluorene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Hexachloro-1,3-butadiene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Hexachlorobenzene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Hexachlorocyclopentadiene	ND		440	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Hexachloroethane	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Indeno[1,2,3-cd]pyrene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Isophorone	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Naphthalene	**73**	**J**	87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Nitrobenzene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
N-Nitrosodimethylamine	ND		87	17	ug/L		06/26/13 13:09	06/27/13 01:55	1
N-Nitrosodi-n-propylamine	ND		87	13	ug/L		06/26/13 13:09	06/27/13 01:55	1
N-Nitrosodiphenylamine	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Pentachlorophenol	ND		440	11	ug/L		06/26/13 13:09	06/27/13 01:55	1
Phenanthrene	**25**	**J**	87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1
Pyrene	ND		87	8.7	ug/L		06/26/13 13:09	06/27/13 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*55*		*41 - 109*	*06/26/13 13:09*	*06/27/13 01:55*	*1*
2-Fluorobiphenyl (Surr)	*53*		*31 - 103*	*06/26/13 13:09*	*06/27/13 01:55*	*1*
2-Fluorophenol (Surr)	*0*	*X*	*23 - 82*	*06/26/13 13:09*	*06/27/13 01:55*	*1*
Nitrobenzene-d5 (Surr)	*0*	*X*	*36 - 98*	*06/26/13 13:09*	*06/27/13 01:55*	*1*
Phenol-d5 (Surr)	*0*	*X*	*14 - 68*	*06/26/13 13:09*	*06/27/13 01:55*	*1*

Client Sample ID: 237/238-MSD

Date Collected: 06/21/13 07:45
Date Received: 06/21/13 11:15

Lab Sample ID: 160-2797-1
Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14 (Surr)	22	X	43 - 107	06/26/13 13:09	06/27/13 01:55	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	7700		870	170	ug/L		06/26/13 13:09	06/26/13 20:43	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	0	D X	41 - 109	06/26/13 13:09	06/26/13 20:43	10
2-Fluorobiphenyl (Surr)	0	D X	31 - 103	06/26/13 13:09	06/26/13 20:43	10
2-Fluorophenol (Surr)	0	D X	23 - 82	06/26/13 13:09	06/26/13 20:43	10
Nitrobenzene-d5 (Surr)	0	D X	36 - 98	06/26/13 13:09	06/26/13 20:43	10
Phenol-d5 (Surr)	0	D X	14 - 68	06/26/13 13:09	06/26/13 20:43	10
Terphenyl-d14 (Surr)	0	D X	43 - 107	06/26/13 13:09	06/26/13 20:43	10

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		500	300	ug/L		06/24/13 12:35	06/26/13 17:17	5
Aluminum	11000		10000	4000	ug/L		06/24/13 12:35	06/26/13 17:17	5
Arsenic	430	J	500	99	ug/L		06/24/13 12:35	06/26/13 17:17	5
Beryllium	ND		250	25	ug/L		06/24/13 12:35	06/26/13 17:17	5
Cadmium	ND		250	23	ug/L		06/24/13 12:35	06/26/13 17:17	5
Cobalt	450	J	2500	200	ug/L		06/24/13 12:35	06/26/13 17:17	5
Chromium	ND		500	160	ug/L		06/24/13 12:35	06/26/13 17:17	5
Copper	320	J	1300	230	ug/L		06/24/13 12:35	06/26/13 17:17	5
Iron	1100000		5000	800	ug/L		06/24/13 12:35	06/26/13 17:17	5
Nickel	ND		2000	670	ug/L		06/24/13 12:35	06/26/13 17:17	5
Lead	320	J	500	64	ug/L		06/24/13 12:35	06/26/13 17:17	5
Antimony	ND		500	200	ug/L		06/24/13 12:35	06/26/13 17:17	5
Selenium	ND		750	130	ug/L		06/24/13 12:35	06/26/13 17:17	5
Thallium	ND	^	1000	44	ug/L		06/24/13 12:35	06/26/13 17:17	5
Zinc	19000		1000	260	ug/L		06/24/13 12:35	06/26/13 17:17	5

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4900	J	10000	4000	ug/L		06/24/13 12:35	06/26/13 17:39	5
Antimony	ND		500	200	ug/L		06/24/13 12:35	06/26/13 17:39	5
Arsenic	410	J	500	99	ug/L		06/24/13 12:35	06/26/13 17:39	5
Beryllium	ND		250	25	ug/L		06/24/13 12:35	06/26/13 17:39	5
Cadmium	ND		250	23	ug/L		06/24/13 12:35	06/26/13 17:39	5
Chromium	280	J	500	160	ug/L		06/24/13 12:35	06/26/13 17:39	5
Cobalt	ND		2500	200	ug/L		06/24/13 12:35	06/26/13 17:39	5
Copper	ND		1300	230	ug/L		06/24/13 12:35	06/26/13 17:39	5
Iron	920000		5000	800	ug/L		06/24/13 12:35	06/26/13 17:39	5
Lead	190	J	500	64	ug/L		06/24/13 12:35	06/26/13 17:39	5
Nickel	ND		2000	670	ug/L		06/24/13 12:35	06/26/13 17:39	5
Selenium	ND		750	130	ug/L		06/24/13 12:35	06/26/13 17:39	5
Silver	ND		500	300	ug/L		06/24/13 12:35	06/26/13 17:39	5
Thallium	ND	^	1000	44	ug/L		06/24/13 12:35	06/26/13 17:39	5
Zinc	19000		1000	260	ug/L		06/24/13 12:35	06/26/13 17:39	5

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2797-1

Client Sample ID: 237/238-MSD

Lab Sample ID: 160-2797-1

Date Collected: 06/21/13 07:45

Matrix: Water

Date Received: 06/21/13 11:15

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	8.1		6.0	1.5	ug/L		06/26/13 10:51	06/26/13 12:40	1

Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		6.0	1.5	ug/L		06/26/13 10:51	06/26/13 12:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	56		17	4.7	mg/L		06/26/13 23:47	06/27/13 00:28	1
SGT-HEM	8.3	J B	17	6.5	mg/L		06/26/13 23:47	06/27/13 00:28	1
Ammonia	1000		20	9.0	mg/L			06/24/13 12:09	1000
Chemical Oxygen Demand	56000		2000	1000	mg/L			06/25/13 13:29	200

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	1200		100	100	mg/L			06/24/13 16:08	1
pH	6.00	HF	0.100	0.100	SU			06/21/13 15:56	1

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-58207/2
Matrix: Water
Analysis Batch: 58207

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/26/13 10:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/26/13 10:59	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/26/13 10:59	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/26/13 10:59	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/26/13 10:59	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/26/13 10:59	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/26/13 10:59	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/26/13 10:59	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/26/13 10:59	1
Benzene	ND		1.0	0.060	ug/L			06/26/13 10:59	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/26/13 10:59	1
Bromoform	ND		1.0	0.17	ug/L			06/26/13 10:59	1
Bromomethane	ND		2.0	0.13	ug/L			06/26/13 10:59	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/26/13 10:59	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/26/13 10:59	1
Chloroethane	ND		2.0	0.10	ug/L			06/26/13 10:59	1
Chloroform	ND		1.0	0.10	ug/L			06/26/13 10:59	1
Chloromethane	ND		2.0	0.080	ug/L			06/26/13 10:59	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/26/13 10:59	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/26/13 10:59	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/26/13 10:59	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/26/13 10:59	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/26/13 10:59	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/26/13 10:59	1
Toluene	ND		1.0	0.070	ug/L			06/26/13 10:59	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
Trichloroethene	ND		1.0	0.21	ug/L			06/26/13 10:59	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/26/13 10:59	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/26/13 10:59	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/26/13 10:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*71 - 135*		*06/26/13 10:59*	*1*
4-Bromofluorobenzene (Surr)	*110*		*80 - 122*		*06/26/13 10:59*	*1*
Toluene-d8 (Surr)	*106*		*84 - 122*		*06/26/13 10:59*	*1*

Lab Sample ID: LCS 160-58207/4
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	9.92		ug/L		99	82 - 127
1,1,2,2-Tetrachloroethane	10.0	10.4		ug/L		104	69 - 130
1,1,2-Trichloroethane	10.0	10.2		ug/L		102	78 - 122
1,1-Dichloroethane	10.0	9.71		ug/L		97	82 - 125

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-58207/4
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	9.78		ug/L		98	77 - 127
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	83 - 121
1,2-Dichloroethane	10.0	9.90		ug/L		99	78 - 127
1,2-Dichloropropane	10.0	9.76		ug/L		98	81 - 124
1,3-Dichlorobenzene	10.0	10.1		ug/L		101	85 - 121
1,4-Dichlorobenzene	10.0	9.92		ug/L		99	83 - 116
2-Chloroethyl vinyl ether	10.0	11.0		ug/L		110	34 - 140
Benzene	10.0	10.2		ug/L		102	84 - 124
Bromodichloromethane	10.0	10.3		ug/L		103	81 - 127
Bromoform	10.0	10.9		ug/L		109	78 - 138
Bromomethane	10.0	9.60		ug/L		96	48 - 162
Carbon tetrachloride	10.0	10.0		ug/L		100	79 - 132
Chlorobenzene	10.0	9.93		ug/L		99	85 - 118
Chloroethane	10.0	9.56		ug/L		96	71 - 132
Chloroform	10.0	9.65		ug/L		96	82 - 124
Chloromethane	10.0	9.25		ug/L		92	68 - 136
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	83 - 123
cis-1,3-Dichloropropene	10.0	11.1		ug/L		111	79 - 132
Dibromochloromethane	10.0	10.5		ug/L		105	81 - 129
Ethylbenzene	10.0	10.5		ug/L		105	85 - 125
Methylene Chloride	10.0	9.33		ug/L		93	70 - 127
Tetrachloroethene	10.0	10.6		ug/L		106	76 - 129
Toluene	10.0	10.5		ug/L		105	83 - 127
trans-1,2-Dichloroethene	10.0	9.86		ug/L		99	78 - 122
trans-1,3-Dichloropropene	10.0	11.5		ug/L		115	83 - 130
Trichloroethene	10.0	9.87		ug/L		99	81 - 123
Trichlorofluoromethane	10.0	9.38		ug/L		94	72 - 135
Vinyl chloride	10.0	9.60		ug/L		96	72 - 132
Xylenes, Total	30.0	32.8		ug/L		109	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*71 - 135*
4-Bromofluorobenzene (Surr)	*100*		*80 - 122*
Toluene-d8 (Surr)	*104*		*84 - 122*

Lab Sample ID: LCSD 160-58207/5
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	10.0	9.98		ug/L		100	82 - 127	1	20
1,1,2,2-Tetrachloroethane	10.0	9.28		ug/L		93	69 - 130	11	20
1,1,2-Trichloroethane	10.0	9.04		ug/L		90	78 - 122	12	20
1,1-Dichloroethane	10.0	9.58		ug/L		96	82 - 125	1	20
1,1-Dichloroethene	10.0	10.0		ug/L		100	77 - 127	2	20
1,2-Dichlorobenzene	10.0	10.1		ug/L		101	83 - 121	1	20
1,2-Dichloroethane	10.0	9.23		ug/L		92	78 - 127	7	20
1,2-Dichloropropane	10.0	9.68		ug/L		97	81 - 124	1	20

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-58207/5
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	10.0	10.1		ug/L		101	85 - 121	0	20
1,4-Dichlorobenzene	10.0	9.53		ug/L		95	83 - 116	4	20
2-Chloroethyl vinyl ether	10.0	8.68	*	ug/L		87	34 - 140	23	20
Benzene	10.0	10.1		ug/L		101	84 - 124	1	20
Bromodichloromethane	10.0	9.74		ug/L		97	81 - 127	5	20
Bromoform	10.0	10.3		ug/L		103	78 - 138	5	20
Bromomethane	10.0	9.87		ug/L		99	48 - 162	3	20
Carbon tetrachloride	10.0	10.2		ug/L		102	79 - 132	1	20
Chlorobenzene	10.0	9.41		ug/L		94	85 - 118	5	20
Chloroethane	10.0	9.29		ug/L		93	71 - 132	3	20
Chloroform	10.0	9.61		ug/L		96	82 - 124	0	20
Chloromethane	10.0	9.26		ug/L		93	68 - 136	0	20
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	83 - 123	0	20
cis-1,3-Dichloropropene	10.0	10.6		ug/L		106	79 - 132	4	20
Dibromochloromethane	10.0	9.70		ug/L		97	81 - 129	8	20
Ethylbenzene	10.0	10.0		ug/L		100	85 - 125	4	20
Methylene Chloride	10.0	9.24		ug/L		92	70 - 127	1	20
Tetrachloroethene	10.0	10.1		ug/L		101	76 - 129	5	20
Toluene	10.0	9.98		ug/L		100	83 - 127	5	20
trans-1,2-Dichloroethene	10.0	9.87		ug/L		99	78 - 122	0	20
trans-1,3-Dichloropropene	10.0	10.4		ug/L		104	83 - 130	10	20
Trichloroethene	10.0	9.63		ug/L		96	81 - 123	2	20
Trichlorofluoromethane	10.0	9.25		ug/L		92	72 - 135	1	20
Vinyl chloride	10.0	9.55		ug/L		95	72 - 132	1	20
Xylenes, Total	30.0	30.9		ug/L		103	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*71 - 135*
4-Bromofluorobenzene (Surr)	*101*		*80 - 122*
Toluene-d8 (Surr)	*102*		*84 - 122*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
bis (2-chloroisopropyl) ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4,6-Trichlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dichlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dimethylphenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dinitrophenol	ND		50	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dinitrotoluene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,6-Dinitrotoluene	ND		10	2.2	ug/L		06/26/13 13:09	06/26/13 17:50	1
2-Chloronaphthalene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2-Chlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		10	1.5	ug/L		06/26/13 13:09	06/26/13 17:50	1
3,3'-Dichlorobenzidine	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
4,6-Dinitro-2-methylphenol	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Bromophenyl phenyl ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Chlorophenyl phenyl ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Nitrophenol	ND		50	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Acenaphthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Acenaphthylene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzidine	ND		100	20	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[a]anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[a]pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[b]fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[g,h,i]perylene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[k]fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-chloroethoxy)methane	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-chloroethyl)ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-ethylhexyl) phthalate	ND		10	1.9	ug/L		06/26/13 13:09	06/26/13 17:50	1
Butyl benzyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Chrysene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Dibenz(a,h)anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Diethyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Dimethyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Di-n-butyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Di-n-octyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Fluorene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachloro-1,3-butadiene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachlorobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachlorocyclopentadiene	ND		50	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachloroethane	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Indeno[1,2,3-cd]pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Isophorone	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Naphthalene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Nitrobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodiphenylamine	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Pentachlorophenol	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
Phenanthrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Phenol	ND		10	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*76*		*41 - 109*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
2-Fluorobiphenyl (Surr)	*56*		*31 - 103*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
2-Fluorophenol (Surr)	*36*		*23 - 82*	*06/26/13 13:09*	*06/26/13 17:50*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	52		36 - 98	06/26/13 13:09	06/26/13 17:50	1
Phenol-d5 (Surr)	28		14 - 68	06/26/13 13:09	06/26/13 17:50	1
Terphenyl-d14 (Surr)	76		43 - 107	06/26/13 13:09	06/26/13 17:50	1

Lab Sample ID: LCS 160-57924/2-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	100	72.6		ug/L		72	44 - 84
bis (2-chloroisopropyl) ether	100	65.8		ug/L		66	42 - 102
2,4,6-Trichlorophenol	100	71.5		ug/L		71	54 - 105
2,4-Dichlorophenol	100	64.4		ug/L		64	46 - 103
2,4-Dimethylphenol	100	65.4		ug/L		65	40 - 105
2,4-Dinitrophenol	100	69.2		ug/L		69	42 - 146
2,4-Dinitrotoluene	100	79.0		ug/L		79	62 - 101
2,6-Dinitrotoluene	100	78.8		ug/L		79	62 - 103
2-Chloronaphthalene	100	75.5		ug/L		76	45 - 95
2-Chlorophenol	100	65.1		ug/L		65	56 - 93
2-Nitrophenol	101	71.7		ug/L		71	51 - 98
3,3'-Dichlorobenzidine	100	64.1		ug/L		64	26 - 77
4,6-Dinitro-2-methylphenol	100	82.6		ug/L		83	61 - 120
4-Bromophenyl phenyl ether	100	89.1		ug/L		89	54 - 111
4-Chloro-3-methylphenol	100	60.1		ug/L		60	45 - 106
4-Chlorophenyl phenyl ether	100	76.6		ug/L		77	53 - 100
4-Nitrophenol	100	34.8	J	ug/L		35	25 - 45
Acenaphthene	100	75.7		ug/L		76	51 - 89
Acenaphthylene	100	76.1		ug/L		76	46 - 98
Anthracene	100	83.5		ug/L		84	54 - 111
Benzo[a]anthracene	100	88.7		ug/L		89	68 - 108
Benzo[a]pyrene	100	83.5		ug/L		84	55 - 108
Benzo[b]fluoranthene	100	82.4		ug/L		82	57 - 114
Benzo[g,h,i]perylene	100	86.8		ug/L		87	58 - 120
Benzo[k]fluoranthene	100	89.3		ug/L		89	59 - 112
Bis(2-chloroethoxy)methane	100	67.0		ug/L		67	53 - 99
Bis(2-chloroethyl)ether	100	65.8		ug/L		66	50 - 97
Bis(2-ethylhexyl) phthalate	100	84.1		ug/L		84	54 - 116
Butyl benzyl phthalate	100	82.8		ug/L		83	52 - 126
Chrysene	100	77.5		ug/L		77	58 - 112
Dibenz(a,h)anthracene	100	87.9		ug/L		88	56 - 122
Diethyl phthalate	100	75.3		ug/L		75	60 - 101
Dimethyl phthalate	100	74.8		ug/L		75	57 - 101
Di-n-butyl phthalate	100	84.4		ug/L		84	57 - 108
Di-n-octyl phthalate	100	76.6		ug/L		77	57 - 118
Fluoranthene	100	81.8		ug/L		82	55 - 114
Fluorene	100	73.8		ug/L		74	59 - 96
Hexachloro-1,3-butadiene	100	77.5		ug/L		77	36 - 84
Hexachlorobenzene	100	90.1		ug/L		90	56 - 110

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-57924/2-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	100	86.3		ug/L		86	16 - 86
Hexachloroethane	100	74.3		ug/L		74	40 - 77
Indeno[1,2,3-cd]pyrene	100	84.3		ug/L		84	55 - 124
Isophorone	100	64.8		ug/L		65	50 - 107
Naphthalene	100	69.0		ug/L		69	42 - 82
Nitrobenzene	100	69.1		ug/L		69	48 - 96
N-Nitrosodi-n-propylamine	101	77.0		ug/L		77	57 - 113
Pentachlorophenol	100	76.8		ug/L		77	56 - 126
Phenanthrene	100	80.9		ug/L		81	54 - 110
Phenol	100	33.0		ug/L		33	27 - 43
Pyrene	100	85.1		ug/L		85	53 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*89*		*41 - 109*
2-Fluorobiphenyl (Surr)	*76*		*31 - 103*
2-Fluorophenol (Surr)	*51*		*23 - 82*
Nitrobenzene-d5 (Surr)	*74*		*36 - 98*
Phenol-d5 (Surr)	*34*		*14 - 68*
Terphenyl-d14 (Surr)	*84*		*43 - 107*

Lab Sample ID: LCSD 160-57924/3-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	100	72.0		ug/L		72	44 - 84	1	20
bis (2-chloroisopropyl) ether	100	69.4		ug/L		69	42 - 102	5	20
2,4,6-Trichlorophenol	100	70.8		ug/L		71	54 - 105	1	20
2,4-Dichlorophenol	100	64.3		ug/L		64	46 - 103	0	20
2,4-Dimethylphenol	100	65.0		ug/L		65	40 - 105	1	20
2,4-Dinitrophenol	100	68.9		ug/L		69	42 - 146	0	20
2,4-Dinitrotoluene	100	76.2		ug/L		76	62 - 101	4	20
2,6-Dinitrotoluene	100	78.8		ug/L		79	62 - 103	0	20
2-Chloronaphthalene	100	76.9		ug/L		77	45 - 95	2	20
2-Chlorophenol	100	65.0		ug/L		65	56 - 93	0	20
2-Nitrophenol	101	71.8		ug/L		71	51 - 98	0	20
3,3'-Dichlorobenzidine	100	63.5		ug/L		63	26 - 77	1	20
4,6-Dinitro-2-methylphenol	100	82.0		ug/L		82	61 - 120	1	20
4-Bromophenyl phenyl ether	100	86.2		ug/L		86	54 - 111	3	20
4-Chloro-3-methylphenol	100	60.6		ug/L		60	45 - 106	1	20
4-Chlorophenyl phenyl ether	100	73.3		ug/L		73	53 - 100	4	20
4-Nitrophenol	100	36.8	J	ug/L		37	25 - 45	5	20
Acenaphthene	100	73.8		ug/L		74	51 - 89	3	20
Acenaphthylene	100	75.6		ug/L		76	46 - 98	1	20
Anthracene	100	80.3		ug/L		80	54 - 111	4	20
Benzo[a]anthracene	100	86.5		ug/L		86	68 - 108	2	20
Benzo[a]pyrene	100	80.5		ug/L		80	55 - 108	4	20
Benzo[b]fluoranthene	100	78.6		ug/L		79	57 - 114	5	20

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-57924/3-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[g,h,i]perylene	100	83.6		ug/L		84	58 - 120	4	20
Benzo[k]fluoranthene	100	87.0		ug/L		87	59 - 112	3	20
Bis(2-chloroethoxy)methane	100	67.8		ug/L		68	53 - 99	1	20
Bis(2-chloroethyl)ether	100	67.7		ug/L		68	50 - 97	3	20
Bis(2-ethylhexyl) phthalate	100	83.5		ug/L		84	54 - 116	1	20
Butyl benzyl phthalate	100	83.4		ug/L		83	52 - 126	1	20
Chrysene	100	75.9		ug/L		76	58 - 112	2	20
Dibenz(a,h)anthracene	100	84.2		ug/L		84	56 - 122	4	20
Diethyl phthalate	100	73.2		ug/L		73	60 - 101	3	20
Dimethyl phthalate	100	73.5		ug/L		73	57 - 101	2	20
Di-n-butyl phthalate	100	82.6		ug/L		83	57 - 108	2	20
Di-n-octyl phthalate	100	76.4		ug/L		76	57 - 118	0	20
Fluoranthene	100	78.5		ug/L		79	55 - 114	4	20
Fluorene	100	70.7		ug/L		71	59 - 96	4	20
Hexachloro-1,3-butadiene	100	74.8		ug/L		75	36 - 84	4	20
Hexachlorobenzene	100	84.5		ug/L		85	56 - 110	6	20
Hexachlorocyclopentadiene	100	80.3		ug/L		80	16 - 86	7	20
Hexachloroethane	100	75.9		ug/L		76	40 - 77	2	20
Indeno[1,2,3-cd]pyrene	100	82.9		ug/L		83	55 - 124	2	20
Isophorone	100	67.2		ug/L		67	50 - 107	4	20
Naphthalene	100	68.8		ug/L		69	42 - 82	0	20
Nitrobenzene	100	71.0		ug/L		71	48 - 96	3	20
N-Nitrosodi-n-propylamine	101	79.5		ug/L		79	57 - 113	3	20
Pentachlorophenol	100	75.9		ug/L		76	56 - 126	1	20
Phenanthrene	100	79.2		ug/L		79	54 - 110	2	20
Phenol	100	34.9		ug/L		35	27 - 43	5	20
Pyrene	100	83.8		ug/L		84	53 - 117	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*82*		*41 - 109*
2-Fluorobiphenyl (Surr)	*77*		*31 - 103*
2-Fluorophenol (Surr)	*52*		*23 - 82*
Nitrobenzene-d5 (Surr)	*76*		*36 - 98*
Phenol-d5 (Surr)	*36*		*14 - 68*
Terphenyl-d14 (Surr)	*82*		*43 - 107*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 160-57473/1-A
Matrix: Water
Analysis Batch: 58206

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57473

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		06/24/13 12:35	06/26/13 17:09	1
Arsenic	ND		10	2.0	ug/L		06/24/13 12:35	06/26/13 17:09	1
Beryllium	ND		5.0	0.50	ug/L		06/24/13 12:35	06/26/13 17:09	1
Cadmium	ND		5.0	0.45	ug/L		06/24/13 12:35	06/26/13 17:09	1
Chromium	ND		10	3.1	ug/L		06/24/13 12:35	06/26/13 17:09	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 160-57473/1-A
Matrix: Water
Analysis Batch: 58206

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57473

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		50	4.0	ug/L		06/24/13 12:35	06/26/13 17:09	1
Copper	ND		25	4.6	ug/L		06/24/13 12:35	06/26/13 17:09	1
Iron	ND		100	16	ug/L		06/24/13 12:35	06/26/13 17:09	1
Lead	ND		10	1.3	ug/L		06/24/13 12:35	06/26/13 17:09	1
Nickel	ND		40	13	ug/L		06/24/13 12:35	06/26/13 17:09	1
Antimony	ND		10	4.0	ug/L		06/24/13 12:35	06/26/13 17:09	1
Selenium	ND		15	2.7	ug/L		06/24/13 12:35	06/26/13 17:09	1
Silver	ND		10	6.0	ug/L		06/24/13 12:35	06/26/13 17:09	1
Thallium	ND	^	20	0.88	ug/L		06/24/13 12:35	06/26/13 17:09	1
Zinc	ND		20	5.2	ug/L		06/24/13 12:35	06/26/13 17:09	1

Lab Sample ID: LCS 160-57473/2-A
Matrix: Water
Analysis Batch: 58206

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 57473

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	10000		ug/L		100	85 - 115
Arsenic	1000	1020		ug/L		102	85 - 115
Beryllium	1000	1050		ug/L		105	85 - 115
Cadmium	1000	1030		ug/L		103	85 - 115
Chromium	1000	1060		ug/L		106	85 - 115
Cobalt	1000	1080		ug/L		108	85 - 115
Copper	1000	1060		ug/L		106	85 - 115
Iron	10000	10500		ug/L		105	85 - 115
Lead	1000	1080		ug/L		108	85 - 115
Nickel	1000	1070		ug/L		107	85 - 115
Antimony	500	527		ug/L		105	85 - 115
Selenium	1000	1040		ug/L		104	85 - 115
Silver	100	100		ug/L		100	85 - 115
Thallium	200	230	^	ug/L		115	85 - 115
Zinc	1000	1040		ug/L		104	85 - 115

Lab Sample ID: 160-2797-1 MS
Matrix: Water
Analysis Batch: 58206

Client Sample ID: 237/238-MSD
Prep Type: Total/NA
Prep Batch: 57473

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	11000		100000	123000		ug/L		112	70 - 130
Arsenic	430	J	10000	11200		ug/L		108	70 - 130
Beryllium	ND		10000	10900		ug/L		109	70 - 130
Cadmium	ND		10000	10800		ug/L		108	70 - 130
Chromium	ND		10000	11300		ug/L		113	70 - 130
Cobalt	450	J	10000	11100		ug/L		106	70 - 130
Copper	320	J	10000	10800		ug/L		105	70 - 130
Iron	1100000		100000	1270000	4	ug/L		167	70 - 130
Lead	320	J	10000	11000		ug/L		107	70 - 130
Nickel	ND		10000	11000		ug/L		110	70 - 130
Antimony	ND		5000	5570		ug/L		111	70 - 130
Selenium	ND		10000	11200		ug/L		112	70 - 130

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 160-2797-1 MS — **Client Sample ID: 237/238-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58206 — **Prep Batch: 57473**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND		1000	1040		ug/L		104	70 - 130
Thallium	ND	^	2000	2280	^	ug/L		114	70 - 130
Zinc	19000		10000	31100		ug/L		120	70 - 130

Lab Sample ID: 160-2797-1 MSD — **Client Sample ID: 237/238-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58206 — **Prep Batch: 57473**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	11000		100000	122000		ug/L		111	70 - 130	1	20
Arsenic	430	J	10000	10600		ug/L		102	70 - 130	5	20
Beryllium	ND		10000	10800		ug/L		108	70 - 130	1	20
Cadmium	ND		10000	10200		ug/L		102	70 - 130	5	20
Chromium	ND		10000	10400		ug/L		104	70 - 130	8	20
Cobalt	450	J	10000	10500		ug/L		101	70 - 130	5	20
Copper	320	J	10000	10200		ug/L		99	70 - 130	6	20
Iron	1100000		100000	1240000	4	ug/L		138	70 - 130	2	20
Lead	320	J	10000	10600		ug/L		102	70 - 130	4	20
Nickel	ND		10000	10400		ug/L		104	70 - 130	5	20
Antimony	ND		5000	5300		ug/L		106	70 - 130	5	20
Selenium	ND		10000	10600		ug/L		106	70 - 130	5	20
Silver	ND		1000	975		ug/L		98	70 - 130	6	20
Thallium	ND	^	2000	2170	^	ug/L		108	70 - 130	5	20
Zinc	19000		10000	29200		ug/L		101	70 - 130	6	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 160-57903/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57922 — **Prep Batch: 57903**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.050	ug/L		06/26/13 10:51	06/26/13 12:30	1

Lab Sample ID: LCS 160-57903/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57922 — **Prep Batch: 57903**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.21		ug/L		104	85 - 115

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 480-126204/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126208 — **Prep Batch: 126204**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/26/13 23:47	06/27/13 00:28	1

Method: 1664A - HEM and SGT-HEM (Continued)

Lab Sample ID: MB 480-126204/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126208 — **Prep Batch: 126204**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
SGT-HEM	1.90	J	5.0	1.9	mg/L		06/26/13 23:47	06/27/13 00:28	1

Lab Sample ID: LCS 480-126204/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126208 — **Prep Batch: 126204**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	38.4		mg/L		96	78 - 114
SGT-HEM	20.0	16.3		mg/L		81	64 - 132

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-125658/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125658

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/24/13 12:05	1

Lab Sample ID: MB 480-125658/75 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125658

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/24/13 13:14	1

Lab Sample ID: LCS 480-125658/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125658

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.02		mg/L		102	90 - 110

Lab Sample ID: LCS 480-125658/76 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125658

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.03		mg/L		103	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 480-125876/27 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			06/25/13 13:29	1

Method: 410.4 - COD (Continued)

Lab Sample ID: MB 480-125876/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			06/25/13 13:29	1

Lab Sample ID: LCS 480-125876/28 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	192		mg/L		96	90 - 110

Lab Sample ID: LCS 480-125876/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	192		mg/L		96	90 - 110

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-125651/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125651

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			06/24/13 16:05	1

Lab Sample ID: LCS 480-125651/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 125651

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	211	204		mg/L		97	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 160-57164/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57164

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.000		SU		100	99.0 - 101.0

Lab Sample ID: 160-2797-1 DU — **Client Sample ID: 237/238-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57164

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	6.00	HF	6.000		SU		0	5

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2797-1

GC/MS VOA

Analysis Batch: 58207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2797-1 - DL	237/238-MSD	Total/NA	Water	624	
LCS 160-58207/4	Lab Control Sample	Total/NA	Water	624	
LCSD 160-58207/5	Lab Control Sample Dup	Total/NA	Water	624	
MB 160-58207/2	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 57924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2797-1	237/238-MSD	Total/NA	Water	625	
160-2797-1 - DL	237/238-MSD	Total/NA	Water	625	
LCS 160-57924/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 160-57924/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 160-57924/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 58253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2797-1	237/238-MSD	Total/NA	Water	625	57924
160-2797-1 - DL	237/238-MSD	Total/NA	Water	625	57924
LCS 160-57924/2-A	Lab Control Sample	Total/NA	Water	625	57924
LCSD 160-57924/3-A	Lab Control Sample Dup	Total/NA	Water	625	57924
MB 160-57924/1-A	Method Blank	Total/NA	Water	625	57924

Metals

Prep Batch: 57473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2797-1	237/238-MSD	Total/NA	Water	200.7/200.8	
160-2797-1	237/238-MSD	Dissolved	Water	200.7/200.8	
160-2797-1 MS	237/238-MSD	Total/NA	Water	200.7/200.8	
160-2797-1 MSD	237/238-MSD	Total/NA	Water	200.7/200.8	
LCS 160-57473/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
MB 160-57473/1-A	Method Blank	Total/NA	Water	200.7/200.8	

Prep Batch: 57903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2797-1	237/238-MSD	Total/NA	Water	245.1	
160-2797-1	237/238-MSD	Dissolved	Water	245.1	
LCS 160-57903/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 160-57903/1-A	Method Blank	Total/NA	Water	245.1	

Analysis Batch: 57922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2797-1	237/238-MSD	Total/NA	Water	245.1	57903
160-2797-1	237/238-MSD	Dissolved	Water	245.1	57903
LCS 160-57903/2-A	Lab Control Sample	Total/NA	Water	245.1	57903
MB 160-57903/1-A	Method Blank	Total/NA	Water	245.1	57903

Metals (Continued)

Analysis Batch: 58206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2797-1	237/238-MSD	Total/NA	Water	200.7 Rev 4.4	57473
160-2797-1	237/238-MSD	Dissolved	Water	200.7 Rev 4.4	57473
160-2797-1 MS	237/238-MSD	Total/NA	Water	200.7 Rev 4.4	57473
160-2797-1 MSD	237/238-MSD	Total/NA	Water	200.7 Rev 4.4	57473
LCS 160-57473/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	57473
MB 160-57473/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	57473

General Chemistry

Analysis Batch: 57164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2797-1	237/238-MSD	Total/NA	Water	SM 4500 H+ B	
160-2797-1 DU	237/238-MSD	Total/NA	Water	SM 4500 H+ B	
LCS 160-57164/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 125651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2797-1	237/238-MSD	Total/NA	Water	SM 2540D	
LCS 480-125651/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-125651/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 125658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2797-1	237/238-MSD	Total/NA	Water	350.1	
LCS 480-125658/4	Lab Control Sample	Total/NA	Water	350.1	
LCS 480-125658/76	Lab Control Sample	Total/NA	Water	350.1	
MB 480-125658/3	Method Blank	Total/NA	Water	350.1	
MB 480-125658/75	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 125876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2797-1	237/238-MSD	Total/NA	Water	410.4	
LCS 480-125876/28	Lab Control Sample	Total/NA	Water	410.4	
LCS 480-125876/4	Lab Control Sample	Total/NA	Water	410.4	
MB 480-125876/27	Method Blank	Total/NA	Water	410.4	
MB 480-125876/3	Method Blank	Total/NA	Water	410.4	

Prep Batch: 126204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2797-1	237/238-MSD	Total/NA	Water	1664A	
LCS 480-126204/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 480-126204/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 126208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2797-1	237/238-MSD	Total/NA	Water	1664A	126204
LCS 480-126204/2-A	Lab Control Sample	Total/NA	Water	1664A	126204
MB 480-126204/1-A	Method Blank	Total/NA	Water	1664A	126204

Surrogate Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2797-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(71-135)	(80-122)	(84-122)
160-2797-1 - DL	237/238-MSD	90	97	101
LCS 160-58207/4	Lab Control Sample	96	100	104
LCSD 160-58207/5	Lab Control Sample Dup	93	101	102
MB 160-58207/2	Method Blank	98	110	106

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(41-109)	(31-103)	(23-82)	(36-98)	(14-68)	(43-107)
160-2797-1	237/238-MSD	55	53	0 X	0 X	0 X	22 X
160-2797-1 - DL	237/238-MSD	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
LCS 160-57924/2-A	Lab Control Sample	89	76	51	74	34	84
LCSD 160-57924/3-A	Lab Control Sample Dup	82	77	52	76	36	82
MB 160-57924/1-A	Method Blank	76	56	36	52	28	76

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2797-2
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/30/2013 2:54:11 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

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Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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.

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Job ID: 160-2797-2

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2797-2

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 06/21/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 5.0 C.

BIOCHEMICAL OXYGEN DEMAND

Sample 237/238-MSD (160-2797-1) was analyzed for Biochemical oxygen demand in accordance with SM 5210B. The samples were analyzed on 06/22/2013.

No difficulties were encountered during the BOD analysis. All quality control parameters were within the acceptance limits.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

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CUF 379

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY	6/21/13	197609
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 1
	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State): BRIDGETON LF / MISSOURI

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.:

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		624-VOCs	1664 HEM/TPH	5210B-BOD	625-SVOCs	200.7 245.1 T	200.7 245.1 D	2540D-TSS	410.4 350.1	pH				Special Instructions/ Conditions of Receipt
			Matrix					Containers & Preservatives							Analysis (Attach list if more space is needed)												
237/238-MSD	6/21/13	7:45		✓				5	1	1	4				3	1	1	1	1	1	1	1	1				

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 Days

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	6/21/13	1115	1. Received By: [signature]	6/21/13	1115
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2797-2

Login Number: 2797

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	
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?	False	Not requested on COC.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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").	False	Headspace larger than 1/4" in all 3 vials.
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2797-2

Login Number: 2797
List Number: 1
Creator: Stau, Brandon

List Source: TestAmerica Buffalo
List Creation: 06/22/13 10:05 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2797-2

Method	Method Description	Protocol	Laboratory
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2797-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2797-1	237/238-MSD	Water	06/21/13 07:45	06/21/13 11:15

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2797-2

Client Sample ID: 237/238-MSD

Lab Sample ID: 160-2797-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	31000		100	100	mg/L	50		SM 5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2797-2

Client Sample ID: 237/238-MSD

Lab Sample ID: 160-2797-1

Date Collected: 06/21/13 07:45

Matrix: Water

Date Received: 06/21/13 11:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	31000		100	100	mg/L			06/22/13 12:02	50

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2797-2

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-125462/1 USB
Matrix: Water
Analysis Batch: 125462

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			06/22/13 12:02	1

Lab Sample ID: LCS 480-125462/2
Matrix: Water
Analysis Batch: 125462

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biochemical Oxygen Demand	198	200		mg/L		101	85 - 115

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2797-2

General Chemistry

Analysis Batch: 125462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2797-1	237/238-MSD	Total/NA	Water	SM 5210B	
LCS 480-125462/2	Lab Control Sample	Total/NA	Water	SM 5210B	
USB 480-125462/1 USB	Method Blank	Total/NA	Water	SM 5210B	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2821-1
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/30/2013 3:42:42 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

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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.

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Job ID: 160-2821-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2821-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The sample was received on 6/22/2013 10:01 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 18.0º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample 242-MSD (160-2821-1) was analyzed for volatile organic compounds (GC-MS) in accordance with EPA Method 624. The samples were analyzed on 06/26/2013.

Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 58207. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 58207 recovered outside control limits for 2-Chloroethyl vinyl ether. This analyte was not observed above the reporting limit in any of the associated samples.

Job ID: 160-2821-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

The following sample(s) were analyzed at reduced volumes due to high concentrations of target analytes: 242-MSD (160-2821-1). The calculation was done using an initial volume adjustment rather than a dilution factor. The reporting limits have been elevated by the appropriate factor.

The following samples were observed to have pH's greater than 2 242-MSD (160-2821-1). The samples were analyzed within seven days of sampling in the field. Therefore, this excursion does not affect the reported data.

No other difficulties were encountered during the VOCs analysis.

All other quality control parameters were within the acceptance limits.

Organic Prep
Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 57924. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 242-MSD (160-2821-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA Method 625. The samples were prepared on 06/26/2013 and analyzed on 06/26/2013 and 06/27/2013.

Several analytes failed the surrogate recovery criteria low for 242-MSD (160-2821-1). The samples show evidence of matrix interference; therefore, re-extraction and/or re-analysis was not performed.

The continuing calibration verification (CCV) for Hexachlorocyclopentadiene associated with batch 58253 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The following samples were diluted to bring the concentration of target analytes within the calibration range: 242-MSD (160-2821-1) [10X]. Elevated reporting limits (RLs) are provided. Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

No other difficulties were encountered during the SVOC analysis.

All other quality control parameters were within the acceptance limits.

ICP total and dissolved
Sample 242-MSD (160-2821-1) was analyzed for ICP in accordance with EPA Method 200.7, Rev. 4.4. The samples were prepared on 06/24/2013 and analyzed on 06/26/2013.

The samples were digested at a 10x dilution due to being an opaque color.

The following samples were diluted due to the nature of the sample matrix. The sample digestates were dark yellow in color: 242-MSD (160-2821-1) [5X]. Elevated reporting limits (RLs) are provided.

The initial calibration verification (ICV) for analytical batch 57473 was outside control criteria for thallium. The affected samples were ND. The data have been qualified and reported.

No other difficulties were encountered during the ICP analysis.

All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)
Sample 242-MSD (160-2821-1) was analyzed for dissolved mercury (CVAA) in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/26/2013.

No difficulties were encountered during the mercury analysis.

Job ID: 160-2821-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

All quality control parameters were within the acceptance limits.

MERCURY

Sample 242-MSD (160-2821-1) was analyzed for mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/26/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

SGT-HEM

Sample 242-MSD (160-2821-1) was analyzed for SGT-HEM in accordance with EPA Method 1664A. The samples were prepared on 06/26/2013 and analyzed on 06/27/2013.

SGT-HEM was detected in method blank MB 480-126204/1-A at a level that was above the method detection limit but below the reporting limit.

No other difficulties were encountered during the SGT-HEM analysis.

All other quality control parameters were within the acceptance limits.

TOTAL SUSPENDED SOLIDS

Sample 242-MSD (160-2821-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 06/25/2013.

Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: 242-MSD (160-2821-1). The reporting limits (RLs) have been adjusted proportionately.

No difficulties were encountered during the TSS analysis.

All quality control parameters were within the acceptance limits.

AMMONIA

Sample 242-MSD (160-2821-1) was analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/26/2013.

Sample 242-MSD (160-2821-1)[1000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the ammonia analysis.

All quality control parameters were within the acceptance limits.

CHEMICAL OXYGEN DEMAND

Sample 242-MSD (160-2821-1) was analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 06/26/2013.

Sample 242-MSD (160-2821-1)[200X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the COD analysis.

All quality control parameters were within the acceptance limits.

PH

Sample 242-MSD (160-2821-1) was analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed on 06/24/2013.

Job ID: 160-2821-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

For the analysis of the associated samples in pH batch 57508, this analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 242-MSD (160-2821-1)

For the analysis of the associated samples in pH batch 57508, the samples were analyzed using pH strips to prevent possible damage to the pH probe. The pH indicator strips used were range 0-14, lot HC270245.242-MSD (160-2821-1)

No difficulties were encountered during the pH analysis.

All quality control parameters were within the acceptance limits.

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2821-1

Login Number: 2821

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	Received same day of collection; chilling process has begun.
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?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2821-1

Login Number: 2821
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/25/13 02:12 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	2.6 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Definitions/Glossary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2821-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2821-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SL
245.1	Mercury (CVAA)	EPA	TAL SL
1664A	HEM and SGT-HEM	1664A	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
410.4	COD	MCAWW	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL SL

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2821-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2821-1	242-MSD	Water	06/22/13 06:32	06/22/13 10:01

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2821-1

Client Sample ID: 242-MSD

Lab Sample ID: 160-2821-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bromomethane - DL	6.6	J	100	6.5	ug/L	1		624	Total/NA
Bis(2-ethylhexyl) phthalate	21	J	90	17	ug/L	1		625	Total/NA
Fluoranthene	19	J	90	9.0	ug/L	1		625	Total/NA
Fluorene	32	J	90	9.0	ug/L	1		625	Total/NA
Naphthalene	100		90	9.0	ug/L	1		625	Total/NA
Phenanthrene	66	J	90	9.0	ug/L	1		625	Total/NA
Pyrene	12	J	90	9.0	ug/L	1		625	Total/NA
Phenol - DL	5100		900	180	ug/L	10		625	Total/NA
Aluminum	39000		10000	4000	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	550		500	99	ug/L	5		200.7 Rev 4.4	Total/NA
Chromium	310	J	500	160	ug/L	5		200.7 Rev 4.4	Total/NA
Iron	1500000		5000	800	ug/L	5		200.7 Rev 4.4	Total/NA
Lead	570		500	64	ug/L	5		200.7 Rev 4.4	Total/NA
Antimony	210	J	500	200	ug/L	5		200.7 Rev 4.4	Total/NA
Zinc	22000		1000	260	ug/L	5		200.7 Rev 4.4	Total/NA
Aluminum	5200	J	10000	4000	ug/L	5		200.7 Rev 4.4	Dissolved
Arsenic	340	J	500	99	ug/L	5		200.7 Rev 4.4	Dissolved
Chromium	180	J	500	160	ug/L	5		200.7 Rev 4.4	Dissolved
Iron	780000		5000	800	ug/L	5		200.7 Rev 4.4	Dissolved
Lead	210	J	500	64	ug/L	5		200.7 Rev 4.4	Dissolved
Zinc	20000		1000	260	ug/L	5		200.7 Rev 4.4	Dissolved
Mercury	39		6.0	1.5	ug/L	1		245.1	Total/NA
Oil & Grease	21		17	4.7	mg/L	1		1664A	Total/NA
SGT-HEM	9.3	J B	17	6.5	mg/L	1		1664A	Total/NA
Ammonia	840		20	9.0	mg/L	1000		350.1	Total/NA
Chemical Oxygen Demand	71000		2000	1000	mg/L	200		410.4	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	3600		100	100	mg/L	1		SM 2540D	Total/NA
pH	6.00	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 242-MSD

Date Collected: 06/22/13 06:32
Date Received: 06/22/13 10:01

Lab Sample ID: 160-2821-1

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.5	ug/L			06/26/13 13:30	1
1,1,2,2-Tetrachloroethane	ND		50	5.0	ug/L			06/26/13 13:30	1
1,1,2-Trichloroethane	ND		50	7.5	ug/L			06/26/13 13:30	1
1,1-Dichloroethane	ND		50	3.5	ug/L			06/26/13 13:30	1
1,1-Dichloroethene	ND		50	4.0	ug/L			06/26/13 13:30	1
1,2-Dichlorobenzene	ND		50	3.0	ug/L			06/26/13 13:30	1
1,2-Dichloroethane	ND		50	5.0	ug/L			06/26/13 13:30	1
1,2-Dichloropropane	ND		50	5.0	ug/L			06/26/13 13:30	1
1,3-Dichlorobenzene	ND		50	4.0	ug/L			06/26/13 13:30	1
1,4-Dichlorobenzene	ND		50	6.0	ug/L			06/26/13 13:30	1
2-Chloroethyl vinyl ether	ND	*	100	8.5	ug/L			06/26/13 13:30	1
Benzene	ND		50	3.0	ug/L			06/26/13 13:30	1
Bromodichloromethane	ND		50	4.5	ug/L			06/26/13 13:30	1
Bromoform	ND		50	8.5	ug/L			06/26/13 13:30	1
Bromomethane	**6.6**	**J**	100	6.5	ug/L			06/26/13 13:30	1
Carbon tetrachloride	ND		50	6.5	ug/L			06/26/13 13:30	1
Chlorobenzene	ND		50	7.5	ug/L			06/26/13 13:30	1
Chloroethane	ND		100	5.0	ug/L			06/26/13 13:30	1
Chloroform	ND		50	5.0	ug/L			06/26/13 13:30	1
Chloromethane	ND		100	4.0	ug/L			06/26/13 13:30	1
cis-1,2-Dichloroethene	ND		50	4.5	ug/L			06/26/13 13:30	1
cis-1,3-Dichloropropene	ND		50	3.5	ug/L			06/26/13 13:30	1
Dibromochloromethane	ND		50	6.5	ug/L			06/26/13 13:30	1
Ethylbenzene	ND		50	4.5	ug/L			06/26/13 13:30	1
Methylene Chloride	ND		50	5.5	ug/L			06/26/13 13:30	1
Tetrachloroethene	ND		50	9.0	ug/L			06/26/13 13:30	1
Toluene	ND		50	3.5	ug/L			06/26/13 13:30	1
trans-1,2-Dichloroethene	ND		50	4.0	ug/L			06/26/13 13:30	1
trans-1,3-Dichloropropene	ND		50	4.0	ug/L			06/26/13 13:30	1
Trichloroethene	ND		50	11	ug/L			06/26/13 13:30	1
Trichlorofluoromethane	ND		50	5.5	ug/L			06/26/13 13:30	1
Vinyl chloride	ND		100	4.0	ug/L			06/26/13 13:30	1
Xylenes, Total	ND		150	10	ug/L			06/26/13 13:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*71 - 135*		*06/26/13 13:30*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 122*		*06/26/13 13:30*	*1*
Toluene-d8 (Surr)	*106*		*84 - 122*		*06/26/13 13:30*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
bis (2-chloroisopropyl) ether	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
2,4,6-Trichlorophenol	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
2,4-Dichlorophenol	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
2,4-Dimethylphenol	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
2,4-Dinitrophenol	ND		450	18	ug/L		06/26/13 13:09	06/27/13 03:04	1
2,4-Dinitrotoluene	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
2,6-Dinitrotoluene	ND		90	19	ug/L		06/26/13 13:09	06/27/13 03:04	1
2-Chloronaphthalene	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2821-1

Client Sample ID: 242-MSD

Date Collected: 06/22/13 06:32
Date Received: 06/22/13 10:01

Lab Sample ID: 160-2821-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
2-Nitrophenol	ND		90	14	ug/L		06/26/13 13:09	06/27/13 03:04	1
3,3'-Dichlorobenzidine	ND		450	12	ug/L		06/26/13 13:09	06/27/13 03:04	1
4,6-Dinitro-2-methylphenol	ND		450	11	ug/L		06/26/13 13:09	06/27/13 03:04	1
4-Bromophenyl phenyl ether	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
4-Chloro-3-methylphenol	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
4-Chlorophenyl phenyl ether	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
4-Nitrophenol	ND		450	18	ug/L		06/26/13 13:09	06/27/13 03:04	1
Acenaphthene	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Acenaphthylene	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Anthracene	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Benzidine	ND		900	180	ug/L		06/26/13 13:09	06/27/13 03:04	1
Benzo[a]anthracene	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Benzo[a]pyrene	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Benzo[b]fluoranthene	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Benzo[g,h,i]perylene	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Benzo[k]fluoranthene	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Bis(2-chloroethoxy)methane	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Bis(2-chloroethyl)ether	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Bis(2-ethylhexyl) phthalate	**21**	**J**	90	17	ug/L		06/26/13 13:09	06/27/13 03:04	1
Butyl benzyl phthalate	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Chrysene	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Dibenz(a,h)anthracene	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Diethyl phthalate	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Dimethyl phthalate	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Di-n-butyl phthalate	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Di-n-octyl phthalate	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Fluoranthene	**19**	**J**	90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Fluorene	**32**	**J**	90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Hexachloro-1,3-butadiene	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Hexachlorobenzene	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Hexachlorocyclopentadiene	ND		450	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Hexachloroethane	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Indeno[1,2,3-cd]pyrene	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Isophorone	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Naphthalene	**100**		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Nitrobenzene	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
N-Nitrosodimethylamine	ND		90	18	ug/L		06/26/13 13:09	06/27/13 03:04	1
N-Nitrosodi-n-propylamine	ND		90	14	ug/L		06/26/13 13:09	06/27/13 03:04	1
N-Nitrosodiphenylamine	ND		90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Pentachlorophenol	ND		450	11	ug/L		06/26/13 13:09	06/27/13 03:04	1
Phenanthrene	**66**	**J**	90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1
Pyrene	**12**	**J**	90	9.0	ug/L		06/26/13 13:09	06/27/13 03:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*38*	*X*	*41 - 109*	*06/26/13 13:09*	*06/27/13 03:04*	*1*
2-Fluorobiphenyl (Surr)	*34*		*31 - 103*	*06/26/13 13:09*	*06/27/13 03:04*	*1*
2-Fluorophenol (Surr)	*0*	*X*	*23 - 82*	*06/26/13 13:09*	*06/27/13 03:04*	*1*
Nitrobenzene-d5 (Surr)	*0*	*X*	*36 - 98*	*06/26/13 13:09*	*06/27/13 03:04*	*1*
Phenol-d5 (Surr)	*0*	*X*	*14 - 68*	*06/26/13 13:09*	*06/27/13 03:04*	*1*

Client Sample ID: 242-MSD

Date Collected: 06/22/13 06:32
Date Received: 06/22/13 10:01

Lab Sample ID: 160-2821-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14 (Surr)	19	X	43 - 107	06/26/13 13:09	06/27/13 03:04	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**5100**		900	180	ug/L		06/26/13 13:09	06/26/13 21:18	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	0	D X	41 - 109	06/26/13 13:09	06/26/13 21:18	10
2-Fluorobiphenyl (Surr)	0	D X	31 - 103	06/26/13 13:09	06/26/13 21:18	10
2-Fluorophenol (Surr)	0	D X	23 - 82	06/26/13 13:09	06/26/13 21:18	10
Nitrobenzene-d5 (Surr)	0	D X	36 - 98	06/26/13 13:09	06/26/13 21:18	10
Phenol-d5 (Surr)	0	D X	14 - 68	06/26/13 13:09	06/26/13 21:18	10
Terphenyl-d14 (Surr)	0	D X	43 - 107	06/26/13 13:09	06/26/13 21:18	10

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		500	300	ug/L		06/24/13 12:35	06/26/13 17:50	5
Aluminum	**39000**		10000	4000	ug/L		06/24/13 12:35	06/26/13 17:50	5
Arsenic	**550**		500	99	ug/L		06/24/13 12:35	06/26/13 17:50	5
Beryllium	ND		250	25	ug/L		06/24/13 12:35	06/26/13 17:50	5
Cadmium	ND		250	23	ug/L		06/24/13 12:35	06/26/13 17:50	5
Cobalt	ND		2500	200	ug/L		06/24/13 12:35	06/26/13 17:50	5
Chromium	**310**	**J**	500	160	ug/L		06/24/13 12:35	06/26/13 17:50	5
Copper	ND		1300	230	ug/L		06/24/13 12:35	06/26/13 17:50	5
Iron	**1500000**		5000	800	ug/L		06/24/13 12:35	06/26/13 17:50	5
Nickel	ND		2000	670	ug/L		06/24/13 12:35	06/26/13 17:50	5
Lead	**570**		500	64	ug/L		06/24/13 12:35	06/26/13 17:50	5
Antimony	**210**	**J**	500	200	ug/L		06/24/13 12:35	06/26/13 17:50	5
Selenium	ND		750	130	ug/L		06/24/13 12:35	06/26/13 17:50	5
Thallium	ND	^	1000	44	ug/L		06/24/13 12:35	06/26/13 17:50	5
Zinc	**22000**		1000	260	ug/L		06/24/13 12:35	06/26/13 17:50	5

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5200**	**J**	10000	4000	ug/L		06/24/13 12:35	06/26/13 17:54	5
Antimony	ND		500	200	ug/L		06/24/13 12:35	06/26/13 17:54	5
Arsenic	**340**	**J**	500	99	ug/L		06/24/13 12:35	06/26/13 17:54	5
Beryllium	ND		250	25	ug/L		06/24/13 12:35	06/26/13 17:54	5
Cadmium	ND		250	23	ug/L		06/24/13 12:35	06/26/13 17:54	5
Chromium	**180**	**J**	500	160	ug/L		06/24/13 12:35	06/26/13 17:54	5
Cobalt	ND		2500	200	ug/L		06/24/13 12:35	06/26/13 17:54	5
Copper	ND		1300	230	ug/L		06/24/13 12:35	06/26/13 17:54	5
Iron	**780000**		5000	800	ug/L		06/24/13 12:35	06/26/13 17:54	5
Lead	**210**	**J**	500	64	ug/L		06/24/13 12:35	06/26/13 17:54	5
Nickel	ND		2000	670	ug/L		06/24/13 12:35	06/26/13 17:54	5
Selenium	ND		750	130	ug/L		06/24/13 12:35	06/26/13 17:54	5
Silver	ND		500	300	ug/L		06/24/13 12:35	06/26/13 17:54	5
Thallium	ND	^	1000	44	ug/L		06/24/13 12:35	06/26/13 17:54	5
Zinc	**20000**		1000	260	ug/L		06/24/13 12:35	06/26/13 17:54	5

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2821-1

Client Sample ID: 242-MSD

Lab Sample ID: 160-2821-1

Date Collected: 06/22/13 06:32

Matrix: Water

Date Received: 06/22/13 10:01

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	39		6.0	1.5	ug/L		06/26/13 10:51	06/26/13 12:42	1

Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		6.0	1.5	ug/L		06/26/13 10:51	06/26/13 12:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	21		17	4.7	mg/L		06/26/13 23:47	06/27/13 00:28	1
SGT-HEM	9.3	J B	17	6.5	mg/L		06/26/13 23:47	06/27/13 00:28	1
Ammonia	840		20	9.0	mg/L			06/26/13 10:28	1000
Chemical Oxygen Demand	71000		2000	1000	mg/L			06/26/13 14:05	200

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	3600		100	100	mg/L			06/25/13 17:06	1
pH	6.00	HF	0.100	0.100	SU			06/24/13 16:34	1

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-58207/2
Matrix: Water
Analysis Batch: 58207

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/26/13 10:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/26/13 10:59	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/26/13 10:59	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/26/13 10:59	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/26/13 10:59	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/26/13 10:59	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/26/13 10:59	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/26/13 10:59	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/26/13 10:59	1
Benzene	ND		1.0	0.060	ug/L			06/26/13 10:59	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/26/13 10:59	1
Bromoform	ND		1.0	0.17	ug/L			06/26/13 10:59	1
Bromomethane	ND		2.0	0.13	ug/L			06/26/13 10:59	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/26/13 10:59	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/26/13 10:59	1
Chloroethane	ND		2.0	0.10	ug/L			06/26/13 10:59	1
Chloroform	ND		1.0	0.10	ug/L			06/26/13 10:59	1
Chloromethane	ND		2.0	0.080	ug/L			06/26/13 10:59	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/26/13 10:59	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/26/13 10:59	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/26/13 10:59	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/26/13 10:59	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/26/13 10:59	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/26/13 10:59	1
Toluene	ND		1.0	0.070	ug/L			06/26/13 10:59	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
Trichloroethene	ND		1.0	0.21	ug/L			06/26/13 10:59	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/26/13 10:59	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/26/13 10:59	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/26/13 10:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*71 - 135*		*06/26/13 10:59*	*1*
4-Bromofluorobenzene (Surr)	*110*		*80 - 122*		*06/26/13 10:59*	*1*
Toluene-d8 (Surr)	*106*		*84 - 122*		*06/26/13 10:59*	*1*

Lab Sample ID: LCS 160-58207/4
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	9.92		ug/L		99	82 - 127
1,1,2,2-Tetrachloroethane	10.0	10.4		ug/L		104	69 - 130
1,1,2-Trichloroethane	10.0	10.2		ug/L		102	78 - 122
1,1-Dichloroethane	10.0	9.71		ug/L		97	82 - 125

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-58207/4
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	9.78		ug/L		98	77 - 127
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	83 - 121
1,2-Dichloroethane	10.0	9.90		ug/L		99	78 - 127
1,2-Dichloropropane	10.0	9.76		ug/L		98	81 - 124
1,3-Dichlorobenzene	10.0	10.1		ug/L		101	85 - 121
1,4-Dichlorobenzene	10.0	9.92		ug/L		99	83 - 116
2-Chloroethyl vinyl ether	10.0	11.0		ug/L		110	34 - 140
Benzene	10.0	10.2		ug/L		102	84 - 124
Bromodichloromethane	10.0	10.3		ug/L		103	81 - 127
Bromoform	10.0	10.9		ug/L		109	78 - 138
Bromomethane	10.0	9.60		ug/L		96	48 - 162
Carbon tetrachloride	10.0	10.0		ug/L		100	79 - 132
Chlorobenzene	10.0	9.93		ug/L		99	85 - 118
Chloroethane	10.0	9.56		ug/L		96	71 - 132
Chloroform	10.0	9.65		ug/L		96	82 - 124
Chloromethane	10.0	9.25		ug/L		92	68 - 136
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	83 - 123
cis-1,3-Dichloropropene	10.0	11.1		ug/L		111	79 - 132
Dibromochloromethane	10.0	10.5		ug/L		105	81 - 129
Ethylbenzene	10.0	10.5		ug/L		105	85 - 125
Methylene Chloride	10.0	9.33		ug/L		93	70 - 127
Tetrachloroethene	10.0	10.6		ug/L		106	76 - 129
Toluene	10.0	10.5		ug/L		105	83 - 127
trans-1,2-Dichloroethene	10.0	9.86		ug/L		99	78 - 122
trans-1,3-Dichloropropene	10.0	11.5		ug/L		115	83 - 130
Trichloroethene	10.0	9.87		ug/L		99	81 - 123
Trichlorofluoromethane	10.0	9.38		ug/L		94	72 - 135
Vinyl chloride	10.0	9.60		ug/L		96	72 - 132
Xylenes, Total	30.0	32.8		ug/L		109	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*71 - 135*
4-Bromofluorobenzene (Surr)	*100*		*80 - 122*
Toluene-d8 (Surr)	*104*		*84 - 122*

Lab Sample ID: LCSD 160-58207/5
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	10.0	9.98		ug/L		100	82 - 127	1	20
1,1,2,2-Tetrachloroethane	10.0	9.28		ug/L		93	69 - 130	11	20
1,1,2-Trichloroethane	10.0	9.04		ug/L		90	78 - 122	12	20
1,1-Dichloroethane	10.0	9.58		ug/L		96	82 - 125	1	20
1,1-Dichloroethene	10.0	10.0		ug/L		100	77 - 127	2	20
1,2-Dichlorobenzene	10.0	10.1		ug/L		101	83 - 121	1	20
1,2-Dichloroethane	10.0	9.23		ug/L		92	78 - 127	7	20
1,2-Dichloropropane	10.0	9.68		ug/L		97	81 - 124	1	20

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-58207/5
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	10.0	10.1		ug/L		101	85 - 121	0	20
1,4-Dichlorobenzene	10.0	9.53		ug/L		95	83 - 116	4	20
2-Chloroethyl vinyl ether	10.0	8.68	*	ug/L		87	34 - 140	23	20
Benzene	10.0	10.1		ug/L		101	84 - 124	1	20
Bromodichloromethane	10.0	9.74		ug/L		97	81 - 127	5	20
Bromoform	10.0	10.3		ug/L		103	78 - 138	5	20
Bromomethane	10.0	9.87		ug/L		99	48 - 162	3	20
Carbon tetrachloride	10.0	10.2		ug/L		102	79 - 132	1	20
Chlorobenzene	10.0	9.41		ug/L		94	85 - 118	5	20
Chloroethane	10.0	9.29		ug/L		93	71 - 132	3	20
Chloroform	10.0	9.61		ug/L		96	82 - 124	0	20
Chloromethane	10.0	9.26		ug/L		93	68 - 136	0	20
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	83 - 123	0	20
cis-1,3-Dichloropropene	10.0	10.6		ug/L		106	79 - 132	4	20
Dibromochloromethane	10.0	9.70		ug/L		97	81 - 129	8	20
Ethylbenzene	10.0	10.0		ug/L		100	85 - 125	4	20
Methylene Chloride	10.0	9.24		ug/L		92	70 - 127	1	20
Tetrachloroethene	10.0	10.1		ug/L		101	76 - 129	5	20
Toluene	10.0	9.98		ug/L		100	83 - 127	5	20
trans-1,2-Dichloroethene	10.0	9.87		ug/L		99	78 - 122	0	20
trans-1,3-Dichloropropene	10.0	10.4		ug/L		104	83 - 130	10	20
Trichloroethene	10.0	9.63		ug/L		96	81 - 123	2	20
Trichlorofluoromethane	10.0	9.25		ug/L		92	72 - 135	1	20
Vinyl chloride	10.0	9.55		ug/L		95	72 - 132	1	20
Xylenes, Total	30.0	30.9		ug/L		103	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*71 - 135*
4-Bromofluorobenzene (Surr)	*101*		*80 - 122*
Toluene-d8 (Surr)	*102*		*84 - 122*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
bis (2-chloroisopropyl) ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4,6-Trichlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dichlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dimethylphenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dinitrophenol	ND		50	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dinitrotoluene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,6-Dinitrotoluene	ND		10	2.2	ug/L		06/26/13 13:09	06/26/13 17:50	1
2-Chloronaphthalene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2-Chlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		10	1.5	ug/L		06/26/13 13:09	06/26/13 17:50	1
3,3'-Dichlorobenzidine	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
4,6-Dinitro-2-methylphenol	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Bromophenyl phenyl ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Chlorophenyl phenyl ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Nitrophenol	ND		50	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Acenaphthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Acenaphthylene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzidine	ND		100	20	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[a]anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[a]pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[b]fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[g,h,i]perylene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[k]fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-chloroethoxy)methane	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-chloroethyl)ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-ethylhexyl) phthalate	ND		10	1.9	ug/L		06/26/13 13:09	06/26/13 17:50	1
Butyl benzyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Chrysene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Dibenz(a,h)anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Diethyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Dimethyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Di-n-butyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Di-n-octyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Fluorene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachloro-1,3-butadiene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachlorobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachlorocyclopentadiene	ND		50	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachloroethane	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Indeno[1,2,3-cd]pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Isophorone	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Naphthalene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Nitrobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodiphenylamine	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Pentachlorophenol	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
Phenanthrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Phenol	ND		10	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*76*		*41 - 109*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
2-Fluorobiphenyl (Surr)	*56*		*31 - 103*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
2-Fluorophenol (Surr)	*36*		*23 - 82*	*06/26/13 13:09*	*06/26/13 17:50*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	52		36 - 98	06/26/13 13:09	06/26/13 17:50	1
Phenol-d5 (Surr)	28		14 - 68	06/26/13 13:09	06/26/13 17:50	1
Terphenyl-d14 (Surr)	76		43 - 107	06/26/13 13:09	06/26/13 17:50	1

Lab Sample ID: LCS 160-57924/2-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	100	72.6		ug/L		72	44 - 84
bis (2-chloroisopropyl) ether	100	65.8		ug/L		66	42 - 102
2,4,6-Trichlorophenol	100	71.5		ug/L		71	54 - 105
2,4-Dichlorophenol	100	64.4		ug/L		64	46 - 103
2,4-Dimethylphenol	100	65.4		ug/L		65	40 - 105
2,4-Dinitrophenol	100	69.2		ug/L		69	42 - 146
2,4-Dinitrotoluene	100	79.0		ug/L		79	62 - 101
2,6-Dinitrotoluene	100	78.8		ug/L		79	62 - 103
2-Chloronaphthalene	100	75.5		ug/L		76	45 - 95
2-Chlorophenol	100	65.1		ug/L		65	56 - 93
2-Nitrophenol	101	71.7		ug/L		71	51 - 98
3,3'-Dichlorobenzidine	100	64.1		ug/L		64	26 - 77
4,6-Dinitro-2-methylphenol	100	82.6		ug/L		83	61 - 120
4-Bromophenyl phenyl ether	100	89.1		ug/L		89	54 - 111
4-Chloro-3-methylphenol	100	60.1		ug/L		60	45 - 106
4-Chlorophenyl phenyl ether	100	76.6		ug/L		77	53 - 100
4-Nitrophenol	100	34.8	J	ug/L		35	25 - 45
Acenaphthene	100	75.7		ug/L		76	51 - 89
Acenaphthylene	100	76.1		ug/L		76	46 - 98
Anthracene	100	83.5		ug/L		84	54 - 111
Benzo[a]anthracene	100	88.7		ug/L		89	68 - 108
Benzo[a]pyrene	100	83.5		ug/L		84	55 - 108
Benzo[b]fluoranthene	100	82.4		ug/L		82	57 - 114
Benzo[g,h,i]perylene	100	86.8		ug/L		87	58 - 120
Benzo[k]fluoranthene	100	89.3		ug/L		89	59 - 112
Bis(2-chloroethoxy)methane	100	67.0		ug/L		67	53 - 99
Bis(2-chloroethyl)ether	100	65.8		ug/L		66	50 - 97
Bis(2-ethylhexyl) phthalate	100	84.1		ug/L		84	54 - 116
Butyl benzyl phthalate	100	82.8		ug/L		83	52 - 126
Chrysene	100	77.5		ug/L		77	58 - 112
Dibenz(a,h)anthracene	100	87.9		ug/L		88	56 - 122
Diethyl phthalate	100	75.3		ug/L		75	60 - 101
Dimethyl phthalate	100	74.8		ug/L		75	57 - 101
Di-n-butyl phthalate	100	84.4		ug/L		84	57 - 108
Di-n-octyl phthalate	100	76.6		ug/L		77	57 - 118
Fluoranthene	100	81.8		ug/L		82	55 - 114
Fluorene	100	73.8		ug/L		74	59 - 96
Hexachloro-1,3-butadiene	100	77.5		ug/L		77	36 - 84
Hexachlorobenzene	100	90.1		ug/L		90	56 - 110

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-57924/2-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	100	86.3		ug/L		86	16 - 86
Hexachloroethane	100	74.3		ug/L		74	40 - 77
Indeno[1,2,3-cd]pyrene	100	84.3		ug/L		84	55 - 124
Isophorone	100	64.8		ug/L		65	50 - 107
Naphthalene	100	69.0		ug/L		69	42 - 82
Nitrobenzene	100	69.1		ug/L		69	48 - 96
N-Nitrosodi-n-propylamine	101	77.0		ug/L		77	57 - 113
Pentachlorophenol	100	76.8		ug/L		77	56 - 126
Phenanthrene	100	80.9		ug/L		81	54 - 110
Phenol	100	33.0		ug/L		33	27 - 43
Pyrene	100	85.1		ug/L		85	53 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*89*		*41 - 109*
2-Fluorobiphenyl (Surr)	*76*		*31 - 103*
2-Fluorophenol (Surr)	*51*		*23 - 82*
Nitrobenzene-d5 (Surr)	*74*		*36 - 98*
Phenol-d5 (Surr)	*34*		*14 - 68*
Terphenyl-d14 (Surr)	*84*		*43 - 107*

Lab Sample ID: LCSD 160-57924/3-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	100	72.0		ug/L		72	44 - 84	1	20
bis (2-chloroisopropyl) ether	100	69.4		ug/L		69	42 - 102	5	20
2,4,6-Trichlorophenol	100	70.8		ug/L		71	54 - 105	1	20
2,4-Dichlorophenol	100	64.3		ug/L		64	46 - 103	0	20
2,4-Dimethylphenol	100	65.0		ug/L		65	40 - 105	1	20
2,4-Dinitrophenol	100	68.9		ug/L		69	42 - 146	0	20
2,4-Dinitrotoluene	100	76.2		ug/L		76	62 - 101	4	20
2,6-Dinitrotoluene	100	78.8		ug/L		79	62 - 103	0	20
2-Chloronaphthalene	100	76.9		ug/L		77	45 - 95	2	20
2-Chlorophenol	100	65.0		ug/L		65	56 - 93	0	20
2-Nitrophenol	101	71.8		ug/L		71	51 - 98	0	20
3,3'-Dichlorobenzidine	100	63.5		ug/L		63	26 - 77	1	20
4,6-Dinitro-2-methylphenol	100	82.0		ug/L		82	61 - 120	1	20
4-Bromophenyl phenyl ether	100	86.2		ug/L		86	54 - 111	3	20
4-Chloro-3-methylphenol	100	60.6		ug/L		60	45 - 106	1	20
4-Chlorophenyl phenyl ether	100	73.3		ug/L		73	53 - 100	4	20
4-Nitrophenol	100	36.8	J	ug/L		37	25 - 45	5	20
Acenaphthene	100	73.8		ug/L		74	51 - 89	3	20
Acenaphthylene	100	75.6		ug/L		76	46 - 98	1	20
Anthracene	100	80.3		ug/L		80	54 - 111	4	20
Benzo[a]anthracene	100	86.5		ug/L		86	68 - 108	2	20
Benzo[a]pyrene	100	80.5		ug/L		80	55 - 108	4	20
Benzo[b]fluoranthene	100	78.6		ug/L		79	57 - 114	5	20

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-57924/3-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[g,h,i]perylene	100	83.6		ug/L		84	58 - 120	4	20
Benzo[k]fluoranthene	100	87.0		ug/L		87	59 - 112	3	20
Bis(2-chloroethoxy)methane	100	67.8		ug/L		68	53 - 99	1	20
Bis(2-chloroethyl)ether	100	67.7		ug/L		68	50 - 97	3	20
Bis(2-ethylhexyl) phthalate	100	83.5		ug/L		84	54 - 116	1	20
Butyl benzyl phthalate	100	83.4		ug/L		83	52 - 126	1	20
Chrysene	100	75.9		ug/L		76	58 - 112	2	20
Dibenz(a,h)anthracene	100	84.2		ug/L		84	56 - 122	4	20
Diethyl phthalate	100	73.2		ug/L		73	60 - 101	3	20
Dimethyl phthalate	100	73.5		ug/L		73	57 - 101	2	20
Di-n-butyl phthalate	100	82.6		ug/L		83	57 - 108	2	20
Di-n-octyl phthalate	100	76.4		ug/L		76	57 - 118	0	20
Fluoranthene	100	78.5		ug/L		79	55 - 114	4	20
Fluorene	100	70.7		ug/L		71	59 - 96	4	20
Hexachloro-1,3-butadiene	100	74.8		ug/L		75	36 - 84	4	20
Hexachlorobenzene	100	84.5		ug/L		85	56 - 110	6	20
Hexachlorocyclopentadiene	100	80.3		ug/L		80	16 - 86	7	20
Hexachloroethane	100	75.9		ug/L		76	40 - 77	2	20
Indeno[1,2,3-cd]pyrene	100	82.9		ug/L		83	55 - 124	2	20
Isophorone	100	67.2		ug/L		67	50 - 107	4	20
Naphthalene	100	68.8		ug/L		69	42 - 82	0	20
Nitrobenzene	100	71.0		ug/L		71	48 - 96	3	20
N-Nitrosodi-n-propylamine	101	79.5		ug/L		79	57 - 113	3	20
Pentachlorophenol	100	75.9		ug/L		76	56 - 126	1	20
Phenanthrene	100	79.2		ug/L		79	54 - 110	2	20
Phenol	100	34.9		ug/L		35	27 - 43	5	20
Pyrene	100	83.8		ug/L		84	53 - 117	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*82*		*41 - 109*
2-Fluorobiphenyl (Surr)	*77*		*31 - 103*
2-Fluorophenol (Surr)	*52*		*23 - 82*
Nitrobenzene-d5 (Surr)	*76*		*36 - 98*
Phenol-d5 (Surr)	*36*		*14 - 68*
Terphenyl-d14 (Surr)	*82*		*43 - 107*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 160-57473/1-A
Matrix: Water
Analysis Batch: 58206

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57473

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		06/24/13 12:35	06/26/13 17:09	1
Arsenic	ND		10	2.0	ug/L		06/24/13 12:35	06/26/13 17:09	1
Beryllium	ND		5.0	0.50	ug/L		06/24/13 12:35	06/26/13 17:09	1
Cadmium	ND		5.0	0.45	ug/L		06/24/13 12:35	06/26/13 17:09	1
Chromium	ND		10	3.1	ug/L		06/24/13 12:35	06/26/13 17:09	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 160-57473/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58206 — **Prep Batch: 57473**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		50	4.0	ug/L		06/24/13 12:35	06/26/13 17:09	1
Copper	ND		25	4.6	ug/L		06/24/13 12:35	06/26/13 17:09	1
Iron	ND		100	16	ug/L		06/24/13 12:35	06/26/13 17:09	1
Lead	ND		10	1.3	ug/L		06/24/13 12:35	06/26/13 17:09	1
Nickel	ND		40	13	ug/L		06/24/13 12:35	06/26/13 17:09	1
Antimony	ND		10	4.0	ug/L		06/24/13 12:35	06/26/13 17:09	1
Selenium	ND		15	2.7	ug/L		06/24/13 12:35	06/26/13 17:09	1
Silver	ND		10	6.0	ug/L		06/24/13 12:35	06/26/13 17:09	1
Thallium	ND	^	20	0.88	ug/L		06/24/13 12:35	06/26/13 17:09	1
Zinc	ND		20	5.2	ug/L		06/24/13 12:35	06/26/13 17:09	1

Lab Sample ID: LCS 160-57473/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58206 — **Prep Batch: 57473**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	10000		ug/L		100	85 - 115
Arsenic	1000	1020		ug/L		102	85 - 115
Beryllium	1000	1050		ug/L		105	85 - 115
Cadmium	1000	1030		ug/L		103	85 - 115
Chromium	1000	1060		ug/L		106	85 - 115
Cobalt	1000	1080		ug/L		108	85 - 115
Copper	1000	1060		ug/L		106	85 - 115
Iron	10000	10500		ug/L		105	85 - 115
Lead	1000	1080		ug/L		108	85 - 115
Nickel	1000	1070		ug/L		107	85 - 115
Antimony	500	527		ug/L		105	85 - 115
Selenium	1000	1040		ug/L		104	85 - 115
Silver	100	100		ug/L		100	85 - 115
Thallium	200	230	^	ug/L		115	85 - 115
Zinc	1000	1040		ug/L		104	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 160-57903/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57922 — **Prep Batch: 57903**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.050	ug/L		06/26/13 10:51	06/26/13 12:30	1

Lab Sample ID: LCS 160-57903/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57922 — **Prep Batch: 57903**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.21		ug/L		104	85 - 115

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2821-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 480-126204/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126208 — **Prep Batch: 126204**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/26/13 23:47	06/27/13 00:28	1
SGT-HEM	1.90	J	5.0	1.9	mg/L		06/26/13 23:47	06/27/13 00:28	1

Lab Sample ID: LCS 480-126204/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126208 — **Prep Batch: 126204**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	38.4		mg/L		96	78 - 114
SGT-HEM	20.0	16.3		mg/L		81	64 - 132

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-126091/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126091

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/26/13 10:27	1

Lab Sample ID: LCS 480-126091/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126091

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.07		mg/L		107	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 480-126061/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126061

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			06/26/13 14:05	1

Lab Sample ID: LCS 480-126061/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126061

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	195		mg/L		97	90 - 110

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2821-1

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-125880/1
Matrix: Water
Analysis Batch: 125880

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			06/25/13 17:03	1

Lab Sample ID: LCS 480-125880/2
Matrix: Water
Analysis Batch: 125880

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Suspended Solids			211	207		mg/L		98	88 - 110		

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 160-57508/5
Matrix: Water
Analysis Batch: 57508

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
pH			7.00	6.960		SU		99	99.0 - 101.0		

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2821-1

GC/MS VOA

Analysis Batch: 58207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2821-1 - DL	242-MSD	Total/NA	Water	624	
LCS 160-58207/4	Lab Control Sample	Total/NA	Water	624	
LCSD 160-58207/5	Lab Control Sample Dup	Total/NA	Water	624	
MB 160-58207/2	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 57924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2821-1	242-MSD	Total/NA	Water	625	
160-2821-1 - DL	242-MSD	Total/NA	Water	625	
LCS 160-57924/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 160-57924/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 160-57924/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 58253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2821-1	242-MSD	Total/NA	Water	625	57924
160-2821-1 - DL	242-MSD	Total/NA	Water	625	57924
LCS 160-57924/2-A	Lab Control Sample	Total/NA	Water	625	57924
LCSD 160-57924/3-A	Lab Control Sample Dup	Total/NA	Water	625	57924
MB 160-57924/1-A	Method Blank	Total/NA	Water	625	57924

Metals

Prep Batch: 57473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2821-1	242-MSD	Total/NA	Water	200.7/200.8	
160-2821-1	242-MSD	Dissolved	Water	200.7/200.8	
LCS 160-57473/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
MB 160-57473/1-A	Method Blank	Total/NA	Water	200.7/200.8	

Prep Batch: 57903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2821-1	242-MSD	Total/NA	Water	245.1	
160-2821-1	242-MSD	Dissolved	Water	245.1	
LCS 160-57903/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 160-57903/1-A	Method Blank	Total/NA	Water	245.1	

Analysis Batch: 57922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2821-1	242-MSD	Total/NA	Water	245.1	57903
160-2821-1	242-MSD	Dissolved	Water	245.1	57903
LCS 160-57903/2-A	Lab Control Sample	Total/NA	Water	245.1	57903
MB 160-57903/1-A	Method Blank	Total/NA	Water	245.1	57903

Analysis Batch: 58206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2821-1	242-MSD	Total/NA	Water	200.7 Rev 4.4	57473
160-2821-1	242-MSD	Dissolved	Water	200.7 Rev 4.4	57473

Metals (Continued)

Analysis Batch: 58206 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 160-57473/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	57473
MB 160-57473/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	57473

General Chemistry

Analysis Batch: 57508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2821-1	242-MSD	Total/NA	Water	SM 4500 H+ B	
LCS 160-57508/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 125880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2821-1	242-MSD	Total/NA	Water	SM 2540D	
LCS 480-125880/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-125880/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 126061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2821-1	242-MSD	Total/NA	Water	410.4	
LCS 480-126061/4	Lab Control Sample	Total/NA	Water	410.4	
MB 480-126061/3	Method Blank	Total/NA	Water	410.4	

Analysis Batch: 126091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2821-1	242-MSD	Total/NA	Water	350.1	
LCS 480-126091/4	Lab Control Sample	Total/NA	Water	350.1	
MB 480-126091/3	Method Blank	Total/NA	Water	350.1	

Prep Batch: 126204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2821-1	242-MSD	Total/NA	Water	1664A	
LCS 480-126204/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 480-126204/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 126208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2821-1	242-MSD	Total/NA	Water	1664A	126204
LCS 480-126204/2-A	Lab Control Sample	Total/NA	Water	1664A	126204
MB 480-126204/1-A	Method Blank	Total/NA	Water	1664A	126204

Surrogate Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2821-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(71-135)	(80-122)	(84-122)
160-2821-1 - DL	242-MSD	95	102	106
LCS 160-58207/4	Lab Control Sample	96	100	104
LCSD 160-58207/5	Lab Control Sample Dup	93	101	102
MB 160-58207/2	Method Blank	98	110	106

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(41-109)	(31-103)	(23-82)	(36-98)	(14-68)	(43-107)
160-2821-1	242-MSD	38 X	34	0 X	0 X	0 X	19 X
160-2821-1 - DL	242-MSD	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
LCS 160-57924/2-A	Lab Control Sample	89	76	51	74	34	84
LCSD 160-57924/3-A	Lab Control Sample Dup	82	77	52	76	36	82
MB 160-57924/1-A	Method Blank	76	56	36	52	28	76

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2821-2
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
7/3/2013 5:05:31 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

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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.

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Job ID: 160-2821-2

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2821-2

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt
Manual Integrations were performed only when necessary and are in compliance with the laboratory's standard operating procedure. Detailed information can be found in the raw data section of the level IV report.

The following clean-up methods for Organic analyses may have been used on the samples in this data set. Specific methods employed are documented on the batch extraction logs:

Method 3600C: Cleanup
Method 3620C: Florisil Cleanup
Method 3630C: Silica Gel Cleanup
Method 3640A: Gel-Permeation Cleanup
Method 3650B: Acid-Base Partition Cleanup
Method 3660B: Sulfur Cleanup
Method 3665A: Sulfuric Acid/Permanganate Cleanup

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

Job ID: 160-2821-2 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

RECEIPT

The sample was received on 6/22/2013 10:01 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 18.0º C.

BIOCHEMICAL OXYGEN DEMAND

Sample 242-MSD (160-2821-1) was analyzed for Biochemical oxygen demand in accordance with SM 5210B. The samples were analyzed on 06/24/2013.

Biochemical Oxygen Demand was detected in method blank SCB 160-58413/2 at a level exceeding the reporting limit.

The glucose-glutamic acid LCS/CCV standard in BOD Batch 58413 recovered outside the recovery limits specified in the method. The sample hold is exceeded and therefore cannot be reanalyzed.

The matrix duplicate %RPD for BOD associated with batch 58413 was outside the control limits due to possible matrix interference of the sample. The sample hold is exceeded, and therefore cannot be reanalyzed. (160-2821-1 DU), 242-MSD (160-2821-1)

No other difficulties were encountered during the BOD analysis.

All other quality control parameters were within the acceptance limits.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

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TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY	6/22/13	197610
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 1
	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State): BRIDGETON LF / MISSOURI

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.:

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	624-VOCs	1664 HEM/TPH	5210B-BOD	625-SVOCs	200.7 245.1 T	200.7 245.1 D	2540D-TSS	420.4 3550.1	pH			
242-MSD	6/22/13	0632		✓			5	1	1	4			3	1	1	1	1	1	1	1	1			
~~TRIP BLANK~~ MH																								

Special Instructions/ Conditions of Receipt

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☑ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 Days

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	6/22/13	1001	1. Received By: Jill Clark	6-22-13	1001
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2821-2

Login Number: 2821

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	Received same day of collection; chilling process has begun.
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?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Definitions/Glossary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2821-2

Qualifiers

General Chemistry

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
s	Seeded Control Blank (SCB) Recovery High

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2821-2

Method	Method Description	Protocol	Laboratory
SM 5210B	BOD, 5-Day	SM	TAL SL

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2821-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2821-1	242-MSD	Water	06/22/13 06:32	06/22/13 10:01

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2821-2

Client Sample ID: 242-MSD

Lab Sample ID: 160-2821-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	34000	J * ^	60000	3000	mg/L	1		SM 5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2821-2

Client Sample ID: 242-MSD

Lab Sample ID: 160-2821-1

Date Collected: 06/22/13 06:32

Matrix: Water

Date Received: 06/22/13 10:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	34000	J * ^	60000	3000	mg/L			06/24/13 05:47	1

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2821-2

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: SCB 160-58413/2 SCB
Matrix: Water
Analysis Batch: 58413

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

Analyte	SCB Result	SCB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.98	s	2.0	0.10	mg/L			06/24/13 05:47	1

Lab Sample ID: USB 160-58413/1 USB
Matrix: Water
Analysis Batch: 58413

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	0.10	mg/L			06/24/13 05:47	1

Lab Sample ID: LCS 160-58413/3
Matrix: Water
Analysis Batch: 58413

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			199	116	* ^	mg/L		58	84.6 - 115.4		

Lab Sample ID: 160-2821-1 DU
Matrix: Water
Analysis Batch: 58413

Client Sample ID: 242-MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Biochemical Oxygen Demand	34000	J * ^		15000	J * ^	mg/L				78	20

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2821-2

General Chemistry

Analysis Batch: 58413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2821-1	242-MSD	Total/NA	Water	SM 5210B	
160-2821-1 DU	242-MSD	Total/NA	Water	SM 5210B	
LCS 160-58413/3	Lab Control Sample	Total/NA	Water	SM 5210B	
SCB 160-58413/2 SCB	Method Blank	Total/NA	Water	SM 5210B	
USB 160-58413/1 USB	Method Blank	Total/NA	Water	SM 5210B	

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2829-1
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
6/30/2013 3:52:31 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

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

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Job ID: 160-2829-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2829-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 6/24/2013 1:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples 245/246-MSD (160-2829-1) and TRIP BLANK (160-2829-2) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA Method 624. The samples were analyzed on 06/26/2013.

Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 58207. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 58207 recovered outside control limits for 2-Chloroethyl vinyl ether. This analyte was not observed above the reporting limit in any of the associated samples.

Job ID: 160-2829-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

The following sample(s) were analyzed at reduced volumes due to high concentrations of target analytes: 245/246-MSD (160-2829-1). The calculation was done using an initial volume adjustment rather than a dilution factor. The reporting limits have been elevated by the appropriate factor.

The following samples were observed to have pH's greater than 2 245/246-MSD (160-2829-1). The samples were analyzed within seven days of sampling in the field. Therefore, this excursion does not affect the reported data.

No other difficulties were encountered during the VOCs analysis.

All other quality control parameters were within the acceptance limits.

Organic Prep
Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 57924. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 245/246-MSD (160-2829-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA Method 625. The samples were prepared on 06/26/2013 and analyzed on 06/26/2013 and 06/27/2013.

Several analytes failed the surrogate recovery criteria low for 245/246-MSD (160-2829-1). The samples show evidence of matrix interference; therefore, re-extraction and/or re-analysis was not performed.

The continuing calibration verification (CCV) for Hexachlorocyclopentadiene associated with batch 58253 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The following samples were diluted to bring the concentration of target analytes within the calibration range: 245/246-MSD (160-2829-1) [10X]. Elevated reporting limits (RLs) are provided. Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

No other difficulties were encountered during the SVOC analysis.

All other quality control parameters were within the acceptance limits.

ICP total and dissolved
Sample 245/246-MSD (160-2829-1) was analyzed for ICP in accordance with EPA Method 200.7, Rev. 4.4. The samples were prepared on 06/26/2013 and analyzed on 06/27/2013.

Samples were prepped at a dilution due to their matrix. Samples were dark brown\black in color and had a strong odor.

The following samples were diluted due to the nature of the sample matrix. The sample digestates were dark yellow in color: (160-2829-1 MS), (160-2829-1 MSD), (160-2829-1 SD), 245/246-MSD (160-2829-1) [5X]. Elevated reporting limits (RLs) are provided.

Zinc was detected in method blank MB 160-57955/1-A at a level exceeding the reporting limit.

Thallium failed the recovery criteria high for LCS 160-57955/2-A. Refer to the QC report for details.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

The initial calibration verification (ICV) for analytical batch 57955 was outside control criteria for thallium. The affected samples are ND for thallium and the data have been qualified and reported.

No other difficulties were encountered during the ICP analysis.

All other quality control parameters were within the acceptance limits.

Job ID: 160-2829-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

DISSOLVED MERCURY (CVAA)
Sample 245/246-MSD (160-2829-1) was analyzed for dissolved mercury (CVAA) in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/26/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

MERCURY
Sample 245/246-MSD (160-2829-1) was analyzed for mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/26/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

SGT-HEM
Sample 245/246-MSD (160-2829-1) was analyzed for SGT-HEM in accordance with EPA Method 1664A. The samples were prepared on 06/26/2013 and analyzed on 06/27/2013.

SGT-HEM was detected in method blank MB 480-126204/1-A at a level that was above the method detection limit but below the reporting limit.

No other difficulties were encountered during the SGT-HEM analysis.

All other quality control parameters were within the acceptance limits.

TOTAL SUSPENDED SOLIDS
Sample 245/246-MSD (160-2829-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 06/25/2013.

Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: 245/246-MSD (160-2829-1). The reporting limits (RLs) have been adjusted proportionately.

No difficulties were encountered during the TSS analysis.

All quality control parameters were within the acceptance limits.

AMMONIA
Sample 245/246-MSD (160-2829-1) was analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/26/2013.

Sample 245/246-MSD (160-2829-1)[1000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the ammonia analysis.

All quality control parameters were within the acceptance limits.

CHEMICAL OXYGEN DEMAND
Sample 245/246-MSD (160-2829-1) was analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 06/26/2013.

Sample 245/246-MSD (160-2829-1)[200X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Job ID: 160-2829-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

No difficulties were encountered during the COD analysis.

All quality control parameters were within the acceptance limits.

PH

Sample 245/246-MSD (160-2829-1) was analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed on 06/24/2013.

For the analysis of the associated samples in pH batch 57508, this analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 245/246-MSD (160-2829-1)

For the analysis of the associated samples in pH batch 57508, the samples were analyzed using pH strips to prevent possible damage to the pH probe. The pH indicator strips used were range 0-14, lot HC270245.245/246-MSD (160-2829-1)

No difficulties were encountered during the pH analysis.

All quality control parameters were within the acceptance limits.

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2829-1

Login Number: 2829

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2829-1

Login Number: 2829
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/25/13 02:10 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	2.6 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2829-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SL
245.1	Mercury (CVAA)	EPA	TAL SL
1664A	HEM and SGT-HEM	1664A	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
410.4	COD	MCAWW	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL SL

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2829-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2829-1	245/246-MSD	Water	06/24/13 08:20	06/24/13 13:50
160-2829-2	TRIP BLANK	Water	06/24/13 00:00	06/24/13 13:50

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2829-1

Client Sample ID: 245/246-MSD — Lab Sample ID: 160-2829-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene - DL	11	J	50	6.0	ug/L	1		624	Total/NA
Anthracene	34	J	97	9.7	ug/L	1		625	Total/NA
Naphthalene	39	J	97	9.7	ug/L	1		625	Total/NA
Phenanthrene	23	J	97	9.7	ug/L	1		625	Total/NA
Phenol - DL	5800		970	190	ug/L	10		625	Total/NA
Aluminum	20000		10000	4000	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	520		500	99	ug/L	5		200.7 Rev 4.4	Total/NA
Cobalt	410	J	2500	200	ug/L	5		200.7 Rev 4.4	Total/NA
Chromium	280	J	500	160	ug/L	5		200.7 Rev 4.4	Total/NA
Iron	1400000		5000	800	ug/L	5		200.7 Rev 4.4	Total/NA
Lead	330	J	500	64	ug/L	5		200.7 Rev 4.4	Total/NA
Zinc	23000	B	1000	260	ug/L	5		200.7 Rev 4.4	Total/NA
Aluminum	5400	J	10000	4000	ug/L	5		200.7 Rev 4.4	Dissolved
Arsenic	430	J	500	99	ug/L	5		200.7 Rev 4.4	Dissolved
Chromium	290	J	500	160	ug/L	5		200.7 Rev 4.4	Dissolved
Cobalt	210	J	2500	200	ug/L	5		200.7 Rev 4.4	Dissolved
Iron	890000		5000	800	ug/L	5		200.7 Rev 4.4	Dissolved
Lead	130	J	500	64	ug/L	5		200.7 Rev 4.4	Dissolved
Selenium	160	J	750	130	ug/L	5		200.7 Rev 4.4	Dissolved
Zinc	21000	B	1000	260	ug/L	5		200.7 Rev 4.4	Dissolved
Mercury	5.9	J	6.0	1.5	ug/L	1		245.1	Total/NA
Oil & Grease	9.0	J	17	4.7	mg/L	1		1664A	Total/NA
SGT-HEM	7.0	J B	17	6.5	mg/L	1		1664A	Total/NA
Ammonia	680		20	9.0	mg/L	1000		350.1	Total/NA
Chemical Oxygen Demand	85000		2000	1000	mg/L	200		410.4	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
Total Suspended Solids	1800		100	100	mg/L	1		SM 2540D	Total/NA
pH	6.00	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 160-2829-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2829-1

Client Sample ID: 245/246-MSD

Date Collected: 06/24/13 08:20
Date Received: 06/24/13 13:50

Lab Sample ID: 160-2829-1

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.5	ug/L			06/26/13 13:55	1
1,1,2,2-Tetrachloroethane	ND		50	5.0	ug/L			06/26/13 13:55	1
1,1,2-Trichloroethane	ND		50	7.5	ug/L			06/26/13 13:55	1
1,1-Dichloroethane	ND		50	3.5	ug/L			06/26/13 13:55	1
1,1-Dichloroethene	ND		50	4.0	ug/L			06/26/13 13:55	1
1,2-Dichlorobenzene	ND		50	3.0	ug/L			06/26/13 13:55	1
1,2-Dichloroethane	ND		50	5.0	ug/L			06/26/13 13:55	1
1,2-Dichloropropane	ND		50	5.0	ug/L			06/26/13 13:55	1
1,3-Dichlorobenzene	ND		50	4.0	ug/L			06/26/13 13:55	1
1,4-Dichlorobenzene	**11**	**J**	50	6.0	ug/L			06/26/13 13:55	1
2-Chloroethyl vinyl ether	ND	*	100	8.5	ug/L			06/26/13 13:55	1
Benzene	ND		50	3.0	ug/L			06/26/13 13:55	1
Bromodichloromethane	ND		50	4.5	ug/L			06/26/13 13:55	1
Bromoform	ND		50	8.5	ug/L			06/26/13 13:55	1
Bromomethane	ND		100	6.5	ug/L			06/26/13 13:55	1
Carbon tetrachloride	ND		50	6.5	ug/L			06/26/13 13:55	1
Chlorobenzene	ND		50	7.5	ug/L			06/26/13 13:55	1
Chloroethane	ND		100	5.0	ug/L			06/26/13 13:55	1
Chloroform	ND		50	5.0	ug/L			06/26/13 13:55	1
Chloromethane	ND		100	4.0	ug/L			06/26/13 13:55	1
cis-1,2-Dichloroethene	ND		50	4.5	ug/L			06/26/13 13:55	1
cis-1,3-Dichloropropene	ND		50	3.5	ug/L			06/26/13 13:55	1
Dibromochloromethane	ND		50	6.5	ug/L			06/26/13 13:55	1
Ethylbenzene	ND		50	4.5	ug/L			06/26/13 13:55	1
Methylene Chloride	ND		50	5.5	ug/L			06/26/13 13:55	1
Tetrachloroethene	ND		50	9.0	ug/L			06/26/13 13:55	1
Toluene	ND		50	3.5	ug/L			06/26/13 13:55	1
trans-1,2-Dichloroethene	ND		50	4.0	ug/L			06/26/13 13:55	1
trans-1,3-Dichloropropene	ND		50	4.0	ug/L			06/26/13 13:55	1
Trichloroethene	ND		50	11	ug/L			06/26/13 13:55	1
Trichlorofluoromethane	ND		50	5.5	ug/L			06/26/13 13:55	1
Vinyl chloride	ND		100	4.0	ug/L			06/26/13 13:55	1
Xylenes, Total	ND		150	10	ug/L			06/26/13 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*71 - 135*		*06/26/13 13:55*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 122*		*06/26/13 13:55*	*1*
Toluene-d8 (Surr)	*104*		*84 - 122*		*06/26/13 13:55*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
bis (2-chloroisopropyl) ether	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
2,4,6-Trichlorophenol	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
2,4-Dichlorophenol	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
2,4-Dimethylphenol	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
2,4-Dinitrophenol	ND		480	19	ug/L		06/26/13 13:09	06/27/13 04:13	1
2,4-Dinitrotoluene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
2,6-Dinitrotoluene	ND		97	21	ug/L		06/26/13 13:09	06/27/13 04:13	1
2-Chloronaphthalene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2829-1

Client Sample ID: 245/246-MSD

Date Collected: 06/24/13 08:20
Date Received: 06/24/13 13:50

Lab Sample ID: 160-2829-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
2-Nitrophenol	ND		97	15	ug/L		06/26/13 13:09	06/27/13 04:13	1
3,3'-Dichlorobenzidine	ND		480	12	ug/L		06/26/13 13:09	06/27/13 04:13	1
4,6-Dinitro-2-methylphenol	ND		480	12	ug/L		06/26/13 13:09	06/27/13 04:13	1
4-Bromophenyl phenyl ether	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
4-Chloro-3-methylphenol	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
4-Chlorophenyl phenyl ether	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
4-Nitrophenol	ND		480	19	ug/L		06/26/13 13:09	06/27/13 04:13	1
Acenaphthene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Acenaphthylene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Anthracene	**34**	**J**	97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Benzidine	ND		970	190	ug/L		06/26/13 13:09	06/27/13 04:13	1
Benzo[a]anthracene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Benzo[a]pyrene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Benzo[b]fluoranthene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Benzo[g,h,i]perylene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Benzo[k]fluoranthene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Bis(2-chloroethoxy)methane	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Bis(2-chloroethyl)ether	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Bis(2-ethylhexyl) phthalate	ND		97	18	ug/L		06/26/13 13:09	06/27/13 04:13	1
Butyl benzyl phthalate	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Chrysene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Dibenz(a,h)anthracene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Diethyl phthalate	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Dimethyl phthalate	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Di-n-butyl phthalate	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Di-n-octyl phthalate	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Fluoranthene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Fluorene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Hexachloro-1,3-butadiene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Hexachlorobenzene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Hexachlorocyclopentadiene	ND		480	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Hexachloroethane	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Indeno[1,2,3-cd]pyrene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Isophorone	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Naphthalene	**39**	**J**	97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Nitrobenzene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
N-Nitrosodimethylamine	ND		97	19	ug/L		06/26/13 13:09	06/27/13 04:13	1
N-Nitrosodi-n-propylamine	ND		97	15	ug/L		06/26/13 13:09	06/27/13 04:13	1
N-Nitrosodiphenylamine	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Pentachlorophenol	ND		480	12	ug/L		06/26/13 13:09	06/27/13 04:13	1
Phenanthrene	**23**	**J**	97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1
Pyrene	ND		97	9.7	ug/L		06/26/13 13:09	06/27/13 04:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*42*		*41 - 109*	*06/26/13 13:09*	*06/27/13 04:13*	*1*
2-Fluorobiphenyl (Surr)	*40*		*31 - 103*	*06/26/13 13:09*	*06/27/13 04:13*	*1*
2-Fluorophenol (Surr)	*0*	*X*	*23 - 82*	*06/26/13 13:09*	*06/27/13 04:13*	*1*
Nitrobenzene-d5 (Surr)	*0*	*X*	*36 - 98*	*06/26/13 13:09*	*06/27/13 04:13*	*1*
Phenol-d5 (Surr)	*0*	*X*	*14 - 68*	*06/26/13 13:09*	*06/27/13 04:13*	*1*

Client Sample ID: 245/246-MSD

Lab Sample ID: 160-2829-1

Date Collected: 06/24/13 08:20

Matrix: Water

Date Received: 06/24/13 13:50

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14 (Surr)	17	X	43 - 107	06/26/13 13:09	06/27/13 04:13	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	5800		970	190	ug/L		06/26/13 13:09	06/26/13 21:53	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	0	D X	41 - 109	06/26/13 13:09	06/26/13 21:53	10
2-Fluorobiphenyl (Surr)	0	D X	31 - 103	06/26/13 13:09	06/26/13 21:53	10
2-Fluorophenol (Surr)	0	D X	23 - 82	06/26/13 13:09	06/26/13 21:53	10
Nitrobenzene-d5 (Surr)	0	D X	36 - 98	06/26/13 13:09	06/26/13 21:53	10
Phenol-d5 (Surr)	0	D X	14 - 68	06/26/13 13:09	06/26/13 21:53	10
Terphenyl-d14 (Surr)	0	D X	43 - 107	06/26/13 13:09	06/26/13 21:53	10

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		500	300	ug/L		06/26/13 16:18	06/27/13 14:02	5
Aluminum	20000		10000	4000	ug/L		06/26/13 16:18	06/27/13 14:02	5
Arsenic	520		500	99	ug/L		06/26/13 16:18	06/27/13 14:02	5
Beryllium	ND		250	25	ug/L		06/26/13 16:18	06/27/13 14:02	5
Cadmium	ND		250	23	ug/L		06/26/13 16:18	06/27/13 14:02	5
Cobalt	410	J	2500	200	ug/L		06/26/13 16:18	06/27/13 14:02	5
Chromium	280	J	500	160	ug/L		06/26/13 16:18	06/27/13 14:02	5
Copper	ND		1300	230	ug/L		06/26/13 16:18	06/27/13 14:02	5
Iron	1400000		5000	800	ug/L		06/26/13 16:18	06/27/13 14:02	5
Nickel	ND		2000	670	ug/L		06/26/13 16:18	06/27/13 14:02	5
Lead	330	J	500	64	ug/L		06/26/13 16:18	06/27/13 14:02	5
Antimony	ND		500	200	ug/L		06/26/13 16:18	06/27/13 14:02	5
Selenium	ND		750	130	ug/L		06/26/13 16:18	06/27/13 14:02	5
Thallium	ND	* ^	1000	44	ug/L		06/26/13 16:18	06/27/13 14:02	5
Zinc	23000	B	1000	260	ug/L		06/26/13 16:18	06/27/13 14:02	5

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5400	J	10000	4000	ug/L		06/26/13 16:18	06/27/13 14:17	5
Antimony	ND		500	200	ug/L		06/26/13 16:18	06/27/13 14:17	5
Arsenic	430	J	500	99	ug/L		06/26/13 16:18	06/27/13 14:17	5
Beryllium	ND		250	25	ug/L		06/26/13 16:18	06/27/13 14:17	5
Cadmium	ND		250	23	ug/L		06/26/13 16:18	06/27/13 14:17	5
Chromium	290	J	500	160	ug/L		06/26/13 16:18	06/27/13 14:17	5
Cobalt	210	J	2500	200	ug/L		06/26/13 16:18	06/27/13 14:17	5
Copper	ND		1300	230	ug/L		06/26/13 16:18	06/27/13 14:17	5
Iron	890000		5000	800	ug/L		06/26/13 16:18	06/27/13 14:17	5
Lead	130	J	500	64	ug/L		06/26/13 16:18	06/27/13 14:17	5
Nickel	ND		2000	670	ug/L		06/26/13 16:18	06/27/13 14:17	5
Selenium	160	J	750	130	ug/L		06/26/13 16:18	06/27/13 14:17	5
Silver	ND		500	300	ug/L		06/26/13 16:18	06/27/13 14:17	5
Thallium	ND	* ^	1000	44	ug/L		06/26/13 16:18	06/27/13 14:17	5
Zinc	21000	B	1000	260	ug/L		06/26/13 16:18	06/27/13 14:17	5

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2829-1

Client Sample ID: 245/246-MSD

Lab Sample ID: 160-2829-1
Matrix: Water
Date Collected: 06/24/13 08:20
Date Received: 06/24/13 13:50

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	5.9	J	6.0	1.5	ug/L		06/26/13 10:51	06/26/13 12:44	1

Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		6.0	1.5	ug/L		06/26/13 10:51	06/26/13 12:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	9.0	J	17	4.7	mg/L		06/26/13 23:47	06/27/13 00:28	1
SGT-HEM	7.0	J B	17	6.5	mg/L		06/26/13 23:47	06/27/13 00:28	1
Ammonia	680		20	9.0	mg/L			06/26/13 10:29	1000
Chemical Oxygen Demand	85000		2000	1000	mg/L			06/26/13 14:05	200

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	1800		100	100	mg/L			06/25/13 17:08	1
pH	6.00	HF	0.100	0.100	SU			06/24/13 16:34	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2829-2
Matrix: Water
Date Collected: 06/24/13 00:00
Date Received: 06/24/13 13:50

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/26/13 12:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/26/13 12:14	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/26/13 12:14	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/26/13 12:14	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/26/13 12:14	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/26/13 12:14	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/26/13 12:14	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/26/13 12:14	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/26/13 12:14	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/26/13 12:14	1
2-Chloroethyl vinyl ether	ND	*	2.0	0.17	ug/L			06/26/13 12:14	1
Benzene	ND		1.0	0.060	ug/L			06/26/13 12:14	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/26/13 12:14	1
Bromoform	ND		1.0	0.17	ug/L			06/26/13 12:14	1
Bromomethane	ND		2.0	0.13	ug/L			06/26/13 12:14	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/26/13 12:14	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/26/13 12:14	1
Chloroethane	ND		2.0	0.10	ug/L			06/26/13 12:14	1
Chloroform	ND		1.0	0.10	ug/L			06/26/13 12:14	1
Chloromethane	ND		2.0	0.080	ug/L			06/26/13 12:14	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/26/13 12:14	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/26/13 12:14	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/26/13 12:14	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/26/13 12:14	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/26/13 12:14	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/26/13 12:14	1
Toluene	ND		1.0	0.070	ug/L			06/26/13 12:14	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/26/13 12:14	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2829-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2829-2

Date Collected: 06/24/13 00:00

Matrix: Water

Date Received: 06/24/13 13:50

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/26/13 12:14	1
Trichloroethene	ND		1.0	0.21	ug/L			06/26/13 12:14	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/26/13 12:14	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/26/13 12:14	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/26/13 12:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*71 - 135*		*06/26/13 12:14*	*1*
4-Bromofluorobenzene (Surr)	*114*		*80 - 122*		*06/26/13 12:14*	*1*
Toluene-d8 (Surr)	*106*		*84 - 122*		*06/26/13 12:14*	*1*

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-58207/2
Matrix: Water
Analysis Batch: 58207

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/26/13 10:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/26/13 10:59	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/26/13 10:59	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/26/13 10:59	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/26/13 10:59	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/26/13 10:59	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/26/13 10:59	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/26/13 10:59	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/26/13 10:59	1
Benzene	ND		1.0	0.060	ug/L			06/26/13 10:59	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/26/13 10:59	1
Bromoform	ND		1.0	0.17	ug/L			06/26/13 10:59	1
Bromomethane	ND		2.0	0.13	ug/L			06/26/13 10:59	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/26/13 10:59	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/26/13 10:59	1
Chloroethane	ND		2.0	0.10	ug/L			06/26/13 10:59	1
Chloroform	ND		1.0	0.10	ug/L			06/26/13 10:59	1
Chloromethane	ND		2.0	0.080	ug/L			06/26/13 10:59	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/26/13 10:59	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/26/13 10:59	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/26/13 10:59	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/26/13 10:59	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/26/13 10:59	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/26/13 10:59	1
Toluene	ND		1.0	0.070	ug/L			06/26/13 10:59	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
Trichloroethene	ND		1.0	0.21	ug/L			06/26/13 10:59	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/26/13 10:59	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/26/13 10:59	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/26/13 10:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*71 - 135*		*06/26/13 10:59*	*1*
4-Bromofluorobenzene (Surr)	*110*		*80 - 122*		*06/26/13 10:59*	*1*
Toluene-d8 (Surr)	*106*		*84 - 122*		*06/26/13 10:59*	*1*

Lab Sample ID: LCS 160-58207/4
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	9.92		ug/L		99	82 - 127
1,1,2,2-Tetrachloroethane	10.0	10.4		ug/L		104	69 - 130
1,1,2-Trichloroethane	10.0	10.2		ug/L		102	78 - 122
1,1-Dichloroethane	10.0	9.71		ug/L		97	82 - 125

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-58207/4
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	9.78		ug/L		98	77 - 127
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	83 - 121
1,2-Dichloroethane	10.0	9.90		ug/L		99	78 - 127
1,2-Dichloropropane	10.0	9.76		ug/L		98	81 - 124
1,3-Dichlorobenzene	10.0	10.1		ug/L		101	85 - 121
1,4-Dichlorobenzene	10.0	9.92		ug/L		99	83 - 116
2-Chloroethyl vinyl ether	10.0	11.0		ug/L		110	34 - 140
Benzene	10.0	10.2		ug/L		102	84 - 124
Bromodichloromethane	10.0	10.3		ug/L		103	81 - 127
Bromoform	10.0	10.9		ug/L		109	78 - 138
Bromomethane	10.0	9.60		ug/L		96	48 - 162
Carbon tetrachloride	10.0	10.0		ug/L		100	79 - 132
Chlorobenzene	10.0	9.93		ug/L		99	85 - 118
Chloroethane	10.0	9.56		ug/L		96	71 - 132
Chloroform	10.0	9.65		ug/L		96	82 - 124
Chloromethane	10.0	9.25		ug/L		92	68 - 136
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	83 - 123
cis-1,3-Dichloropropene	10.0	11.1		ug/L		111	79 - 132
Dibromochloromethane	10.0	10.5		ug/L		105	81 - 129
Ethylbenzene	10.0	10.5		ug/L		105	85 - 125
Methylene Chloride	10.0	9.33		ug/L		93	70 - 127
Tetrachloroethene	10.0	10.6		ug/L		106	76 - 129
Toluene	10.0	10.5		ug/L		105	83 - 127
trans-1,2-Dichloroethene	10.0	9.86		ug/L		99	78 - 122
trans-1,3-Dichloropropene	10.0	11.5		ug/L		115	83 - 130
Trichloroethene	10.0	9.87		ug/L		99	81 - 123
Trichlorofluoromethane	10.0	9.38		ug/L		94	72 - 135
Vinyl chloride	10.0	9.60		ug/L		96	72 - 132
Xylenes, Total	30.0	32.8		ug/L		109	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*71 - 135*
4-Bromofluorobenzene (Surr)	*100*		*80 - 122*
Toluene-d8 (Surr)	*104*		*84 - 122*

Lab Sample ID: LCSD 160-58207/5
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	10.0	9.98		ug/L		100	82 - 127	1	20
1,1,2,2-Tetrachloroethane	10.0	9.28		ug/L		93	69 - 130	11	20
1,1,2-Trichloroethane	10.0	9.04		ug/L		90	78 - 122	12	20
1,1-Dichloroethane	10.0	9.58		ug/L		96	82 - 125	1	20
1,1-Dichloroethene	10.0	10.0		ug/L		100	77 - 127	2	20
1,2-Dichlorobenzene	10.0	10.1		ug/L		101	83 - 121	1	20
1,2-Dichloroethane	10.0	9.23		ug/L		92	78 - 127	7	20
1,2-Dichloropropane	10.0	9.68		ug/L		97	81 - 124	1	20

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-58207/5
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	10.0	10.1		ug/L		101	85 - 121	0	20
1,4-Dichlorobenzene	10.0	9.53		ug/L		95	83 - 116	4	20
2-Chloroethyl vinyl ether	10.0	8.68	*	ug/L		87	34 - 140	23	20
Benzene	10.0	10.1		ug/L		101	84 - 124	1	20
Bromodichloromethane	10.0	9.74		ug/L		97	81 - 127	5	20
Bromoform	10.0	10.3		ug/L		103	78 - 138	5	20
Bromomethane	10.0	9.87		ug/L		99	48 - 162	3	20
Carbon tetrachloride	10.0	10.2		ug/L		102	79 - 132	1	20
Chlorobenzene	10.0	9.41		ug/L		94	85 - 118	5	20
Chloroethane	10.0	9.29		ug/L		93	71 - 132	3	20
Chloroform	10.0	9.61		ug/L		96	82 - 124	0	20
Chloromethane	10.0	9.26		ug/L		93	68 - 136	0	20
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	83 - 123	0	20
cis-1,3-Dichloropropene	10.0	10.6		ug/L		106	79 - 132	4	20
Dibromochloromethane	10.0	9.70		ug/L		97	81 - 129	8	20
Ethylbenzene	10.0	10.0		ug/L		100	85 - 125	4	20
Methylene Chloride	10.0	9.24		ug/L		92	70 - 127	1	20
Tetrachloroethene	10.0	10.1		ug/L		101	76 - 129	5	20
Toluene	10.0	9.98		ug/L		100	83 - 127	5	20
trans-1,2-Dichloroethene	10.0	9.87		ug/L		99	78 - 122	0	20
trans-1,3-Dichloropropene	10.0	10.4		ug/L		104	83 - 130	10	20
Trichloroethene	10.0	9.63		ug/L		96	81 - 123	2	20
Trichlorofluoromethane	10.0	9.25		ug/L		92	72 - 135	1	20
Vinyl chloride	10.0	9.55		ug/L		95	72 - 132	1	20
Xylenes, Total	30.0	30.9		ug/L		103	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*71 - 135*
4-Bromofluorobenzene (Surr)	*101*		*80 - 122*
Toluene-d8 (Surr)	*102*		*84 - 122*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
bis (2-chloroisopropyl) ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4,6-Trichlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dichlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dimethylphenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dinitrophenol	ND		50	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dinitrotoluene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,6-Dinitrotoluene	ND		10	2.2	ug/L		06/26/13 13:09	06/26/13 17:50	1
2-Chloronaphthalene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2-Chlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		10	1.5	ug/L		06/26/13 13:09	06/26/13 17:50	1
3,3'-Dichlorobenzidine	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
4,6-Dinitro-2-methylphenol	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Bromophenyl phenyl ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Chlorophenyl phenyl ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Nitrophenol	ND		50	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Acenaphthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Acenaphthylene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzidine	ND		100	20	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[a]anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[a]pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[b]fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[g,h,i]perylene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[k]fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-chloroethoxy)methane	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-chloroethyl)ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-ethylhexyl) phthalate	ND		10	1.9	ug/L		06/26/13 13:09	06/26/13 17:50	1
Butyl benzyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Chrysene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Dibenz(a,h)anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Diethyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Dimethyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Di-n-butyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Di-n-octyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Fluorene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachloro-1,3-butadiene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachlorobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachlorocyclopentadiene	ND		50	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachloroethane	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Indeno[1,2,3-cd]pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Isophorone	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Naphthalene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Nitrobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodiphenylamine	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Pentachlorophenol	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
Phenanthrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Phenol	ND		10	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*76*		*41 - 109*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
2-Fluorobiphenyl (Surr)	*56*		*31 - 103*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
2-Fluorophenol (Surr)	*36*		*23 - 82*	*06/26/13 13:09*	*06/26/13 17:50*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	52		36 - 98	06/26/13 13:09	06/26/13 17:50	1
Phenol-d5 (Surr)	28		14 - 68	06/26/13 13:09	06/26/13 17:50	1
Terphenyl-d14 (Surr)	76		43 - 107	06/26/13 13:09	06/26/13 17:50	1

Lab Sample ID: LCS 160-57924/2-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	100	72.6		ug/L		72	44 - 84
bis (2-chloroisopropyl) ether	100	65.8		ug/L		66	42 - 102
2,4,6-Trichlorophenol	100	71.5		ug/L		71	54 - 105
2,4-Dichlorophenol	100	64.4		ug/L		64	46 - 103
2,4-Dimethylphenol	100	65.4		ug/L		65	40 - 105
2,4-Dinitrophenol	100	69.2		ug/L		69	42 - 146
2,4-Dinitrotoluene	100	79.0		ug/L		79	62 - 101
2,6-Dinitrotoluene	100	78.8		ug/L		79	62 - 103
2-Chloronaphthalene	100	75.5		ug/L		76	45 - 95
2-Chlorophenol	100	65.1		ug/L		65	56 - 93
2-Nitrophenol	101	71.7		ug/L		71	51 - 98
3,3'-Dichlorobenzidine	100	64.1		ug/L		64	26 - 77
4,6-Dinitro-2-methylphenol	100	82.6		ug/L		83	61 - 120
4-Bromophenyl phenyl ether	100	89.1		ug/L		89	54 - 111
4-Chloro-3-methylphenol	100	60.1		ug/L		60	45 - 106
4-Chlorophenyl phenyl ether	100	76.6		ug/L		77	53 - 100
4-Nitrophenol	100	34.8	J	ug/L		35	25 - 45
Acenaphthene	100	75.7		ug/L		76	51 - 89
Acenaphthylene	100	76.1		ug/L		76	46 - 98
Anthracene	100	83.5		ug/L		84	54 - 111
Benzo[a]anthracene	100	88.7		ug/L		89	68 - 108
Benzo[a]pyrene	100	83.5		ug/L		84	55 - 108
Benzo[b]fluoranthene	100	82.4		ug/L		82	57 - 114
Benzo[g,h,i]perylene	100	86.8		ug/L		87	58 - 120
Benzo[k]fluoranthene	100	89.3		ug/L		89	59 - 112
Bis(2-chloroethoxy)methane	100	67.0		ug/L		67	53 - 99
Bis(2-chloroethyl)ether	100	65.8		ug/L		66	50 - 97
Bis(2-ethylhexyl) phthalate	100	84.1		ug/L		84	54 - 116
Butyl benzyl phthalate	100	82.8		ug/L		83	52 - 126
Chrysene	100	77.5		ug/L		77	58 - 112
Dibenz(a,h)anthracene	100	87.9		ug/L		88	56 - 122
Diethyl phthalate	100	75.3		ug/L		75	60 - 101
Dimethyl phthalate	100	74.8		ug/L		75	57 - 101
Di-n-butyl phthalate	100	84.4		ug/L		84	57 - 108
Di-n-octyl phthalate	100	76.6		ug/L		77	57 - 118
Fluoranthene	100	81.8		ug/L		82	55 - 114
Fluorene	100	73.8		ug/L		74	59 - 96
Hexachloro-1,3-butadiene	100	77.5		ug/L		77	36 - 84
Hexachlorobenzene	100	90.1		ug/L		90	56 - 110

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-57924/2-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	100	86.3		ug/L		86	16 - 86
Hexachloroethane	100	74.3		ug/L		74	40 - 77
Indeno[1,2,3-cd]pyrene	100	84.3		ug/L		84	55 - 124
Isophorone	100	64.8		ug/L		65	50 - 107
Naphthalene	100	69.0		ug/L		69	42 - 82
Nitrobenzene	100	69.1		ug/L		69	48 - 96
N-Nitrosodi-n-propylamine	101	77.0		ug/L		77	57 - 113
Pentachlorophenol	100	76.8		ug/L		77	56 - 126
Phenanthrene	100	80.9		ug/L		81	54 - 110
Phenol	100	33.0		ug/L		33	27 - 43
Pyrene	100	85.1		ug/L		85	53 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*89*		*41 - 109*
2-Fluorobiphenyl (Surr)	*76*		*31 - 103*
2-Fluorophenol (Surr)	*51*		*23 - 82*
Nitrobenzene-d5 (Surr)	*74*		*36 - 98*
Phenol-d5 (Surr)	*34*		*14 - 68*
Terphenyl-d14 (Surr)	*84*		*43 - 107*

Lab Sample ID: LCSD 160-57924/3-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	100	72.0		ug/L		72	44 - 84	1	20
bis (2-chloroisopropyl) ether	100	69.4		ug/L		69	42 - 102	5	20
2,4,6-Trichlorophenol	100	70.8		ug/L		71	54 - 105	1	20
2,4-Dichlorophenol	100	64.3		ug/L		64	46 - 103	0	20
2,4-Dimethylphenol	100	65.0		ug/L		65	40 - 105	1	20
2,4-Dinitrophenol	100	68.9		ug/L		69	42 - 146	0	20
2,4-Dinitrotoluene	100	76.2		ug/L		76	62 - 101	4	20
2,6-Dinitrotoluene	100	78.8		ug/L		79	62 - 103	0	20
2-Chloronaphthalene	100	76.9		ug/L		77	45 - 95	2	20
2-Chlorophenol	100	65.0		ug/L		65	56 - 93	0	20
2-Nitrophenol	101	71.8		ug/L		71	51 - 98	0	20
3,3'-Dichlorobenzidine	100	63.5		ug/L		63	26 - 77	1	20
4,6-Dinitro-2-methylphenol	100	82.0		ug/L		82	61 - 120	1	20
4-Bromophenyl phenyl ether	100	86.2		ug/L		86	54 - 111	3	20
4-Chloro-3-methylphenol	100	60.6		ug/L		60	45 - 106	1	20
4-Chlorophenyl phenyl ether	100	73.3		ug/L		73	53 - 100	4	20
4-Nitrophenol	100	36.8	J	ug/L		37	25 - 45	5	20
Acenaphthene	100	73.8		ug/L		74	51 - 89	3	20
Acenaphthylene	100	75.6		ug/L		76	46 - 98	1	20
Anthracene	100	80.3		ug/L		80	54 - 111	4	20
Benzo[a]anthracene	100	86.5		ug/L		86	68 - 108	2	20
Benzo[a]pyrene	100	80.5		ug/L		80	55 - 108	4	20
Benzo[b]fluoranthene	100	78.6		ug/L		79	57 - 114	5	20

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-57924/3-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[g,h,i]perylene	100	83.6		ug/L		84	58 - 120	4	20
Benzo[k]fluoranthene	100	87.0		ug/L		87	59 - 112	3	20
Bis(2-chloroethoxy)methane	100	67.8		ug/L		68	53 - 99	1	20
Bis(2-chloroethyl)ether	100	67.7		ug/L		68	50 - 97	3	20
Bis(2-ethylhexyl) phthalate	100	83.5		ug/L		84	54 - 116	1	20
Butyl benzyl phthalate	100	83.4		ug/L		83	52 - 126	1	20
Chrysene	100	75.9		ug/L		76	58 - 112	2	20
Dibenz(a,h)anthracene	100	84.2		ug/L		84	56 - 122	4	20
Diethyl phthalate	100	73.2		ug/L		73	60 - 101	3	20
Dimethyl phthalate	100	73.5		ug/L		73	57 - 101	2	20
Di-n-butyl phthalate	100	82.6		ug/L		83	57 - 108	2	20
Di-n-octyl phthalate	100	76.4		ug/L		76	57 - 118	0	20
Fluoranthene	100	78.5		ug/L		79	55 - 114	4	20
Fluorene	100	70.7		ug/L		71	59 - 96	4	20
Hexachloro-1,3-butadiene	100	74.8		ug/L		75	36 - 84	4	20
Hexachlorobenzene	100	84.5		ug/L		85	56 - 110	6	20
Hexachlorocyclopentadiene	100	80.3		ug/L		80	16 - 86	7	20
Hexachloroethane	100	75.9		ug/L		76	40 - 77	2	20
Indeno[1,2,3-cd]pyrene	100	82.9		ug/L		83	55 - 124	2	20
Isophorone	100	67.2		ug/L		67	50 - 107	4	20
Naphthalene	100	68.8		ug/L		69	42 - 82	0	20
Nitrobenzene	100	71.0		ug/L		71	48 - 96	3	20
N-Nitrosodi-n-propylamine	101	79.5		ug/L		79	57 - 113	3	20
Pentachlorophenol	100	75.9		ug/L		76	56 - 126	1	20
Phenanthrene	100	79.2		ug/L		79	54 - 110	2	20
Phenol	100	34.9		ug/L		35	27 - 43	5	20
Pyrene	100	83.8		ug/L		84	53 - 117	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*82*		*41 - 109*
2-Fluorobiphenyl (Surr)	*77*		*31 - 103*
2-Fluorophenol (Surr)	*52*		*23 - 82*
Nitrobenzene-d5 (Surr)	*76*		*36 - 98*
Phenol-d5 (Surr)	*36*		*14 - 68*
Terphenyl-d14 (Surr)	*82*		*43 - 107*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 160-57955/1-A
Matrix: Water
Analysis Batch: 58327

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57955

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		06/26/13 16:18	06/27/13 13:54	1
Arsenic	ND		10	2.0	ug/L		06/26/13 16:18	06/27/13 13:54	1
Beryllium	ND		5.0	0.50	ug/L		06/26/13 16:18	06/27/13 13:54	1
Cadmium	ND		5.0	0.45	ug/L		06/26/13 16:18	06/27/13 13:54	1
Chromium	ND		10	3.1	ug/L		06/26/13 16:18	06/27/13 13:54	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 160-57955/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58327 — **Prep Batch: 57955**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		50	4.0	ug/L		06/26/13 16:18	06/27/13 13:54	1
Copper	ND		25	4.6	ug/L		06/26/13 16:18	06/27/13 13:54	1
Iron	ND		100	16	ug/L		06/26/13 16:18	06/27/13 13:54	1
Lead	ND		10	1.3	ug/L		06/26/13 16:18	06/27/13 13:54	1
Nickel	ND		40	13	ug/L		06/26/13 16:18	06/27/13 13:54	1
Antimony	ND		10	4.0	ug/L		06/26/13 16:18	06/27/13 13:54	1
Selenium	ND		15	2.7	ug/L		06/26/13 16:18	06/27/13 13:54	1
Silver	ND		10	6.0	ug/L		06/26/13 16:18	06/27/13 13:54	1
Thallium	ND	^	20	0.88	ug/L		06/26/13 16:18	06/27/13 13:54	1
Zinc	8.10	J	20	5.2	ug/L		06/26/13 16:18	06/27/13 13:54	1

Lab Sample ID: LCS 160-57955/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58327 — **Prep Batch: 57955**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9970		ug/L		100	85 - 115
Arsenic	1000	1030		ug/L		103	85 - 115
Beryllium	1000	1050		ug/L		105	85 - 115
Cadmium	1000	1060		ug/L		106	85 - 115
Chromium	1000	1050		ug/L		105	85 - 115
Cobalt	1000	1110		ug/L		111	85 - 115
Copper	1000	1070		ug/L		107	85 - 115
Iron	10000	10300		ug/L		103	85 - 115
Lead	1000	1090		ug/L		109	85 - 115
Nickel	1000	1090		ug/L		109	85 - 115
Antimony	500	528		ug/L		106	85 - 115
Selenium	1000	1050		ug/L		105	85 - 115
Silver	100	100		ug/L		100	85 - 115
Thallium	200	241	^ *	ug/L		120	85 - 115
Zinc	1000	1050		ug/L		105	85 - 115

Lab Sample ID: 160-2829-1 MS — **Client Sample ID: 245/246-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58327 — **Prep Batch: 57955**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	20000		100000	132000		ug/L		111	70 - 130
Arsenic	520		10000	10700		ug/L		102	70 - 130
Beryllium	ND		10000	10600		ug/L		106	70 - 130
Cadmium	ND		10000	10400		ug/L		104	70 - 130
Chromium	280	J	10000	10500		ug/L		102	70 - 130
Cobalt	410	J	10000	11000		ug/L		106	70 - 130
Copper	ND		10000	10300		ug/L		103	70 - 130
Iron	1400000		100000	1510000	4	ug/L		119	70 - 130
Lead	330	J	10000	10600		ug/L		103	70 - 130
Nickel	ND		10000	10600		ug/L		106	70 - 130
Antimony	ND		5000	5350		ug/L		107	70 - 130
Selenium	ND		10000	10800		ug/L		108	70 - 130

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 160-2829-1 MS — **Client Sample ID: 245/246-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58327 — **Prep Batch: 57955**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND		1000	1010		ug/L		101	70 - 130
Thallium	ND	* ^	2000	2260	^	ug/L		113	70 - 130
Zinc	23000	B	10000	33600		ug/L		106	70 - 130

Lab Sample ID: 160-2829-1 MSD — **Client Sample ID: 245/246-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58327 — **Prep Batch: 57955**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	20000		100000	129000		ug/L		108	70 - 130	3	20
Arsenic	520		10000	10500		ug/L		100	70 - 130	2	20
Beryllium	ND		10000	10500		ug/L		105	70 - 130	1	20
Cadmium	ND		10000	10100		ug/L		101	70 - 130	3	20
Chromium	280	J	10000	10200		ug/L		99	70 - 130	3	20
Cobalt	410	J	10000	10500		ug/L		101	70 - 130	5	20
Copper	ND		10000	10000		ug/L		100	70 - 130	3	20
Iron	1400000		100000	1490000	4	ug/L		104	70 - 130	1	20
Lead	330	J	10000	10300		ug/L		100	70 - 130	3	20
Nickel	ND		10000	10300		ug/L		103	70 - 130	3	20
Antimony	ND		5000	5200		ug/L		104	70 - 130	3	20
Selenium	ND		10000	10400		ug/L		104	70 - 130	4	20
Silver	ND		1000	970		ug/L		97	70 - 130	4	20
Thallium	ND	* ^	2000	2220	^	ug/L		111	70 - 130	2	20
Zinc	23000	B	10000	32900		ug/L		99	70 - 130	2	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 160-57903/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57922 — **Prep Batch: 57903**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.050	ug/L		06/26/13 10:51	06/26/13 12:30	1

Lab Sample ID: LCS 160-57903/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57922 — **Prep Batch: 57903**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.21		ug/L		104	85 - 115

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 480-126204/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126208 — **Prep Batch: 126204**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/26/13 23:47	06/27/13 00:28	1

Method: 1664A - HEM and SGT-HEM (Continued)

Lab Sample ID: MB 480-126204/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126208 — **Prep Batch: 126204**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
SGT-HEM	1.90	J	5.0	1.9	mg/L		06/26/13 23:47	06/27/13 00:28	1

Lab Sample ID: LCS 480-126204/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126208 — **Prep Batch: 126204**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	38.4		mg/L		96	78 - 114
SGT-HEM	20.0	16.3		mg/L		81	64 - 132

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-126091/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126091

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/26/13 10:27	1

Lab Sample ID: LCS 480-126091/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126091

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.07		mg/L		107	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 480-126061/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126061

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			06/26/13 14:05	1

Lab Sample ID: LCS 480-126061/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126061

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	195		mg/L		97	90 - 110

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2829-1

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-125880/1
Matrix: Water
Analysis Batch: 125880

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			06/25/13 17:03	1

Lab Sample ID: LCS 480-125880/2
Matrix: Water
Analysis Batch: 125880

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Suspended Solids			211	207		mg/L		98	88 - 110		

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 160-57508/5
Matrix: Water
Analysis Batch: 57508

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
pH			7.00	6.960		SU		99	99.0 - 101.0		

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2829-1

GC/MS VOA

Analysis Batch: 58207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2829-1 - DL	245/246-MSD	Total/NA	Water	624	
160-2829-2	TRIP BLANK	Total/NA	Water	624	
LCS 160-58207/4	Lab Control Sample	Total/NA	Water	624	
LCSD 160-58207/5	Lab Control Sample Dup	Total/NA	Water	624	
MB 160-58207/2	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 57924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2829-1 - DL	245/246-MSD	Total/NA	Water	625	
160-2829-1	245/246-MSD	Total/NA	Water	625	
LCS 160-57924/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 160-57924/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 160-57924/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 58253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2829-1 - DL	245/246-MSD	Total/NA	Water	625	57924
160-2829-1	245/246-MSD	Total/NA	Water	625	57924
LCS 160-57924/2-A	Lab Control Sample	Total/NA	Water	625	57924
LCSD 160-57924/3-A	Lab Control Sample Dup	Total/NA	Water	625	57924
MB 160-57924/1-A	Method Blank	Total/NA	Water	625	57924

Metals

Prep Batch: 57903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2829-1	245/246-MSD	Total/NA	Water	245.1	
160-2829-1	245/246-MSD	Dissolved	Water	245.1	
LCS 160-57903/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 160-57903/1-A	Method Blank	Total/NA	Water	245.1	

Analysis Batch: 57922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2829-1	245/246-MSD	Total/NA	Water	245.1	57903
160-2829-1	245/246-MSD	Dissolved	Water	245.1	57903
LCS 160-57903/2-A	Lab Control Sample	Total/NA	Water	245.1	57903
MB 160-57903/1-A	Method Blank	Total/NA	Water	245.1	57903

Prep Batch: 57955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2829-1	245/246-MSD	Total/NA	Water	200.7/200.8	
160-2829-1	245/246-MSD	Dissolved	Water	200.7/200.8	
160-2829-1 MS	245/246-MSD	Total/NA	Water	200.7/200.8	
160-2829-1 MSD	245/246-MSD	Total/NA	Water	200.7/200.8	
LCS 160-57955/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
MB 160-57955/1-A	Method Blank	Total/NA	Water	200.7/200.8	

Metals (Continued)

Analysis Batch: 58327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2829-1	245/246-MSD	Total/NA	Water	200.7 Rev 4.4	57955
160-2829-1	245/246-MSD	Dissolved	Water	200.7 Rev 4.4	57955
160-2829-1 MS	245/246-MSD	Total/NA	Water	200.7 Rev 4.4	57955
160-2829-1 MSD	245/246-MSD	Total/NA	Water	200.7 Rev 4.4	57955
LCS 160-57955/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	57955
MB 160-57955/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	57955

General Chemistry

Analysis Batch: 57508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2829-1	245/246-MSD	Total/NA	Water	SM 4500 H+ B	
LCS 160-57508/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 125880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2829-1	245/246-MSD	Total/NA	Water	SM 2540D	
LCS 480-125880/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-125880/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 126061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2829-1	245/246-MSD	Total/NA	Water	410.4	
LCS 480-126061/4	Lab Control Sample	Total/NA	Water	410.4	
MB 480-126061/3	Method Blank	Total/NA	Water	410.4	

Analysis Batch: 126091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2829-1	245/246-MSD	Total/NA	Water	350.1	
LCS 480-126091/4	Lab Control Sample	Total/NA	Water	350.1	
MB 480-126091/3	Method Blank	Total/NA	Water	350.1	

Prep Batch: 126204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2829-1	245/246-MSD	Total/NA	Water	1664A	
LCS 480-126204/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 480-126204/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 126208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2829-1	245/246-MSD	Total/NA	Water	1664A	126204
LCS 480-126204/2-A	Lab Control Sample	Total/NA	Water	1664A	126204
MB 480-126204/1-A	Method Blank	Total/NA	Water	1664A	126204

Surrogate Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2829-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(71-135)	(80-122)	(84-122)
160-2829-1 - DL	245/246-MSD	92	96	104
160-2829-2	TRIP BLANK	96	114	106
LCS 160-58207/4	Lab Control Sample	96	100	104
LCSD 160-58207/5	Lab Control Sample Dup	93	101	102
MB 160-58207/2	Method Blank	98	110	106

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(41-109)	(31-103)	(23-82)	(36-98)	(14-68)	(43-107)
160-2829-1 - DL	245/246-MSD	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
160-2829-1	245/246-MSD	42	40	0 X	0 X	0 X	17 X
LCS 160-57924/2-A	Lab Control Sample	89	76	51	74	34	84
LCSD 160-57924/3-A	Lab Control Sample Dup	82	77	52	76	36	82
MB 160-57924/1-A	Method Blank	76	56	36	52	28	76

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2829-2
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
7/3/2013 2:11:18 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

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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.

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Job ID: 160-2829-2

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2829-2

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 6/24/2013 1:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0º C.

BIOCHEMICAL OXYGEN DEMAND

Sample 245/246-MSD (160-2829-1) was analyzed for Biochemical oxygen demand in accordance with SM 5210B. The samples were analyzed on 06/26/2013.

The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results are reported. (USB 480-125948/1)

No difficulties were encountered during the BOD analysis.

All quality control parameters were within the acceptance limits.

Job ID: 160-2829-2 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica

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TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY	6/23/13	197684
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 1
	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State): BRIDGETON LF / MISSOURI

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.:

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): 624 - VOCs	1664 HEM/TPH	5210B - BOD	625 - SVOCs	200.7 245.1 T	200.7 245.1 D	25400 - TSS	4500.4 350.1	pH				Special Instructions/ Conditions of Receipt
245/246-MSD	6/24/13	0820		✓				5	1	1	4				3	1	1	1	1	1	1	1	1				
TRIP BLANK	—	—		✓							2				2												

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 Days

QC Requirements (Specify):

1. Relinquished By	Date	Time	1. Received By	Date	Time
[signature]	6/24/13	1350	[signature]	6/24/13	1350
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2829-2

Login Number: 2829

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2829-2

Login Number: 2829
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/25/13 02:10 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	2.6 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Definitions/Glossary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2829-2

Qualifiers

General Chemistry

Qualifier	Qualifier Description
b	Result Detected in the Unseeded Control blank (USB).

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2829-2

Method	Method Description	Protocol	Laboratory
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2829-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2829-1	245/246-MSD	Water	06/24/13 08:20	06/24/13 13:50

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2829-2

Client Sample ID: 245/246-MSD

Lab Sample ID: 160-2829-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	37000	b	40	40	mg/L	20		SM 5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2829-2

Client Sample ID: 245/246-MSD

Lab Sample ID: 160-2829-1

Date Collected: 06/24/13 08:20

Matrix: Water

Date Received: 06/24/13 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	37000	b	40	40	mg/L			06/26/13 00:56	20

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2829-2

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-125948/1 USB
Matrix: Water
Analysis Batch: 125948

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			06/26/13 00:56	1

Lab Sample ID: LCS 480-125948/2
Matrix: Water
Analysis Batch: 125948

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	204		mg/L		103	85 - 115		

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2829-2

General Chemistry

Analysis Batch: 125948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2829-1	245/246-MSD	Total/NA	Water	SM 5210B	
LCS 480-125948/2	Lab Control Sample	Total/NA	Water	SM 5210B	
USB 480-125948/1 USB	Method Blank	Total/NA	Water	SM 5210B	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2833-1
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
7/3/2013 1:52:32 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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.

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Job ID: 160-2833-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2833-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 6/25/2013 10:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 13.0º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples 250/243-MSD (160-2833-1) and Trip Blank (160-2833-2) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA Method 624. The samples were analyzed on 06/26/2013.

Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 58207. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

The following sample(s) were analyzed at reduced volumes due to high concentrations of target analytes: 250/243-MSD (160-2833-1). The calculation was done using an initial volume adjustment rather than a dilution factor. The reporting limits have been elevated by the appropriate factor.

Job ID: 160-2833-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 58207 recovered outside control limits for 2-Chloroethyl vinyl ether. This analyte was not observed above the reporting limit in any of the associated samples.

The following samples were observed to have pH's greater than 2 250/243-MSD (160-2833-1). The samples were analyzed within seven days of sampling in the field. Therefore, this excursion does not affect the reported data.

No other difficulties were encountered during the VOCs analysis.

All other quality control parameters were within the acceptance limits.

Organic Prep
Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 57924. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 250/243-MSD (160-2833-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA Method 625. The samples were prepared on 06/26/2013 and analyzed on 06/26/2013 and 06/27/2013.

The continuing calibration verification (CCV) for Hexachlorocyclopentadiene associated with batch 58253 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The following samples were diluted to bring the concentration of target analytes within the calibration range: 250/243-MSD (160-2833-1) [10X]. Elevated reporting limits (RLs) are provided. Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Surrogate recoveries for the following samples were outside control limits: 250/243-MSD (160-2833-1). The samples show evidence of matrix interference; therefore, re-extraction and/or re-analysis was not performed.

No other difficulties were encountered during the SVOC analysis.

All other quality control parameters were within the acceptance limits.

ICP total and dissolved
Sample 250/243-MSD (160-2833-1) was analyzed for ICP in accordance with EPA Method 200.7, Rev. 4.4. The samples were prepared on 06/26/2013 and analyzed on 06/27/2013.

Samples were prepped at a dilution due to their matrix. Samples were dark brown\black in color and had a strong odor.

The following samples were diluted due to the nature of the sample matrix. The sample digestates were dark yellow in color: 250/243-MSD (160-2833-1)[5X]. Elevated reporting limits (RLs) are provided.

Zinc was detected in method blank MB 160-57955/1-A at a level exceeding the reporting limit.

The initial calibration verification (ICV) for analytical batch 57955 was outside control criteria for thallium. The affected samples are ND for thallium and the data have been qualified and reported.

Thallium failed the recovery criteria high for LCS 160-57955/2-A.

No other difficulties were encountered during the ICP analysis.

All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)
Sample 250/243-MSD (160-2833-1) was analyzed for dissolved mercury (CVAA) in accordance with EPA Method 245.1. The samples were

Job ID: 160-2833-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

prepared and analyzed on 06/30/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

MERCURY
Sample 250/243-MSD (160-2833-1) was analyzed for mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/30/2013.

Sample was a black liquid with particulate in suspension. Due to possible matrix interference, the sample was prepped at a dilution. Affected samples are: (160-2833-1 MS), (160-2833-1 MSD), 250/243-MSD (160-2833-1)

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

SGT-HEM
Sample 250/243-MSD (160-2833-1) was analyzed for SGT-HEM in accordance with EPA Method 1664A. The samples were prepared on 06/26/2013 and analyzed on 06/27/2013.

SGT-HEM was detected in method blank MB 480-126204/1-A at a level that was above the method detection limit but below the reporting limit.

No other difficulties were encountered during the SGT-HEM analysis.

All other quality control parameters were within the acceptance limits.

TOTAL SUSPENDED SOLIDS
Sample 250/243-MSD (160-2833-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 06/26/2013.

Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: 250/243-MSD (160-2833-1). The reporting limits (RLs) have been adjusted proportionately.

No difficulties were encountered during the TSS analysis.

All quality control parameters were within the acceptance limits.

AMMONIA
Sample 250/243-MSD (160-2833-1) was analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 07/01/2013.

Sample 250/243-MSD (160-2833-1)[500X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the ammonia analysis.

All quality control parameters were within the acceptance limits.

CHEMICAL OXYGEN DEMAND
Sample 250/243-MSD (160-2833-1) was analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 07/02/2013.

Sample 250/243-MSD (160-2833-1)[100X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Job ID: 160-2833-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

No difficulties were encountered during the COD analysis.

All quality control parameters were within the acceptance limits.

PH

Sample 250/243-MSD (160-2833-1) was analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed on 06/25/2013.

For the analysis of the associated sample in pH batch 57852, this analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 250/243-MSD (160-2833-1)

For the analysis of the associated sample in pH batch 57852, the sample was analyzed using pH indicator strips to prevent possible damage to the pH probe. The indicator strips used were range 0-14, Lot HC270245.250/243-MSD (160-2833-1)

No difficulties were encountered during the pH analysis.

All quality control parameters were within the acceptance limits.

COR 417

[redacted]

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

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TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY - FEI		197620
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State)	Carrier/Waybill Number
BRIDGETON LF / MISSOURI	

Contract/Purchase Order/Quote No.

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): 624-VOCs	1664 HEM/FPH	5210B-BOD	625-SVOCs	200.7 245.1 T	200.7 245.1 D	2540D-TSS	420.4 350.1	pH				Special Instructions/ Conditions of Receipt
250/243-MSD	6/25/13	0826		✓				5	1	1	4				3	1	1	1	1	1	1	1	1				
TRIP BLANK	—	—		✓							2				2												

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 Days

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	6/25/13	1020	1. Received By	6/25/13	1020
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2833-1

Login Number: 2833

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	Sample was just collected.
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?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2833-1

Login Number: 2833
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/26/13 03:49 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	4.1 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Definitions/Glossary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2833-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2833-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SL
245.1	Mercury (CVAA)	EPA	TAL SL
1664A	HEM and SGT-HEM	1664A	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
410.4	COD	MCAWW	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL SL

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2833-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2833-1	250/243-MSD	Water	06/25/13 08:26	06/25/13 10:20
160-2833-2	Trip Blank	Water	06/25/13 00:00	06/25/13 10:20

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2833-1

Client Sample ID: 250/243-MSD — Lab Sample ID: 160-2833-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	15	J	93	9.3	ug/L	1		625	Total/NA
Anthracene	27	J	93	9.3	ug/L	1		625	Total/NA
Naphthalene	31	J	93	9.3	ug/L	1		625	Total/NA
Phenanthrene	29	J	93	9.3	ug/L	1		625	Total/NA
Phenol - DL	6100		930	190	ug/L	10		625	Total/NA
Aluminum	13000		10000	4000	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	490	J	500	99	ug/L	5		200.7 Rev 4.4	Total/NA
Cobalt	430	J	2500	200	ug/L	5		200.7 Rev 4.4	Total/NA
Chromium	200	J	500	160	ug/L	5		200.7 Rev 4.4	Total/NA
Iron	1200000		5000	800	ug/L	5		200.7 Rev 4.4	Total/NA
Lead	280	J	500	64	ug/L	5		200.7 Rev 4.4	Total/NA
Antimony	210	J	500	200	ug/L	5		200.7 Rev 4.4	Total/NA
Zinc	20000	B	1000	260	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	360	J	500	99	ug/L	5		200.7 Rev 4.4	Dissolved
Chromium	350	J	500	160	ug/L	5		200.7 Rev 4.4	Dissolved
Cobalt	210	J	2500	200	ug/L	5		200.7 Rev 4.4	Dissolved
Iron	810000		5000	800	ug/L	5		200.7 Rev 4.4	Dissolved
Lead	160	J	500	64	ug/L	5		200.7 Rev 4.4	Dissolved
Selenium	150	J	750	130	ug/L	5		200.7 Rev 4.4	Dissolved
Zinc	19000	B	1000	260	ug/L	5		200.7 Rev 4.4	Dissolved
Oil & Grease	8.0	J	20	5.6	mg/L	1		1664A	Total/NA
Ammonia	920		10	4.5	mg/L	500		350.1	Total/NA
Chemical Oxygen Demand	60000		1000	500	mg/L	100		410.4	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
Total Suspended Solids	2300		100	100	mg/L	1		SM 2540D	Total/NA
pH	6.00	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 160-2833-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2833-1

Client Sample ID: 250/243-MSD

Lab Sample ID: 160-2833-1

Date Collected: 06/25/13 08:26
Date Received: 06/25/13 10:20

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.5	ug/L			06/26/13 14:20	1
1,1,2,2-Tetrachloroethane	ND		50	5.0	ug/L			06/26/13 14:20	1
1,1,2-Trichloroethane	ND		50	7.5	ug/L			06/26/13 14:20	1
1,1-Dichloroethane	ND		50	3.5	ug/L			06/26/13 14:20	1
1,1-Dichloroethene	ND		50	4.0	ug/L			06/26/13 14:20	1
1,2-Dichlorobenzene	ND		50	3.0	ug/L			06/26/13 14:20	1
1,2-Dichloroethane	ND		50	5.0	ug/L			06/26/13 14:20	1
1,2-Dichloropropane	ND		50	5.0	ug/L			06/26/13 14:20	1
1,3-Dichlorobenzene	ND		50	4.0	ug/L			06/26/13 14:20	1
1,4-Dichlorobenzene	ND		50	6.0	ug/L			06/26/13 14:20	1
2-Chloroethyl vinyl ether	ND	*	100	8.5	ug/L			06/26/13 14:20	1
Benzene	ND		50	3.0	ug/L			06/26/13 14:20	1
Bromodichloromethane	ND		50	4.5	ug/L			06/26/13 14:20	1
Bromoform	ND		50	8.5	ug/L			06/26/13 14:20	1
Bromomethane	ND		100	6.5	ug/L			06/26/13 14:20	1
Carbon tetrachloride	ND		50	6.5	ug/L			06/26/13 14:20	1
Chlorobenzene	ND		50	7.5	ug/L			06/26/13 14:20	1
Chloroethane	ND		100	5.0	ug/L			06/26/13 14:20	1
Chloroform	ND		50	5.0	ug/L			06/26/13 14:20	1
Chloromethane	ND		100	4.0	ug/L			06/26/13 14:20	1
cis-1,2-Dichloroethene	ND		50	4.5	ug/L			06/26/13 14:20	1
cis-1,3-Dichloropropene	ND		50	3.5	ug/L			06/26/13 14:20	1
Dibromochloromethane	ND		50	6.5	ug/L			06/26/13 14:20	1
Ethylbenzene	ND		50	4.5	ug/L			06/26/13 14:20	1
Methylene Chloride	ND		50	5.5	ug/L			06/26/13 14:20	1
Tetrachloroethene	ND		50	9.0	ug/L			06/26/13 14:20	1
Toluene	ND		50	3.5	ug/L			06/26/13 14:20	1
trans-1,2-Dichloroethene	ND		50	4.0	ug/L			06/26/13 14:20	1
trans-1,3-Dichloropropene	ND		50	4.0	ug/L			06/26/13 14:20	1
Trichloroethene	ND		50	11	ug/L			06/26/13 14:20	1
Trichlorofluoromethane	ND		50	5.5	ug/L			06/26/13 14:20	1
Vinyl chloride	ND		100	4.0	ug/L			06/26/13 14:20	1
Xylenes, Total	ND		150	10	ug/L			06/26/13 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*71 - 135*		*06/26/13 14:20*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 122*		*06/26/13 14:20*	*1*
Toluene-d8 (Surr)	*103*		*84 - 122*		*06/26/13 14:20*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
bis (2-chloroisopropyl) ether	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
2,4,6-Trichlorophenol	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
2,4-Dichlorophenol	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
2,4-Dimethylphenol	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
2,4-Dinitrophenol	ND		470	19	ug/L		06/26/13 13:09	06/27/13 05:22	1
2,4-Dinitrotoluene	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
2,6-Dinitrotoluene	ND		93	20	ug/L		06/26/13 13:09	06/27/13 05:22	1
2-Chloronaphthalene	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1

Client Sample ID: 250/243-MSD

Date Collected: 06/25/13 08:26
Date Received: 06/25/13 10:20

Lab Sample ID: 160-2833-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
2-Nitrophenol	ND		93	14	ug/L		06/26/13 13:09	06/27/13 05:22	1
3,3'-Dichlorobenzidine	ND		470	12	ug/L		06/26/13 13:09	06/27/13 05:22	1
4,6-Dinitro-2-methylphenol	ND		470	12	ug/L		06/26/13 13:09	06/27/13 05:22	1
4-Bromophenyl phenyl ether	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
4-Chloro-3-methylphenol	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
4-Chlorophenyl phenyl ether	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
4-Nitrophenol	ND		470	19	ug/L		06/26/13 13:09	06/27/13 05:22	1
Acenaphthene	**15**	**J**	93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Acenaphthylene	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Anthracene	**27**	**J**	93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Benzidine	ND		930	190	ug/L		06/26/13 13:09	06/27/13 05:22	1
Benzo[a]anthracene	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Benzo[a]pyrene	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Benzo[b]fluoranthene	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Benzo[g,h,i]perylene	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Benzo[k]fluoranthene	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Bis(2-chloroethoxy)methane	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Bis(2-chloroethyl)ether	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Bis(2-ethylhexyl) phthalate	ND		93	17	ug/L		06/26/13 13:09	06/27/13 05:22	1
Butyl benzyl phthalate	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Chrysene	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Dibenz(a,h)anthracene	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Diethyl phthalate	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Dimethyl phthalate	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Di-n-butyl phthalate	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Di-n-octyl phthalate	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Fluoranthene	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Fluorene	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Hexachloro-1,3-butadiene	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Hexachlorobenzene	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Hexachlorocyclopentadiene	ND		470	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Hexachloroethane	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Indeno[1,2,3-cd]pyrene	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Isophorone	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Naphthalene	**31**	**J**	93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Nitrobenzene	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
N-Nitrosodimethylamine	ND		93	19	ug/L		06/26/13 13:09	06/27/13 05:22	1
N-Nitrosodi-n-propylamine	ND		93	14	ug/L		06/26/13 13:09	06/27/13 05:22	1
N-Nitrosodiphenylamine	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Pentachlorophenol	ND		470	12	ug/L		06/26/13 13:09	06/27/13 05:22	1
Phenanthrene	**29**	**J**	93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1
Pyrene	ND		93	9.3	ug/L		06/26/13 13:09	06/27/13 05:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*46*		*41 - 109*	*06/26/13 13:09*	*06/27/13 05:22*	*1*
2-Fluorobiphenyl (Surr)	*45*		*31 - 103*	*06/26/13 13:09*	*06/27/13 05:22*	*1*
2-Fluorophenol (Surr)	*0*	*X*	*23 - 82*	*06/26/13 13:09*	*06/27/13 05:22*	*1*
Nitrobenzene-d5 (Surr)	*0*	*X*	*36 - 98*	*06/26/13 13:09*	*06/27/13 05:22*	*1*
Phenol-d5 (Surr)	*0*	*X*	*14 - 68*	*06/26/13 13:09*	*06/27/13 05:22*	*1*

Client Sample ID: 250/243-MSD

Lab Sample ID: 160-2833-1

Date Collected: 06/25/13 08:26

Matrix: Water

Date Received: 06/25/13 10:20

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14 (Surr)	21	X	43 - 107	06/26/13 13:09	06/27/13 05:22	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	6100		930	190	ug/L		06/26/13 13:09	06/26/13 22:27	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	0	D X	41 - 109	06/26/13 13:09	06/26/13 22:27	10
2-Fluorobiphenyl (Surr)	0	D X	31 - 103	06/26/13 13:09	06/26/13 22:27	10
2-Fluorophenol (Surr)	0	D X	23 - 82	06/26/13 13:09	06/26/13 22:27	10
Nitrobenzene-d5 (Surr)	0	D X	36 - 98	06/26/13 13:09	06/26/13 22:27	10
Phenol-d5 (Surr)	0	D X	14 - 68	06/26/13 13:09	06/26/13 22:27	10
Terphenyl-d14 (Surr)	0	D X	43 - 107	06/26/13 13:09	06/26/13 22:27	10

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		500	300	ug/L		06/26/13 16:18	06/27/13 14:20	5
Aluminum	13000		10000	4000	ug/L		06/26/13 16:18	06/27/13 14:20	5
Arsenic	490	J	500	99	ug/L		06/26/13 16:18	06/27/13 14:20	5
Beryllium	ND		250	25	ug/L		06/26/13 16:18	06/27/13 14:20	5
Cadmium	ND		250	23	ug/L		06/26/13 16:18	06/27/13 14:20	5
Cobalt	430	J	2500	200	ug/L		06/26/13 16:18	06/27/13 14:20	5
Chromium	200	J	500	160	ug/L		06/26/13 16:18	06/27/13 14:20	5
Copper	ND		1300	230	ug/L		06/26/13 16:18	06/27/13 14:20	5
Iron	1200000		5000	800	ug/L		06/26/13 16:18	06/27/13 14:20	5
Nickel	ND		2000	670	ug/L		06/26/13 16:18	06/27/13 14:20	5
Lead	280	J	500	64	ug/L		06/26/13 16:18	06/27/13 14:20	5
Antimony	210	J	500	200	ug/L		06/26/13 16:18	06/27/13 14:20	5
Selenium	ND		750	130	ug/L		06/26/13 16:18	06/27/13 14:20	5
Thallium	ND	* ^	1000	44	ug/L		06/26/13 16:18	06/27/13 14:20	5
Zinc	20000	B	1000	260	ug/L		06/26/13 16:18	06/27/13 14:20	5

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10000	4000	ug/L		06/26/13 16:18	06/27/13 14:24	5
Antimony	ND		500	200	ug/L		06/26/13 16:18	06/27/13 14:24	5
Arsenic	360	J	500	99	ug/L		06/26/13 16:18	06/27/13 14:24	5
Beryllium	ND		250	25	ug/L		06/26/13 16:18	06/27/13 14:24	5
Cadmium	ND		250	23	ug/L		06/26/13 16:18	06/27/13 14:24	5
Chromium	350	J	500	160	ug/L		06/26/13 16:18	06/27/13 14:24	5
Cobalt	210	J	2500	200	ug/L		06/26/13 16:18	06/27/13 14:24	5
Copper	ND		1300	230	ug/L		06/26/13 16:18	06/27/13 14:24	5
Iron	810000		5000	800	ug/L		06/26/13 16:18	06/27/13 14:24	5
Lead	160	J	500	64	ug/L		06/26/13 16:18	06/27/13 14:24	5
Nickel	ND		2000	670	ug/L		06/26/13 16:18	06/27/13 14:24	5
Selenium	150	J	750	130	ug/L		06/26/13 16:18	06/27/13 14:24	5
Silver	ND		500	300	ug/L		06/26/13 16:18	06/27/13 14:24	5
Thallium	ND	* ^	1000	44	ug/L		06/26/13 16:18	06/27/13 14:24	5
Zinc	19000	B	1000	260	ug/L		06/26/13 16:18	06/27/13 14:24	5

Client Sample ID: 250/243-MSD

Lab Sample ID: 160-2833-1
Matrix: Water
Date Collected: 06/25/13 08:26
Date Received: 06/25/13 10:20

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		6.0	1.5	ug/L		06/30/13 10:22	06/30/13 15:59	1

Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		6.0	1.5	ug/L		06/30/13 10:22	06/30/13 16:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	**8.0**	**J**	20	5.6	mg/L		06/26/13 23:47	06/27/13 00:28	1
SGT-HEM	ND		20	7.8	mg/L		06/26/13 23:47	06/27/13 00:28	1
Ammonia	**920**		10	4.5	mg/L			07/01/13 13:24	500
Chemical Oxygen Demand	**60000**		1000	500	mg/L			07/02/13 14:44	100

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**2300**		100	100	mg/L			06/26/13 20:00	1
pH	**6.00**	**HF**	0.100	0.100	SU			06/25/13 19:20	1

Client Sample ID: Trip Blank

Lab Sample ID: 160-2833-2
Matrix: Water
Date Collected: 06/25/13 00:00
Date Received: 06/25/13 10:20

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/26/13 12:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/26/13 12:39	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/26/13 12:39	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/26/13 12:39	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/26/13 12:39	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/26/13 12:39	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/26/13 12:39	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/26/13 12:39	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/26/13 12:39	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/26/13 12:39	1
2-Chloroethyl vinyl ether	ND	*	2.0	0.17	ug/L			06/26/13 12:39	1
Benzene	ND		1.0	0.060	ug/L			06/26/13 12:39	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/26/13 12:39	1
Bromoform	ND		1.0	0.17	ug/L			06/26/13 12:39	1
Bromomethane	ND		2.0	0.13	ug/L			06/26/13 12:39	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/26/13 12:39	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/26/13 12:39	1
Chloroethane	ND		2.0	0.10	ug/L			06/26/13 12:39	1
Chloroform	ND		1.0	0.10	ug/L			06/26/13 12:39	1
Chloromethane	ND		2.0	0.080	ug/L			06/26/13 12:39	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/26/13 12:39	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/26/13 12:39	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/26/13 12:39	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/26/13 12:39	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/26/13 12:39	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/26/13 12:39	1
Toluene	ND		1.0	0.070	ug/L			06/26/13 12:39	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/26/13 12:39	1

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2833-1

Client Sample ID: Trip Blank

Lab Sample ID: 160-2833-2

Date Collected: 06/25/13 00:00

Matrix: Water

Date Received: 06/25/13 10:20

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/26/13 12:39	1
Trichloroethene	ND		1.0	0.21	ug/L			06/26/13 12:39	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/26/13 12:39	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/26/13 12:39	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/26/13 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*71 - 135*		*06/26/13 12:39*	*1*
4-Bromofluorobenzene (Surr)	*112*		*80 - 122*		*06/26/13 12:39*	*1*
Toluene-d8 (Surr)	*107*		*84 - 122*		*06/26/13 12:39*	*1*

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2833-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-58207/2
Matrix: Water
Analysis Batch: 58207

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/26/13 10:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/26/13 10:59	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/26/13 10:59	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/26/13 10:59	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/26/13 10:59	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/26/13 10:59	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/26/13 10:59	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/26/13 10:59	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/26/13 10:59	1
Benzene	ND		1.0	0.060	ug/L			06/26/13 10:59	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/26/13 10:59	1
Bromoform	ND		1.0	0.17	ug/L			06/26/13 10:59	1
Bromomethane	ND		2.0	0.13	ug/L			06/26/13 10:59	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/26/13 10:59	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/26/13 10:59	1
Chloroethane	ND		2.0	0.10	ug/L			06/26/13 10:59	1
Chloroform	ND		1.0	0.10	ug/L			06/26/13 10:59	1
Chloromethane	ND		2.0	0.080	ug/L			06/26/13 10:59	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/26/13 10:59	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/26/13 10:59	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/26/13 10:59	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/26/13 10:59	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/26/13 10:59	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/26/13 10:59	1
Toluene	ND		1.0	0.070	ug/L			06/26/13 10:59	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
Trichloroethene	ND		1.0	0.21	ug/L			06/26/13 10:59	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/26/13 10:59	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/26/13 10:59	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/26/13 10:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*71 - 135*		*06/26/13 10:59*	*1*
4-Bromofluorobenzene (Surr)	*110*		*80 - 122*		*06/26/13 10:59*	*1*
Toluene-d8 (Surr)	*106*		*84 - 122*		*06/26/13 10:59*	*1*

Lab Sample ID: LCS 160-58207/4
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	10.0	10.4		ug/L		104	69 - 130
1,1,2-Trichloroethane	10.0	10.2		ug/L		102	78 - 122
1,1-Dichloroethane	10.0	9.71		ug/L		97	82 - 125
1,1-Dichloroethene	10.0	9.78		ug/L		98	77 - 127

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-58207/4
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	10.0	9.90		ug/L		99	78 - 127
1,2-Dichloropropane	10.0	9.76		ug/L		98	81 - 124
1,4-Dichlorobenzene	10.0	9.92		ug/L		99	83 - 116
2-Chloroethyl vinyl ether	10.0	11.0		ug/L		110	34 - 140
Benzene	10.0	10.2		ug/L		102	84 - 124
Bromodichloromethane	10.0	10.3		ug/L		103	81 - 127
Bromoform	10.0	10.9		ug/L		109	78 - 138
Bromomethane	10.0	9.60		ug/L		96	48 - 162
Carbon tetrachloride	10.0	10.0		ug/L		100	79 - 132
Chlorobenzene	10.0	9.93		ug/L		99	85 - 118
Chloroethane	10.0	9.56		ug/L		96	71 - 132
Chloromethane	10.0	9.25		ug/L		92	68 - 136
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	83 - 123
Dibromochloromethane	10.0	10.5		ug/L		105	81 - 129
Ethylbenzene	10.0	10.5		ug/L		105	85 - 125
Toluene	10.0	10.5		ug/L		105	83 - 127
trans-1,2-Dichloroethene	10.0	9.86		ug/L		99	78 - 122
trans-1,3-Dichloropropene	10.0	11.5		ug/L		115	83 - 130
Trichlorofluoromethane	10.0	9.38		ug/L		94	72 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*71 - 135*
4-Bromofluorobenzene (Surr)	*100*		*80 - 122*
Toluene-d8 (Surr)	*104*		*84 - 122*

Lab Sample ID: LCSD 160-58207/5
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane	10.0	9.28		ug/L		93	69 - 130	11	20
1,1,2-Trichloroethane	10.0	9.04		ug/L		90	78 - 122	12	20
1,1-Dichloroethane	10.0	9.58		ug/L		96	82 - 125	1	20
1,1-Dichloroethene	10.0	10.0		ug/L		100	77 - 127	2	20
1,2-Dichloroethane	10.0	9.23		ug/L		92	78 - 127	7	20
1,2-Dichloropropane	10.0	9.68		ug/L		97	81 - 124	1	20
1,4-Dichlorobenzene	10.0	9.53		ug/L		95	83 - 116	4	20
2-Chloroethyl vinyl ether	10.0	8.68	*	ug/L		87	34 - 140	23	20
Benzene	10.0	10.1		ug/L		101	84 - 124	1	20
Bromodichloromethane	10.0	9.74		ug/L		97	81 - 127	5	20
Bromoform	10.0	10.3		ug/L		103	78 - 138	5	20
Bromomethane	10.0	9.87		ug/L		99	48 - 162	3	20
Carbon tetrachloride	10.0	10.2		ug/L		102	79 - 132	1	20
Chlorobenzene	10.0	9.41		ug/L		94	85 - 118	5	20
Chloroethane	10.0	9.29		ug/L		93	71 - 132	3	20
Chloromethane	10.0	9.26		ug/L		93	68 - 136	0	20
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	83 - 123	0	20
Dibromochloromethane	10.0	9.70		ug/L		97	81 - 129	8	20

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-58207/5
Matrix: Water
Analysis Batch: 58207

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene			10.0	10.0		ug/L		100	85 - 125	4	20
Toluene			10.0	9.98		ug/L		100	83 - 127	5	20
trans-1,2-Dichloroethene			10.0	9.87		ug/L		99	78 - 122	0	20
trans-1,3-Dichloropropene			10.0	10.4		ug/L		104	83 - 130	10	20
Trichlorofluoromethane			10.0	9.25		ug/L		92	72 - 135	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*71 - 135*
4-Bromofluorobenzene (Surr)	*101*		*80 - 122*
Toluene-d8 (Surr)	*102*		*84 - 122*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
bis (2-chloroisopropyl) ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4,6-Trichlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dichlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dimethylphenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dinitrophenol	ND		50	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,4-Dinitrotoluene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2,6-Dinitrotoluene	ND		10	2.2	ug/L		06/26/13 13:09	06/26/13 17:50	1
2-Chloronaphthalene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2-Chlorophenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
2-Nitrophenol	ND		10	1.5	ug/L		06/26/13 13:09	06/26/13 17:50	1
3,3'-Dichlorobenzidine	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
4,6-Dinitro-2-methylphenol	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Bromophenyl phenyl ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Chloro-3-methylphenol	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Chlorophenyl phenyl ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
4-Nitrophenol	ND		50	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Acenaphthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Acenaphthylene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzidine	ND		100	20	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[a]anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[a]pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[b]fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[g,h,i]perylene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Benzo[k]fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-chloroethoxy)methane	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-chloroethyl)ether	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Bis(2-ethylhexyl) phthalate	ND		10	1.9	ug/L		06/26/13 13:09	06/26/13 17:50	1
Butyl benzyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-57924/1-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Dibenz(a,h)anthracene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Diethyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Dimethyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Di-n-butyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Di-n-octyl phthalate	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Fluoranthene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Fluorene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachloro-1,3-butadiene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachlorobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachlorocyclopentadiene	ND		50	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Hexachloroethane	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Indeno[1,2,3-cd]pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Isophorone	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Naphthalene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Nitrobenzene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodimethylamine	ND		10	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/L		06/26/13 13:09	06/26/13 17:50	1
N-Nitrosodiphenylamine	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Pentachlorophenol	ND		50	1.3	ug/L		06/26/13 13:09	06/26/13 17:50	1
Phenanthrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Phenol	ND		10	2.0	ug/L		06/26/13 13:09	06/26/13 17:50	1
Pyrene	ND		10	1.0	ug/L		06/26/13 13:09	06/26/13 17:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*76*		*41 - 109*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
2-Fluorobiphenyl (Surr)	*56*		*31 - 103*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
2-Fluorophenol (Surr)	*36*		*23 - 82*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
Nitrobenzene-d5 (Surr)	*52*		*36 - 98*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
Phenol-d5 (Surr)	*28*		*14 - 68*	*06/26/13 13:09*	*06/26/13 17:50*	*1*
Terphenyl-d14 (Surr)	*76*		*43 - 107*	*06/26/13 13:09*	*06/26/13 17:50*	*1*

Lab Sample ID: LCS 160-57924/2-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	100	72.6		ug/L		72	44 - 84
bis (2-chloroisopropyl) ether	100	65.8		ug/L		66	42 - 102
2,4,6-Trichlorophenol	100	71.5		ug/L		71	54 - 105
2,4-Dichlorophenol	100	64.4		ug/L		64	46 - 103
2,4-Dimethylphenol	100	65.4		ug/L		65	40 - 105
2,4-Dinitrophenol	100	69.2		ug/L		69	42 - 146
2,4-Dinitrotoluene	100	79.0		ug/L		79	62 - 101
2,6-Dinitrotoluene	100	78.8		ug/L		79	62 - 103
2-Chloronaphthalene	100	75.5		ug/L		76	45 - 95
2-Chlorophenol	100	65.1		ug/L		65	56 - 93
2-Nitrophenol	101	71.7		ug/L		71	51 - 98

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-57924/2-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
3,3'-Dichlorobenzidine	100	64.1		ug/L		64	26 - 77
4,6-Dinitro-2-methylphenol	100	82.6		ug/L		83	61 - 120
4-Bromophenyl phenyl ether	100	89.1		ug/L		89	54 - 111
4-Chloro-3-methylphenol	100	60.1		ug/L		60	45 - 106
4-Chlorophenyl phenyl ether	100	76.6		ug/L		77	53 - 100
4-Nitrophenol	100	34.8	J	ug/L		35	25 - 45
Acenaphthene	100	75.7		ug/L		76	51 - 89
Acenaphthylene	100	76.1		ug/L		76	46 - 98
Anthracene	100	83.5		ug/L		84	54 - 111
Benzo[a]anthracene	100	88.7		ug/L		89	68 - 108
Benzo[a]pyrene	100	83.5		ug/L		84	55 - 108
Benzo[b]fluoranthene	100	82.4		ug/L		82	57 - 114
Benzo[g,h,i]perylene	100	86.8		ug/L		87	58 - 120
Benzo[k]fluoranthene	100	89.3		ug/L		89	59 - 112
Bis(2-chloroethoxy)methane	100	67.0		ug/L		67	53 - 99
Bis(2-chloroethyl)ether	100	65.8		ug/L		66	50 - 97
Bis(2-ethylhexyl) phthalate	100	84.1		ug/L		84	54 - 116
Butyl benzyl phthalate	100	82.8		ug/L		83	52 - 126
Chrysene	100	77.5		ug/L		77	58 - 112
Dibenz(a,h)anthracene	100	87.9		ug/L		88	56 - 122
Diethyl phthalate	100	75.3		ug/L		75	60 - 101
Dimethyl phthalate	100	74.8		ug/L		75	57 - 101
Di-n-butyl phthalate	100	84.4		ug/L		84	57 - 108
Di-n-octyl phthalate	100	76.6		ug/L		77	57 - 118
Fluoranthene	100	81.8		ug/L		82	55 - 114
Fluorene	100	73.8		ug/L		74	59 - 96
Hexachloro-1,3-butadiene	100	77.5		ug/L		77	36 - 84
Hexachlorobenzene	100	90.1		ug/L		90	56 - 110
Hexachlorocyclopentadiene	100	86.3		ug/L		86	16 - 86
Hexachloroethane	100	74.3		ug/L		74	40 - 77
Indeno[1,2,3-cd]pyrene	100	84.3		ug/L		84	55 - 124
Isophorone	100	64.8		ug/L		65	50 - 107
Naphthalene	100	69.0		ug/L		69	42 - 82
Nitrobenzene	100	69.1		ug/L		69	48 - 96
N-Nitrosodi-n-propylamine	101	77.0		ug/L		77	57 - 113
Pentachlorophenol	100	76.8		ug/L		77	56 - 126
Phenanthrene	100	80.9		ug/L		81	54 - 110
Phenol	100	33.0		ug/L		33	27 - 43
Pyrene	100	85.1		ug/L		85	53 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*89*		*41 - 109*
2-Fluorobiphenyl (Surr)	*76*		*31 - 103*
2-Fluorophenol (Surr)	*51*		*23 - 82*
Nitrobenzene-d5 (Surr)	*74*		*36 - 98*
Phenol-d5 (Surr)	*34*		*14 - 68*
Terphenyl-d14 (Surr)	*84*		*43 - 107*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-57924/3-A
Matrix: Water
Analysis Batch: 58253

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 57924

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	100	72.0		ug/L		72	44 - 84	1	20
bis (2-chloroisopropyl) ether	100	69.4		ug/L		69	42 - 102	5	20
2,4,6-Trichlorophenol	100	70.8		ug/L		71	54 - 105	1	20
2,4-Dichlorophenol	100	64.3		ug/L		64	46 - 103	0	20
2,4-Dimethylphenol	100	65.0		ug/L		65	40 - 105	1	20
2,4-Dinitrophenol	100	68.9		ug/L		69	42 - 146	0	20
2,4-Dinitrotoluene	100	76.2		ug/L		76	62 - 101	4	20
2,6-Dinitrotoluene	100	78.8		ug/L		79	62 - 103	0	20
2-Chloronaphthalene	100	76.9		ug/L		77	45 - 95	2	20
2-Chlorophenol	100	65.0		ug/L		65	56 - 93	0	20
2-Nitrophenol	101	71.8		ug/L		71	51 - 98	0	20
3,3'-Dichlorobenzidine	100	63.5		ug/L		63	26 - 77	1	20
4,6-Dinitro-2-methylphenol	100	82.0		ug/L		82	61 - 120	1	20
4-Bromophenyl phenyl ether	100	86.2		ug/L		86	54 - 111	3	20
4-Chloro-3-methylphenol	100	60.6		ug/L		60	45 - 106	1	20
4-Chlorophenyl phenyl ether	100	73.3		ug/L		73	53 - 100	4	20
4-Nitrophenol	100	36.8	J	ug/L		37	25 - 45	5	20
Acenaphthene	100	73.8		ug/L		74	51 - 89	3	20
Acenaphthylene	100	75.6		ug/L		76	46 - 98	1	20
Anthracene	100	80.3		ug/L		80	54 - 111	4	20
Benzo[a]anthracene	100	86.5		ug/L		86	68 - 108	2	20
Benzo[a]pyrene	100	80.5		ug/L		80	55 - 108	4	20
Benzo[b]fluoranthene	100	78.6		ug/L		79	57 - 114	5	20
Benzo[g,h,i]perylene	100	83.6		ug/L		84	58 - 120	4	20
Benzo[k]fluoranthene	100	87.0		ug/L		87	59 - 112	3	20
Bis(2-chloroethoxy)methane	100	67.8		ug/L		68	53 - 99	1	20
Bis(2-chloroethyl)ether	100	67.7		ug/L		68	50 - 97	3	20
Bis(2-ethylhexyl) phthalate	100	83.5		ug/L		84	54 - 116	1	20
Butyl benzyl phthalate	100	83.4		ug/L		83	52 - 126	1	20
Chrysene	100	75.9		ug/L		76	58 - 112	2	20
Dibenz(a,h)anthracene	100	84.2		ug/L		84	56 - 122	4	20
Diethyl phthalate	100	73.2		ug/L		73	60 - 101	3	20
Dimethyl phthalate	100	73.5		ug/L		73	57 - 101	2	20
Di-n-butyl phthalate	100	82.6		ug/L		83	57 - 108	2	20
Di-n-octyl phthalate	100	76.4		ug/L		76	57 - 118	0	20
Fluoranthene	100	78.5		ug/L		79	55 - 114	4	20
Fluorene	100	70.7		ug/L		71	59 - 96	4	20
Hexachloro-1,3-butadiene	100	74.8		ug/L		75	36 - 84	4	20
Hexachlorobenzene	100	84.5		ug/L		85	56 - 110	6	20
Hexachlorocyclopentadiene	100	80.3		ug/L		80	16 - 86	7	20
Hexachloroethane	100	75.9		ug/L		76	40 - 77	2	20
Indeno[1,2,3-cd]pyrene	100	82.9		ug/L		83	55 - 124	2	20
Isophorone	100	67.2		ug/L		67	50 - 107	4	20
Naphthalene	100	68.8		ug/L		69	42 - 82	0	20
Nitrobenzene	100	71.0		ug/L		71	48 - 96	3	20
N-Nitrosodi-n-propylamine	101	79.5		ug/L		79	57 - 113	3	20
Pentachlorophenol	100	75.9		ug/L		76	56 - 126	1	20
Phenanthrene	100	79.2		ug/L		79	54 - 110	2	20

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-57924/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58253 — **Prep Batch: 57924**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	100	34.9		ug/L		35	27 - 43	5	20
Pyrene	100	83.8		ug/L		84	53 - 117	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*82*		*41 - 109*
2-Fluorobiphenyl (Surr)	*77*		*31 - 103*
2-Fluorophenol (Surr)	*52*		*23 - 82*
Nitrobenzene-d5 (Surr)	*76*		*36 - 98*
Phenol-d5 (Surr)	*36*		*14 - 68*
Terphenyl-d14 (Surr)	*82*		*43 - 107*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 160-57955/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58327 — **Prep Batch: 57955**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		06/26/13 16:18	06/27/13 13:54	1
Arsenic	ND		10	2.0	ug/L		06/26/13 16:18	06/27/13 13:54	1
Beryllium	ND		5.0	0.50	ug/L		06/26/13 16:18	06/27/13 13:54	1
Cadmium	ND		5.0	0.45	ug/L		06/26/13 16:18	06/27/13 13:54	1
Chromium	ND		10	3.1	ug/L		06/26/13 16:18	06/27/13 13:54	1
Cobalt	ND		50	4.0	ug/L		06/26/13 16:18	06/27/13 13:54	1
Copper	ND		25	4.6	ug/L		06/26/13 16:18	06/27/13 13:54	1
Iron	ND		100	16	ug/L		06/26/13 16:18	06/27/13 13:54	1
Lead	ND		10	1.3	ug/L		06/26/13 16:18	06/27/13 13:54	1
Nickel	ND		40	13	ug/L		06/26/13 16:18	06/27/13 13:54	1
Antimony	ND		10	4.0	ug/L		06/26/13 16:18	06/27/13 13:54	1
Selenium	ND		15	2.7	ug/L		06/26/13 16:18	06/27/13 13:54	1
Silver	ND		10	6.0	ug/L		06/26/13 16:18	06/27/13 13:54	1
Thallium	ND	^	20	0.88	ug/L		06/26/13 16:18	06/27/13 13:54	1
Zinc	8.10	J	20	5.2	ug/L		06/26/13 16:18	06/27/13 13:54	1

Lab Sample ID: LCS 160-57955/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58327 — **Prep Batch: 57955**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9970		ug/L		100	85 - 115
Arsenic	1000	1030		ug/L		103	85 - 115
Beryllium	1000	1050		ug/L		105	85 - 115
Cadmium	1000	1060		ug/L		106	85 - 115
Chromium	1000	1050		ug/L		105	85 - 115
Cobalt	1000	1110		ug/L		111	85 - 115
Copper	1000	1070		ug/L		107	85 - 115
Iron	10000	10300		ug/L		103	85 - 115
Lead	1000	1090		ug/L		109	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 160-57955/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58327 — **Prep Batch: 57955**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	1000	1090		ug/L		109	85 - 115
Antimony	500	528		ug/L		106	85 - 115
Selenium	1000	1050		ug/L		105	85 - 115
Silver	100	100		ug/L		100	85 - 115
Thallium	200	241	^ *	ug/L		120	85 - 115
Zinc	1000	1050		ug/L		105	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 160-58423/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58593 — **Prep Batch: 58423**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.050	ug/L		06/30/13 10:22	06/30/13 15:56	1

Lab Sample ID: LCS 160-58423/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58593 — **Prep Batch: 58423**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.85		ug/L		97	85 - 115

Lab Sample ID: 160-2833-1 MS — **Client Sample ID: 250/243-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58593 — **Prep Batch: 58423**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		150	144		ug/L		96	70 - 130

Lab Sample ID: 160-2833-1 MSD — **Client Sample ID: 250/243-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58593 — **Prep Batch: 58423**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		150	145		ug/L		97	70 - 130	1	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 480-126204/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126208 — **Prep Batch: 126204**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/26/13 23:47	06/27/13 00:28	1
SGT-HEM	1.90	J	5.0	1.9	mg/L		06/26/13 23:47	06/27/13 00:28	1

Method: 1664A - HEM and SGT-HEM (Continued)

Lab Sample ID: LCS 480-126204/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126208 — **Prep Batch: 126204**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	38.4		mg/L		96	78 - 114
SGT-HEM	20.0	16.3		mg/L		81	64 - 132

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-126947/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126947

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			07/01/13 13:22	1

Lab Sample ID: LCS 480-126947/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126947

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.08		mg/L		108	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 480-127163/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 127163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			07/02/13 14:44	1

Lab Sample ID: LCS 480-127163/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 127163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	186		mg/L		93	90 - 110

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-126148/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126148

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			06/26/13 19:02	1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 480-126148/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126148

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Suspended Solids			211	199		mg/L		94	88 - 110		

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 160-57852/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57852

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
pH			7.00	7.000		SU		100	99.0 - 101.0		

Lab Sample ID: 160-2833-1 DU — **Client Sample ID: 250/243-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57852

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	6.00	HF		6.000		SU				0	5

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2833-1

GC/MS VOA

Analysis Batch: 58207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2833-1 - DL	250/243-MSD	Total/NA	Water	624	
160-2833-2	Trip Blank	Total/NA	Water	624	
LCS 160-58207/4	Lab Control Sample	Total/NA	Water	624	
LCSD 160-58207/5	Lab Control Sample Dup	Total/NA	Water	624	
MB 160-58207/2	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 57924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2833-1 - DL	250/243-MSD	Total/NA	Water	625	
160-2833-1	250/243-MSD	Total/NA	Water	625	
LCS 160-57924/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 160-57924/3-A	Lab Control Sample Dup	Total/NA	Water	625	
MB 160-57924/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 58253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2833-1 - DL	250/243-MSD	Total/NA	Water	625	57924
160-2833-1	250/243-MSD	Total/NA	Water	625	57924
LCS 160-57924/2-A	Lab Control Sample	Total/NA	Water	625	57924
LCSD 160-57924/3-A	Lab Control Sample Dup	Total/NA	Water	625	57924
MB 160-57924/1-A	Method Blank	Total/NA	Water	625	57924

Metals

Prep Batch: 57955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2833-1	250/243-MSD	Total/NA	Water	200.7/200.8	
160-2833-1	250/243-MSD	Dissolved	Water	200.7/200.8	
LCS 160-57955/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
MB 160-57955/1-A	Method Blank	Total/NA	Water	200.7/200.8	

Analysis Batch: 58327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2833-1	250/243-MSD	Total/NA	Water	200.7 Rev 4.4	57955
160-2833-1	250/243-MSD	Dissolved	Water	200.7 Rev 4.4	57955
LCS 160-57955/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	57955
MB 160-57955/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	57955

Prep Batch: 58423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2833-1	250/243-MSD	Total/NA	Water	245.1	
160-2833-1	250/243-MSD	Dissolved	Water	245.1	
160-2833-1 MS	250/243-MSD	Total/NA	Water	245.1	
160-2833-1 MSD	250/243-MSD	Total/NA	Water	245.1	
LCS 160-58423/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 160-58423/1-A	Method Blank	Total/NA	Water	245.1	

Metals (Continued)

Analysis Batch: 58593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2833-1	250/243-MSD	Total/NA	Water	245.1	58423
160-2833-1	250/243-MSD	Dissolved	Water	245.1	58423
160-2833-1 MS	250/243-MSD	Total/NA	Water	245.1	58423
160-2833-1 MSD	250/243-MSD	Total/NA	Water	245.1	58423
LCS 160-58423/2-A	Lab Control Sample	Total/NA	Water	245.1	58423
MB 160-58423/1-A	Method Blank	Total/NA	Water	245.1	58423

General Chemistry

Analysis Batch: 57852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2833-1	250/243-MSD	Total/NA	Water	SM 4500 H+ B	
160-2833-1 DU	250/243-MSD	Total/NA	Water	SM 4500 H+ B	
LCS 160-57852/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 126148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2833-1	250/243-MSD	Total/NA	Water	SM 2540D	
LCS 480-126148/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-126148/1	Method Blank	Total/NA	Water	SM 2540D	

Prep Batch: 126204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2833-1	250/243-MSD	Total/NA	Water	1664A	
LCS 480-126204/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 480-126204/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 126208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2833-1	250/243-MSD	Total/NA	Water	1664A	126204
LCS 480-126204/2-A	Lab Control Sample	Total/NA	Water	1664A	126204
MB 480-126204/1-A	Method Blank	Total/NA	Water	1664A	126204

Analysis Batch: 126947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2833-1	250/243-MSD	Total/NA	Water	350.1	
LCS 480-126947/4	Lab Control Sample	Total/NA	Water	350.1	
MB 480-126947/3	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 127163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2833-1	250/243-MSD	Total/NA	Water	410.4	
LCS 480-127163/4	Lab Control Sample	Total/NA	Water	410.4	
MB 480-127163/3	Method Blank	Total/NA	Water	410.4	

Surrogate Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2833-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(71-135)	(80-122)	(84-122)
160-2833-1 - DL	250/243-MSD	97	96	103
160-2833-2	Trip Blank	98	112	107
LCS 160-58207/4	Lab Control Sample	96	100	104
LCSD 160-58207/5	Lab Control Sample Dup	93	101	102
MB 160-58207/2	Method Blank	98	110	106

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(41-109)	(31-103)	(23-82)	(36-98)	(14-68)	(43-107)
160-2833-1 - DL	250/243-MSD	0 D X	0 D X	0 D X	0 D X	0 D X	0 D X
160-2833-1	250/243-MSD	46	45	0 X	0 X	0 X	21 X
LCS 160-57924/2-A	Lab Control Sample	89	76	51	74	34	84
LCSD 160-57924/3-A	Lab Control Sample Dup	82	77	52	76	36	82
MB 160-57924/1-A	Method Blank	76	56	36	52	28	76

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2833-2
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
7/3/2013 1:58:41 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

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

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Job ID: 160-2833-2

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2833-2

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT
The samples were received on 6/25/2013 10:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 13.0º C.

BIOCHEMICAL OXYGEN DEMAND
Sample 250/243-MSD (160-2833-1) was analyzed for Biochemical oxygen demand in accordance with SM 5210B. The samples were analyzed on 06/26/2013.

For batch # 126224, the USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results are reported. (USB 480-126224/1)

No difficulties were encountered during the BOD analysis.

All quality control parameters were within the acceptance limits.

Job ID: 160-2833-2 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

COC 417

[redacted]

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY - FEI		197620
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State)	Carrier/Waybill Number
BRIDGETON LF / MISSOURI	

Contract/Purchase Order/Quote No.

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): 624-VOCs	1664 HEM/FPH	5210B-BOD	625-SVOCs	200.7 2451.T	200.7 2451.D	2540D-TSS	420.4 350.1	pH				Special Instructions/ Conditions of Receipt
250/243-MSD	6/25/13	0826		✓				5	1	1	4				3	1	1	1	1	1	1	1	1				
TRIP BLANK	—	—		✓							2				2												

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 Days

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	6/25/13	1020	1. Received By	6/25/13	1020
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2833-2

Login Number: 2833

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	Sample was just collected.
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?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2833-2

Login Number: 2833
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/26/13 03:49 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	4.1 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Definitions/Glossary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2833-2

Qualifiers

General Chemistry

Qualifier	Qualifier Description
b	Result Detected in the Unseeded Control blank (USB).

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2833-2

Method	Method Description	Protocol	Laboratory
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2833-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2833-1	250/243-MSD	Water	06/25/13 08:26	06/25/13 10:20

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2833-2

Client Sample ID: 250/243-MSD

Lab Sample ID: 160-2833-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	38000	b	40	40	mg/L	20		SM 5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2833-2

Client Sample ID: 250/243-MSD

Lab Sample ID: 160-2833-1

Date Collected: 06/25/13 08:26

Matrix: Water

Date Received: 06/25/13 10:20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	38000	b	40	40	mg/L			06/26/13 22:59	20

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2833-2

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-126224/1 USB
Matrix: Water
Analysis Batch: 126224

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			06/26/13 22:59	1

Lab Sample ID: LCS 480-126224/2
Matrix: Water
Analysis Batch: 126224

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	212		mg/L		107	85 - 115		

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2833-2

General Chemistry

Analysis Batch: 126224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2833-1	250/243-MSD	Total/NA	Water	SM 5210B	
LCS 480-126224/2	Lab Control Sample	Total/NA	Water	SM 5210B	
USB 480-126224/1 USB	Method Blank	Total/NA	Water	SM 5210B	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2848-1
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
7/3/2013 2:41:15 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.testamericainc.com

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.

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Job ID: 160-2848-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2848-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 6/26/2013 3:02 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples 251/252-MSD (160-2848-1) and TRIP BLANK (160-2848-2) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA Method 624. The samples were analyzed on 06/26/2013.

Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 58207. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

The following sample(s) were analyzed at reduced volumes due to high concentrations of target analytes: 251/252-MSD (160-2848-1). The calculation was done using an initial volume adjustment rather than a dilution factor. The reporting limits have been elevated by the appropriate factor.

Job ID: 160-2848-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 58207 recovered outside control limits for 2-Chloroethyl vinyl ether. This analyte was not observed above the reporting limit in any of the associated samples.

The following samples were observed to have pH's greater than 2 251/252-MSD (160-2848-1). The samples were analyzed within seven days of sampling in the field. Therefore, this excursion does not affect the reported data.

No other difficulties were encountered during the VOCs analysis.

All other quality control parameters were within the acceptance limits.

Organic Prep
During pH adjustment, the following sample required 15mL of acid and 30 mL of base to reach the desired pH: 251/252-MSD (160-2848-1).

The following sample formed an emulsion during the extraction procedure: 251/252-MSD (160-2848-1). The emulsion was broken up using the centrifuge.

Due to the matrix, the following sample could not be concentrated to the final method required volume: 251/252-MSD (160-2848-1). The reporting limits (RLs) are elevated proportionately.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 251/252-MSD (160-2848-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA Method 625. The samples were prepared on 06/29/2013 and analyzed on 07/01/2013.

The following sample was diluted due to the nature of the sample matrix: 251/252-MSD (160-2848-1)[20X]. Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

No other difficulties were encountered during the SVOC analysis.

All other quality control parameters were within the acceptance limits.

ICP total and dissolved
Sample 251/252-MSD (160-2848-1) was analyzed for ICP in accordance with EPA Method 200.7, Rev. 4.4. The samples were prepared on 06/27/2013 and analyzed on 07/01/2013.

Samples were prepped at a dilution due to their matrix. Samples were dark brown\black in color and had a strong odor.

The following samples were diluted due to the nature of the sample matrix. The sample digestates were dark yellow in color: (160-2848-1 MS), (160-2848-1 MSD), (160-2848-1 SD), 251/252-MSD (160-2848-1)[5X]. Elevated reporting limits (RLs) are provided.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

The initial calibration verification (ICV) for analytical batch 58798 was outside control criteria for thallium. The affected samples were ND for thallium and the data have been qualified and reported.

No other difficulties were encountered during the ICP analysis.

All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)
Sample 251/252-MSD (160-2848-1) was analyzed for dissolved mercury (CVAA) in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/30/2013.

Job ID: 160-2848-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

MERCURY
Sample 251/252-MSD (160-2848-1) was analyzed for mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/30/2013.

Sample was a black liquid with particulate in suspension. Due to possible matrix interference, the sample was prepped at a dilution. Affected samples are: 251/252-MSD (160-2848-1)

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

SGT-HEM
Sample 251/252-MSD (160-2848-1) was analyzed for SGT-HEM in accordance with EPA Method 1664A. The samples were prepared and analyzed on 07/02/2013.

No difficulties were encountered during the SGT-HEM analysis.

All quality control parameters were within the acceptance limits.

TOTAL SUSPENDED SOLIDS
Sample 251/252-MSD (160-2848-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 06/27/2013.

Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: 251/252-MSD (160-2848-1). The reporting limits (RLs) have been adjusted proportionately.

No difficulties were encountered during the TSS analysis.

All quality control parameters were within the acceptance limits.

AMMONIA
Sample 251/252-MSD (160-2848-1) was analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/28/2013.

Sample 251/252-MSD (160-2848-1)[500X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the ammonia analysis.

All quality control parameters were within the acceptance limits.

CHEMICAL OXYGEN DEMAND
Sample 251/252-MSD (160-2848-1) was analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 07/02/2013.

Sample 251/252-MSD (160-2848-1)[100X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the COD analysis.

All quality control parameters were within the acceptance limits.

Job ID: 160-2848-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

PH

Sample 251/252-MSD (160-2848-1) was analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed on 06/26/2013.

For the analysis of the associated sample in pH batch 57971, this analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 251/252-MSD (160-2848-1)

For the analysis of the associated sample in pH batch 57971, the sample was analyzed using pH indicator strips. The strips used were range 0-14, Lot HC270245.251/252-MSD (160-2848-1)

No difficulties were encountered during the pH analysis.

All quality control parameters were within the acceptance limits.

CVR 024

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY - FEI	6/26/13	197618
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 1
	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State): BRIDGETON LF / MISSOURI

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.:

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	624 - VOCs	1664 HEM-FPH	5210B - BOD	625 - SVOCs	200.7 245.1 T	200.7 245.1 D	2540D - TSS	4500 - 350.1	pH				Special Instructions/ Conditions of Receipt
251/252 - MSD	6/26/13	1036		✓			5	1	1	4			3	1	1	1	1	1	1	1	1				
TRIP BLANK	—	—		✓						2			2												

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 Days

QC Requirements (Specify):

1. Relinquished By: [signature]	Date 6/26/13	Time 1502	1. Received By: [signature]	Date 6/26/13	Time 1502
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2848-1

Login Number: 2848

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	
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?	False	Not requested on COC.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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	See NCM
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	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2848-1

Login Number: 2848
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/27/13 03:11 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	3.4 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Definitions/Glossary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2848-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2848-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL SL
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SL
245.1	Mercury (CVAA)	EPA	TAL SL
1664A	HEM and SGT-HEM	1664A	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
410.4	COD	MCAWW	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL SL

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2848-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2848-1	251/252-MSD	Water	06/26/13 10:36	06/26/13 15:02
160-2848-2	TRIP BLANK	Water	06/26/13 00:00	06/26/13 15:02

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2848-1

Client Sample ID: 251/252-MSD — Lab Sample ID: 160-2848-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,4-Dimethylphenol	95	J	290	7.8	ug/L	20		625	Total/NA
Acenaphthene	12	J	290	3.5	ug/L	20		625	Total/NA
Naphthalene	33	J	290	4.6	ug/L	20		625	Total/NA
Phenol	5300		290	7.0	ug/L	20		625	Total/NA
Aluminum	20000		10000	4000	ug/L	5		200.7 Rev 4.4	Total/NA
Arsenic	440	J	500	99	ug/L	5		200.7 Rev 4.4	Total/NA
Cobalt	320	J	2500	200	ug/L	5		200.7 Rev 4.4	Total/NA
Chromium	310	J	500	160	ug/L	5		200.7 Rev 4.4	Total/NA
Iron	990000		5000	800	ug/L	5		200.7 Rev 4.4	Total/NA
Lead	280	J	500	64	ug/L	5		200.7 Rev 4.4	Total/NA
Antimony	230	J	500	200	ug/L	5		200.7 Rev 4.4	Total/NA
Zinc	14000		1000	260	ug/L	5		200.7 Rev 4.4	Total/NA
Aluminum	4100	J	10000	4000	ug/L	5		200.7 Rev 4.4	Dissolved
Arsenic	410	J	500	99	ug/L	5		200.7 Rev 4.4	Dissolved
Chromium	170	J	500	160	ug/L	5		200.7 Rev 4.4	Dissolved
Iron	670000		5000	800	ug/L	5		200.7 Rev 4.4	Dissolved
Lead	140	J	500	64	ug/L	5		200.7 Rev 4.4	Dissolved
Zinc	13000		1000	260	ug/L	5		200.7 Rev 4.4	Dissolved
Mercury	11		6.0	1.5	ug/L	1		245.1	Total/NA
Oil & Grease	39		17	4.7	mg/L	1		1664A	Total/NA
SGT-HEM	9.0	J	17	6.5	mg/L	1		1664A	Total/NA
Ammonia	590		10	4.5	mg/L	500		350.1	Total/NA
Chemical Oxygen Demand	52000		1000	500	mg/L	100		410.4	Total/NA
Analyte	**Result**	**Qualifier**	**RL**	**RL**	**Unit**	**Dil Fac**	**D**	**Method**	**Prep Type**
Total Suspended Solids	1800		100	100	mg/L	1		SM 2540D	Total/NA
pH	6.00	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 160-2848-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2848-1

Client Sample ID: 251/252-MSD

Lab Sample ID: 160-2848-1

Date Collected: 06/26/13 10:36

Matrix: Water

Date Received: 06/26/13 15:02

Method: 624 - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	3.5	ug/L			06/26/13 19:42	1
1,1,2,2-Tetrachloroethane	ND		50	5.0	ug/L			06/26/13 19:42	1
1,1,2-Trichloroethane	ND		50	7.5	ug/L			06/26/13 19:42	1
1,1-Dichloroethane	ND		50	3.5	ug/L			06/26/13 19:42	1
1,1-Dichloroethene	ND		50	4.0	ug/L			06/26/13 19:42	1
1,2-Dichlorobenzene	ND		50	3.0	ug/L			06/26/13 19:42	1
1,2-Dichloroethane	ND		50	5.0	ug/L			06/26/13 19:42	1
1,2-Dichloropropane	ND		50	5.0	ug/L			06/26/13 19:42	1
1,3-Dichlorobenzene	ND		50	4.0	ug/L			06/26/13 19:42	1
1,4-Dichlorobenzene	ND		50	6.0	ug/L			06/26/13 19:42	1
2-Chloroethyl vinyl ether	ND	*	100	8.5	ug/L			06/26/13 19:42	1
Benzene	ND		50	3.0	ug/L			06/26/13 19:42	1
Bromodichloromethane	ND		50	4.5	ug/L			06/26/13 19:42	1
Bromoform	ND		50	8.5	ug/L			06/26/13 19:42	1
Bromomethane	ND		100	6.5	ug/L			06/26/13 19:42	1
Carbon tetrachloride	ND		50	6.5	ug/L			06/26/13 19:42	1
Chlorobenzene	ND		50	7.5	ug/L			06/26/13 19:42	1
Chloroethane	ND		100	5.0	ug/L			06/26/13 19:42	1
Chloroform	ND		50	5.0	ug/L			06/26/13 19:42	1
Chloromethane	ND		100	4.0	ug/L			06/26/13 19:42	1
cis-1,2-Dichloroethene	ND		50	4.5	ug/L			06/26/13 19:42	1
cis-1,3-Dichloropropene	ND		50	3.5	ug/L			06/26/13 19:42	1
Dibromochloromethane	ND		50	6.5	ug/L			06/26/13 19:42	1
Ethylbenzene	ND		50	4.5	ug/L			06/26/13 19:42	1
Methylene Chloride	ND		50	5.5	ug/L			06/26/13 19:42	1
Tetrachloroethene	ND		50	9.0	ug/L			06/26/13 19:42	1
Toluene	ND		50	3.5	ug/L			06/26/13 19:42	1
trans-1,2-Dichloroethene	ND		50	4.0	ug/L			06/26/13 19:42	1
trans-1,3-Dichloropropene	ND		50	4.0	ug/L			06/26/13 19:42	1
Trichloroethene	ND		50	11	ug/L			06/26/13 19:42	1
Trichlorofluoromethane	ND		50	5.5	ug/L			06/26/13 19:42	1
Vinyl chloride	ND		100	4.0	ug/L			06/26/13 19:42	1
Xylenes, Total	ND		150	10	ug/L			06/26/13 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*71 - 135*		*06/26/13 19:42*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 122*		*06/26/13 19:42*	*1*
Toluene-d8 (Surr)	*104*		*84 - 122*		*06/26/13 19:42*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		580	28	ug/L		06/29/13 07:12	07/01/13 20:05	20
2,4,6-Trichlorophenol	ND		290	13	ug/L		06/29/13 07:12	07/01/13 20:05	20
2,4-Dichlorophenol	ND		290	17	ug/L		06/29/13 07:12	07/01/13 20:05	20
2,4-Dimethylphenol	**95**	**J**	290	7.8	ug/L		06/29/13 07:12	07/01/13 20:05	20
2,4-Dinitrophenol	ND		580	48	ug/L		06/29/13 07:12	07/01/13 20:05	20
2,4-Dinitrotoluene	ND		290	15	ug/L		06/29/13 07:12	07/01/13 20:05	20
2-Chloronaphthalene	ND		290	3.9	ug/L		06/29/13 07:12	07/01/13 20:05	20
2-Chlorophenol	ND		290	9.0	ug/L		06/29/13 07:12	07/01/13 20:05	20
2-Nitrophenol	ND		290	8.3	ug/L		06/29/13 07:12	07/01/13 20:05	20

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2848-1

Client Sample ID: 251/252-MSD

Date Collected: 06/26/13 10:36
Date Received: 06/26/13 15:02

Lab Sample ID: 160-2848-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3,3'-Dichlorobenzidine	ND		290	47	ug/L		06/29/13 07:12	07/01/13 20:05	20
4,6-Dinitro-2-methylphenol	ND		580	44	ug/L		06/29/13 07:12	07/01/13 20:05	20
4-Bromophenyl phenyl ether	ND		290	6.6	ug/L		06/29/13 07:12	07/01/13 20:05	20
4-Chloro-3-methylphenol	ND		290	32	ug/L		06/29/13 07:12	07/01/13 20:05	20
4-Chlorophenyl phenyl ether	ND		290	12	ug/L		06/29/13 07:12	07/01/13 20:05	20
4-Nitrophenol	ND		580	78	ug/L		06/29/13 07:12	07/01/13 20:05	20
Acenaphthene	**12**	**J**	290	3.5	ug/L		06/29/13 07:12	07/01/13 20:05	20
Acenaphthylene	ND		290	2.0	ug/L		06/29/13 07:12	07/01/13 20:05	20
Anthracene	ND		290	3.0	ug/L		06/29/13 07:12	07/01/13 20:05	20
Benzidine	ND		4600	150	ug/L		06/29/13 07:12	07/01/13 20:05	20
Benzo[a]anthracene	ND		290	2.5	ug/L		06/29/13 07:12	07/01/13 20:05	20
Benzo[a]pyrene	ND		290	3.3	ug/L		06/29/13 07:12	07/01/13 20:05	20
Benzo[b]fluoranthene	ND		290	3.6	ug/L		06/29/13 07:12	07/01/13 20:05	20
Benzo[g,h,i]perylene	ND		290	5.8	ug/L		06/29/13 07:12	07/01/13 20:05	20
Benzo[k]fluoranthene	ND		290	2.4	ug/L		06/29/13 07:12	07/01/13 20:05	20
bis (2-chloroisopropyl) ether	ND		290	4.9	ug/L		06/29/13 07:12	07/01/13 20:05	20
Bis(2-chloroethoxy)methane	ND		290	4.9	ug/L		06/29/13 07:12	07/01/13 20:05	20
Bis(2-chloroethyl)ether	ND		290	63	ug/L		06/29/13 07:12	07/01/13 20:05	20
Bis(2-ethylhexyl) phthalate	ND		580	50	ug/L		06/29/13 07:12	07/01/13 20:05	20
Butyl benzyl phthalate	ND		290	75	ug/L		06/29/13 07:12	07/01/13 20:05	20
Chrysene	ND		290	2.1	ug/L		06/29/13 07:12	07/01/13 20:05	20
Dibenz(a,h)anthracene	ND		290	3.2	ug/L		06/29/13 07:12	07/01/13 20:05	20
Diethyl phthalate	ND		290	10	ug/L		06/29/13 07:12	07/01/13 20:05	20
Dimethyl phthalate	ND		290	9.6	ug/L		06/29/13 07:12	07/01/13 20:05	20
Di-n-butyl phthalate	ND		290	54	ug/L		06/29/13 07:12	07/01/13 20:05	20
Di-n-octyl phthalate	ND		290	260	ug/L		06/29/13 07:12	07/01/13 20:05	20
Fluoranthene	ND		290	6.3	ug/L		06/29/13 07:12	07/01/13 20:05	20
Fluorene	ND		290	2.5	ug/L		06/29/13 07:12	07/01/13 20:05	20
Hexachlorobenzene	ND		290	16	ug/L		06/29/13 07:12	07/01/13 20:05	20
Hexachlorobutadiene	ND		290	36	ug/L		06/29/13 07:12	07/01/13 20:05	20
Hexachlorocyclopentadiene	ND		290	26	ug/L		06/29/13 07:12	07/01/13 20:05	20
Hexachloroethane	ND		290	28	ug/L		06/29/13 07:12	07/01/13 20:05	20
Indeno[1,2,3-cd]pyrene	ND		290	11	ug/L		06/29/13 07:12	07/01/13 20:05	20
Isophorone	ND		290	9.0	ug/L		06/29/13 07:12	07/01/13 20:05	20
Naphthalene	**33**	**J**	290	4.6	ug/L		06/29/13 07:12	07/01/13 20:05	20
Nitrobenzene	ND		290	6.4	ug/L		06/29/13 07:12	07/01/13 20:05	20
N-Nitrosodimethylamine	ND		580	55	ug/L		06/29/13 07:12	07/01/13 20:05	20
N-Nitrosodi-n-propylamine	ND		290	13	ug/L		06/29/13 07:12	07/01/13 20:05	20
N-Nitrosodiphenylamine	ND		290	23	ug/L		06/29/13 07:12	07/01/13 20:05	20
Pentachlorophenol	ND		580	24	ug/L		06/29/13 07:12	07/01/13 20:05	20
Phenanthrene	ND		290	4.1	ug/L		06/29/13 07:12	07/01/13 20:05	20
Phenol	**5300**		290	7.0	ug/L		06/29/13 07:12	07/01/13 20:05	20
Pyrene	ND		290	2.4	ug/L		06/29/13 07:12	07/01/13 20:05	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*0*	*X*	*52 - 151*	*06/29/13 07:12*	*07/01/13 20:05*	*20*
2-Fluorobiphenyl	*23*	*X*	*44 - 120*	*06/29/13 07:12*	*07/01/13 20:05*	*20*
2-Fluorophenol	*0*	*X*	*17 - 120*	*06/29/13 07:12*	*07/01/13 20:05*	*20*
Nitrobenzene-d5	*0*	*X*	*42 - 120*	*06/29/13 07:12*	*07/01/13 20:05*	*20*
Phenol-d5	*0*	*X*	*10 - 120*	*06/29/13 07:12*	*07/01/13 20:05*	*20*

Client Sample ID: 251/252-MSD

Lab Sample ID: 160-2848-1

Date Collected: 06/26/13 10:36

Matrix: Water

Date Received: 06/26/13 15:02

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	0	X	22 - 125	06/29/13 07:12	07/01/13 20:05	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		500	300	ug/L		06/27/13 14:22	07/01/13 15:47	5
Aluminum	**20000**		10000	4000	ug/L		06/27/13 14:22	07/01/13 15:47	5
Arsenic	**440**	**J**	500	99	ug/L		06/27/13 14:22	07/01/13 15:47	5
Beryllium	ND		250	25	ug/L		06/27/13 14:22	07/01/13 15:47	5
Cadmium	ND		250	23	ug/L		06/27/13 14:22	07/01/13 15:47	5
Cobalt	**320**	**J**	2500	200	ug/L		06/27/13 14:22	07/01/13 15:47	5
Chromium	**310**	**J**	500	160	ug/L		06/27/13 14:22	07/01/13 15:47	5
Copper	ND		1300	230	ug/L		06/27/13 14:22	07/01/13 15:47	5
Iron	**990000**		5000	800	ug/L		06/27/13 14:22	07/01/13 15:47	5
Nickel	ND		2000	670	ug/L		06/27/13 14:22	07/01/13 15:47	5
Lead	**280**	**J**	500	64	ug/L		06/27/13 14:22	07/01/13 15:47	5
Antimony	**230**	**J**	500	200	ug/L		06/27/13 14:22	07/01/13 15:47	5
Selenium	ND		750	130	ug/L		06/27/13 14:22	07/01/13 15:47	5
Thallium	ND	^	1000	44	ug/L		06/27/13 14:22	07/01/13 15:47	5
Zinc	**14000**		1000	260	ug/L		06/27/13 14:22	07/01/13 15:47	5

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**4100**	**J**	10000	4000	ug/L		06/27/13 14:22	07/01/13 16:09	5
Antimony	ND		500	200	ug/L		06/27/13 14:22	07/01/13 16:09	5
Arsenic	**410**	**J**	500	99	ug/L		06/27/13 14:22	07/01/13 16:09	5
Beryllium	ND		250	25	ug/L		06/27/13 14:22	07/01/13 16:09	5
Cadmium	ND		250	23	ug/L		06/27/13 14:22	07/01/13 16:09	5
Chromium	**170**	**J**	500	160	ug/L		06/27/13 14:22	07/01/13 16:09	5
Cobalt	ND		2500	200	ug/L		06/27/13 14:22	07/01/13 16:09	5
Copper	ND		1300	230	ug/L		06/27/13 14:22	07/01/13 16:09	5
Iron	**670000**		5000	800	ug/L		06/27/13 14:22	07/01/13 16:09	5
Lead	**140**	**J**	500	64	ug/L		06/27/13 14:22	07/01/13 16:09	5
Nickel	ND		2000	670	ug/L		06/27/13 14:22	07/01/13 16:09	5
Selenium	ND		750	130	ug/L		06/27/13 14:22	07/01/13 16:09	5
Silver	ND		500	300	ug/L		06/27/13 14:22	07/01/13 16:09	5
Thallium	ND	^	1000	44	ug/L		06/27/13 14:22	07/01/13 16:09	5
Zinc	**13000**		1000	260	ug/L		06/27/13 14:22	07/01/13 16:09	5

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**11**		6.0	1.5	ug/L		06/30/13 10:22	06/30/13 16:06	1

Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		6.0	1.5	ug/L		06/30/13 10:22	06/30/13 16:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	**39**		17	4.7	mg/L		07/02/13 00:12	07/02/13 01:25	1
SGT-HEM	**9.0**	**J**	17	6.5	mg/L		07/02/13 00:12	07/02/13 01:25	1

Client Sample ID: 251/252-MSD

Lab Sample ID: 160-2848-1

Date Collected: 06/26/13 10:36

Matrix: Water

Date Received: 06/26/13 15:02

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	590		10	4.5	mg/L			06/28/13 14:50	500
Chemical Oxygen Demand	52000		1000	500	mg/L			07/02/13 14:44	100

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	1800		100	100	mg/L			06/27/13 21:57	1
pH	6.00	HF	0.100	0.100	SU			06/26/13 18:14	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2848-2

Date Collected: 06/26/13 00:00

Matrix: Water

Date Received: 06/26/13 15:02

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/26/13 19:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/26/13 19:17	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/26/13 19:17	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/26/13 19:17	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/26/13 19:17	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/26/13 19:17	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/26/13 19:17	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/26/13 19:17	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/26/13 19:17	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/26/13 19:17	1
2-Chloroethyl vinyl ether	ND	*	2.0	0.17	ug/L			06/26/13 19:17	1
Benzene	ND		1.0	0.060	ug/L			06/26/13 19:17	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/26/13 19:17	1
Bromoform	ND		1.0	0.17	ug/L			06/26/13 19:17	1
Bromomethane	ND		2.0	0.13	ug/L			06/26/13 19:17	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/26/13 19:17	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/26/13 19:17	1
Chloroethane	ND		2.0	0.10	ug/L			06/26/13 19:17	1
Chloroform	ND		1.0	0.10	ug/L			06/26/13 19:17	1
Chloromethane	ND		2.0	0.080	ug/L			06/26/13 19:17	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/26/13 19:17	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/26/13 19:17	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/26/13 19:17	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/26/13 19:17	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/26/13 19:17	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/26/13 19:17	1
Toluene	ND		1.0	0.070	ug/L			06/26/13 19:17	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/26/13 19:17	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/26/13 19:17	1
Trichloroethene	ND		1.0	0.21	ug/L			06/26/13 19:17	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/26/13 19:17	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/26/13 19:17	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/26/13 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*71 - 135*		*06/26/13 19:17*	*1*
4-Bromofluorobenzene (Surr)	*110*		*80 - 122*		*06/26/13 19:17*	*1*
Toluene-d8 (Surr)	*108*		*84 - 122*		*06/26/13 19:17*	*1*

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-58207/2
Matrix: Water
Analysis Batch: 58207

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.070	ug/L			06/26/13 10:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.10	ug/L			06/26/13 10:59	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/26/13 10:59	1
1,1-Dichloroethane	ND		1.0	0.070	ug/L			06/26/13 10:59	1
1,1-Dichloroethene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
1,2-Dichlorobenzene	ND		1.0	0.060	ug/L			06/26/13 10:59	1
1,2-Dichloroethane	ND		1.0	0.10	ug/L			06/26/13 10:59	1
1,2-Dichloropropane	ND		1.0	0.10	ug/L			06/26/13 10:59	1
1,3-Dichlorobenzene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
1,4-Dichlorobenzene	ND		1.0	0.12	ug/L			06/26/13 10:59	1
2-Chloroethyl vinyl ether	ND		2.0	0.17	ug/L			06/26/13 10:59	1
Benzene	ND		1.0	0.060	ug/L			06/26/13 10:59	1
Bromodichloromethane	ND		1.0	0.090	ug/L			06/26/13 10:59	1
Bromoform	ND		1.0	0.17	ug/L			06/26/13 10:59	1
Bromomethane	ND		2.0	0.13	ug/L			06/26/13 10:59	1
Carbon tetrachloride	ND		1.0	0.13	ug/L			06/26/13 10:59	1
Chlorobenzene	ND		1.0	0.15	ug/L			06/26/13 10:59	1
Chloroethane	ND		2.0	0.10	ug/L			06/26/13 10:59	1
Chloroform	ND		1.0	0.10	ug/L			06/26/13 10:59	1
Chloromethane	ND		2.0	0.080	ug/L			06/26/13 10:59	1
cis-1,2-Dichloroethene	ND		1.0	0.090	ug/L			06/26/13 10:59	1
cis-1,3-Dichloropropene	ND		1.0	0.070	ug/L			06/26/13 10:59	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/26/13 10:59	1
Ethylbenzene	ND		1.0	0.090	ug/L			06/26/13 10:59	1
Methylene Chloride	ND		1.0	0.11	ug/L			06/26/13 10:59	1
Tetrachloroethene	ND		1.0	0.18	ug/L			06/26/13 10:59	1
Toluene	ND		1.0	0.070	ug/L			06/26/13 10:59	1
trans-1,2-Dichloroethene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
trans-1,3-Dichloropropene	ND		1.0	0.080	ug/L			06/26/13 10:59	1
Trichloroethene	ND		1.0	0.21	ug/L			06/26/13 10:59	1
Trichlorofluoromethane	ND		1.0	0.11	ug/L			06/26/13 10:59	1
Vinyl chloride	ND		2.0	0.080	ug/L			06/26/13 10:59	1
Xylenes, Total	ND		3.0	0.20	ug/L			06/26/13 10:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*71 - 135*		*06/26/13 10:59*	*1*
4-Bromofluorobenzene (Surr)	*110*		*80 - 122*		*06/26/13 10:59*	*1*
Toluene-d8 (Surr)	*106*		*84 - 122*		*06/26/13 10:59*	*1*

Lab Sample ID: LCS 160-58207/4
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	10.0	10.4		ug/L		104	69 - 130
1,1,2-Trichloroethane	10.0	10.2		ug/L		102	78 - 122
1,1-Dichloroethane	10.0	9.71		ug/L		97	82 - 125
1,1-Dichloroethene	10.0	9.78		ug/L		98	77 - 127

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-58207/4
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	10.0	9.90		ug/L		99	78 - 127
1,2-Dichloropropane	10.0	9.76		ug/L		98	81 - 124
1,4-Dichlorobenzene	10.0	9.92		ug/L		99	83 - 116
2-Chloroethyl vinyl ether	10.0	11.0		ug/L		110	34 - 140
Benzene	10.0	10.2		ug/L		102	84 - 124
Bromodichloromethane	10.0	10.3		ug/L		103	81 - 127
Bromoform	10.0	10.9		ug/L		109	78 - 138
Bromomethane	10.0	9.60		ug/L		96	48 - 162
Carbon tetrachloride	10.0	10.0		ug/L		100	79 - 132
Chlorobenzene	10.0	9.93		ug/L		99	85 - 118
Chloroethane	10.0	9.56		ug/L		96	71 - 132
Chloromethane	10.0	9.25		ug/L		92	68 - 136
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	83 - 123
Dibromochloromethane	10.0	10.5		ug/L		105	81 - 129
Ethylbenzene	10.0	10.5		ug/L		105	85 - 125
Toluene	10.0	10.5		ug/L		105	83 - 127
trans-1,2-Dichloroethene	10.0	9.86		ug/L		99	78 - 122
trans-1,3-Dichloropropene	10.0	11.5		ug/L		115	83 - 130
Trichlorofluoromethane	10.0	9.38		ug/L		94	72 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*71 - 135*
4-Bromofluorobenzene (Surr)	*100*		*80 - 122*
Toluene-d8 (Surr)	*104*		*84 - 122*

Lab Sample ID: LCSD 160-58207/5
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane	10.0	9.28		ug/L		93	69 - 130	11	20
1,1,2-Trichloroethane	10.0	9.04		ug/L		90	78 - 122	12	20
1,1-Dichloroethane	10.0	9.58		ug/L		96	82 - 125	1	20
1,1-Dichloroethene	10.0	10.0		ug/L		100	77 - 127	2	20
1,2-Dichloroethane	10.0	9.23		ug/L		92	78 - 127	7	20
1,2-Dichloropropane	10.0	9.68		ug/L		97	81 - 124	1	20
1,4-Dichlorobenzene	10.0	9.53		ug/L		95	83 - 116	4	20
2-Chloroethyl vinyl ether	10.0	8.68	*	ug/L		87	34 - 140	23	20
Benzene	10.0	10.1		ug/L		101	84 - 124	1	20
Bromodichloromethane	10.0	9.74		ug/L		97	81 - 127	5	20
Bromoform	10.0	10.3		ug/L		103	78 - 138	5	20
Bromomethane	10.0	9.87		ug/L		99	48 - 162	3	20
Carbon tetrachloride	10.0	10.2		ug/L		102	79 - 132	1	20
Chlorobenzene	10.0	9.41		ug/L		94	85 - 118	5	20
Chloroethane	10.0	9.29		ug/L		93	71 - 132	3	20
Chloromethane	10.0	9.26		ug/L		93	68 - 136	0	20
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	83 - 123	0	20
Dibromochloromethane	10.0	9.70		ug/L		97	81 - 129	8	20

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-58207/5
Matrix: Water
Analysis Batch: 58207

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	10.0	10.0		ug/L		100	85 - 125	4	20
Toluene	10.0	9.98		ug/L		100	83 - 127	5	20
trans-1,2-Dichloroethene	10.0	9.87		ug/L		99	78 - 122	0	20
trans-1,3-Dichloropropene	10.0	10.4		ug/L		104	83 - 130	10	20
Trichlorofluoromethane	10.0	9.25		ug/L		92	72 - 135	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*71 - 135*
4-Bromofluorobenzene (Surr)	*101*		*80 - 122*
Toluene-d8 (Surr)	*102*		*84 - 122*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-126723/1-A
Matrix: Water
Analysis Batch: 126892

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 126723

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.49	ug/L		06/29/13 07:12	07/01/13 19:17	1
2,4,6-Trichlorophenol	ND		5.0	0.23	ug/L		06/29/13 07:12	07/01/13 19:17	1
2,4-Dichlorophenol	ND		5.0	0.30	ug/L		06/29/13 07:12	07/01/13 19:17	1
2,4-Dimethylphenol	ND		5.0	0.13	ug/L		06/29/13 07:12	07/01/13 19:17	1
2,4-Dinitrophenol	ND		10	0.84	ug/L		06/29/13 07:12	07/01/13 19:17	1
2,4-Dinitrotoluene	ND		5.0	0.26	ug/L		06/29/13 07:12	07/01/13 19:17	1
2-Chloronaphthalene	ND		5.0	0.068	ug/L		06/29/13 07:12	07/01/13 19:17	1
2-Chlorophenol	ND		5.0	0.16	ug/L		06/29/13 07:12	07/01/13 19:17	1
2-Nitrophenol	ND		5.0	0.14	ug/L		06/29/13 07:12	07/01/13 19:17	1
3,3'-Dichlorobenzidine	ND		5.0	0.82	ug/L		06/29/13 07:12	07/01/13 19:17	1
4,6-Dinitro-2-methylphenol	ND		10	0.76	ug/L		06/29/13 07:12	07/01/13 19:17	1
4-Bromophenyl phenyl ether	ND		5.0	0.11	ug/L		06/29/13 07:12	07/01/13 19:17	1
4-Chloro-3-methylphenol	ND		5.0	0.56	ug/L		06/29/13 07:12	07/01/13 19:17	1
4-Chlorophenyl phenyl ether	ND		5.0	0.21	ug/L		06/29/13 07:12	07/01/13 19:17	1
4-Nitrophenol	ND		10	1.3	ug/L		06/29/13 07:12	07/01/13 19:17	1
Acenaphthene	ND		5.0	0.060	ug/L		06/29/13 07:12	07/01/13 19:17	1
Acenaphthylene	ND		5.0	0.034	ug/L		06/29/13 07:12	07/01/13 19:17	1
Anthracene	ND		5.0	0.052	ug/L		06/29/13 07:12	07/01/13 19:17	1
Benzidine	ND		80	2.5	ug/L		06/29/13 07:12	07/01/13 19:17	1
Benzo[a]anthracene	ND		5.0	0.043	ug/L		06/29/13 07:12	07/01/13 19:17	1
Benzo[a]pyrene	ND		5.0	0.058	ug/L		06/29/13 07:12	07/01/13 19:17	1
Benzo[b]fluoranthene	ND		5.0	0.062	ug/L		06/29/13 07:12	07/01/13 19:17	1
Benzo[g,h,i]perylene	ND		5.0	0.10	ug/L		06/29/13 07:12	07/01/13 19:17	1
Benzo[k]fluoranthene	ND		5.0	0.042	ug/L		06/29/13 07:12	07/01/13 19:17	1
bis (2-chloroisopropyl) ether	ND		5.0	0.086	ug/L		06/29/13 07:12	07/01/13 19:17	1
Bis(2-chloroethoxy)methane	ND		5.0	0.085	ug/L		06/29/13 07:12	07/01/13 19:17	1
Bis(2-chloroethyl)ether	ND		5.0	1.1	ug/L		06/29/13 07:12	07/01/13 19:17	1
Bis(2-ethylhexyl) phthalate	ND		10	0.86	ug/L		06/29/13 07:12	07/01/13 19:17	1
Butyl benzyl phthalate	ND		5.0	1.3	ug/L		06/29/13 07:12	07/01/13 19:17	1
Chrysene	ND		5.0	0.036	ug/L		06/29/13 07:12	07/01/13 19:17	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-126723/1-A
Matrix: Water
Analysis Batch: 126892

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 126723

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		5.0	0.055	ug/L		06/29/13 07:12	07/01/13 19:17	1
Diethyl phthalate	ND		5.0	0.17	ug/L		06/29/13 07:12	07/01/13 19:17	1
Dimethyl phthalate	ND		5.0	0.17	ug/L		06/29/13 07:12	07/01/13 19:17	1
Di-n-butyl phthalate	ND		5.0	0.94	ug/L		06/29/13 07:12	07/01/13 19:17	1
Di-n-octyl phthalate	ND		5.0	4.5	ug/L		06/29/13 07:12	07/01/13 19:17	1
Fluoranthene	ND		5.0	0.11	ug/L		06/29/13 07:12	07/01/13 19:17	1
Fluorene	ND		5.0	0.043	ug/L		06/29/13 07:12	07/01/13 19:17	1
Hexachlorobenzene	ND		5.0	0.28	ug/L		06/29/13 07:12	07/01/13 19:17	1
Hexachlorobutadiene	ND		5.0	0.62	ug/L		06/29/13 07:12	07/01/13 19:17	1
Hexachlorocyclopentadiene	ND		5.0	0.45	ug/L		06/29/13 07:12	07/01/13 19:17	1
Hexachloroethane	ND		5.0	0.48	ug/L		06/29/13 07:12	07/01/13 19:17	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.19	ug/L		06/29/13 07:12	07/01/13 19:17	1
Isophorone	ND		5.0	0.16	ug/L		06/29/13 07:12	07/01/13 19:17	1
Naphthalene	ND		5.0	0.080	ug/L		06/29/13 07:12	07/01/13 19:17	1
Nitrobenzene	ND		5.0	0.11	ug/L		06/29/13 07:12	07/01/13 19:17	1
N-Nitrosodimethylamine	ND		10	0.96	ug/L		06/29/13 07:12	07/01/13 19:17	1
N-Nitrosodi-n-propylamine	ND		5.0	0.23	ug/L		06/29/13 07:12	07/01/13 19:17	1
N-Nitrosodiphenylamine	ND		5.0	0.40	ug/L		06/29/13 07:12	07/01/13 19:17	1
Pentachlorophenol	ND		10	0.41	ug/L		06/29/13 07:12	07/01/13 19:17	1
Phenanthrene	ND		5.0	0.071	ug/L		06/29/13 07:12	07/01/13 19:17	1
Phenol	ND		5.0	0.12	ug/L		06/29/13 07:12	07/01/13 19:17	1
Pyrene	ND		5.0	0.041	ug/L		06/29/13 07:12	07/01/13 19:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*73*		*52 - 151*	*06/29/13 07:12*	*07/01/13 19:17*	*1*
2-Fluorobiphenyl	*73*		*44 - 120*	*06/29/13 07:12*	*07/01/13 19:17*	*1*
2-Fluorophenol	*36*		*17 - 120*	*06/29/13 07:12*	*07/01/13 19:17*	*1*
Nitrobenzene-d5	*69*		*42 - 120*	*06/29/13 07:12*	*07/01/13 19:17*	*1*
Phenol-d5	*26*		*10 - 120*	*06/29/13 07:12*	*07/01/13 19:17*	*1*
p-Terphenyl-d14	*85*		*22 - 125*	*06/29/13 07:12*	*07/01/13 19:17*	*1*

Lab Sample ID: LCS 480-126723/2-A
Matrix: Water
Analysis Batch: 126892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 126723

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	50.0	39.1		ug/L		78	44 - 142
2,4,6-Trichlorophenol	50.0	47.9		ug/L		96	37 - 144
2,4-Dichlorophenol	50.0	46.2		ug/L		92	39 - 135
2,4-Dimethylphenol	50.0	45.5		ug/L		91	32 - 119
2,4-Dinitrophenol	100	61.8		ug/L		62	1 - 191
2,4-Dinitrotoluene	50.0	55.1		ug/L		110	39 - 139
2-Chloronaphthalene	50.0	44.7		ug/L		89	60 - 118
2-Chlorophenol	50.0	37.4		ug/L		75	23 - 134
2-Nitrophenol	50.0	44.9		ug/L		90	29 - 182
3,3'-Dichlorobenzidine	50.0	47.1		ug/L		94	1 - 262
4,6-Dinitro-2-methylphenol	100	81.3		ug/L		81	1 - 181
4-Bromophenyl phenyl ether	50.0	48.4		ug/L		97	53 - 127

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-126723/2-A
Matrix: Water
Analysis Batch: 126892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 126723

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloro-3-methylphenol	50.0	49.0		ug/L		98	22 - 147
4-Chlorophenyl phenyl ether	50.0	48.5		ug/L		97	25 - 158
4-Nitrophenol	100	44.9		ug/L		45	1 - 132
Acenaphthene	50.0	47.2		ug/L		94	47 - 145
Acenaphthylene	50.0	48.5		ug/L		97	33 - 145
Anthracene	50.0	52.5		ug/L		105	27 - 133
Benzo[a]anthracene	50.0	53.0		ug/L		106	33 - 143
Benzo[a]pyrene	50.0	56.4		ug/L		113	17 - 163
Benzo[b]fluoranthene	50.0	53.1		ug/L		106	24 - 159
Benzo[g,h,i]perylene	50.0	35.4		ug/L		71	1 - 219
Benzo[k]fluoranthene	50.0	52.6		ug/L		105	11 - 162
bis (2-chloroisopropyl) ether	50.0	34.4		ug/L		69	36 - 166
Bis(2-chloroethoxy)methane	50.0	41.4		ug/L		83	33 - 184
Bis(2-chloroethyl)ether	50.0	38.7		ug/L		77	12 - 158
Bis(2-ethylhexyl) phthalate	50.0	51.7		ug/L		103	8 - 158
Butyl benzyl phthalate	50.0	49.8		ug/L		100	1 - 152
Chrysene	50.0	49.1		ug/L		98	17 - 168
Dibenz(a,h)anthracene	50.0	38.6		ug/L		77	1 - 227
Diethyl phthalate	50.0	55.0		ug/L		110	1 - 114
Dimethyl phthalate	50.0	51.3		ug/L		103	1 - 112
Di-n-butyl phthalate	50.0	54.8		ug/L		110	1 - 118
Di-n-octyl phthalate	50.0	57.1		ug/L		114	4 - 146
Fluoranthene	50.0	53.0		ug/L		106	26 - 137
Fluorene	50.0	50.6		ug/L		101	59 - 121
Hexachlorobenzene	50.0	46.7		ug/L		93	1 - 152
Hexachlorocyclopentadiene	50.0	25.0		ug/L		50	5 - 120
Hexachloroethane	50.0	35.1		ug/L		70	40 - 113
Indeno[1,2,3-cd]pyrene	50.0	39.5		ug/L		79	1 - 171
Isophorone	50.0	40.0		ug/L		80	21 - 196
Naphthalene	50.0	43.5		ug/L		87	21 - 133
Nitrobenzene	50.0	41.8		ug/L		84	35 - 180
N-Nitrosodi-n-propylamine	50.0	41.7		ug/L		83	1 - 230
N-Nitrosodiphenylamine	50.0	45.2		ug/L		90	54 - 125
Pentachlorophenol	100	92.8		ug/L		93	14 - 176
Phenanthrene	50.0	51.4		ug/L		103	54 - 120
Phenol	50.0	17.1		ug/L		34	5 - 112
Pyrene	50.0	50.8		ug/L		102	52 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*79*		*52 - 151*
2-Fluorobiphenyl	*74*		*44 - 120*
2-Fluorophenol	*35*		*17 - 120*
Nitrobenzene-d5	*66*		*42 - 120*
Phenol-d5	*26*		*10 - 120*
p-Terphenyl-d14	*80*		*22 - 125*

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2848-1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 160-58255/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58798 — **Prep Batch: 58255**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		06/27/13 14:22	07/01/13 15:39	1
Arsenic	ND		10	2.0	ug/L		06/27/13 14:22	07/01/13 15:39	1
Beryllium	ND		5.0	0.50	ug/L		06/27/13 14:22	07/01/13 15:39	1
Cadmium	ND		5.0	0.45	ug/L		06/27/13 14:22	07/01/13 15:39	1
Chromium	ND		10	3.1	ug/L		06/27/13 14:22	07/01/13 15:39	1
Cobalt	ND		50	4.0	ug/L		06/27/13 14:22	07/01/13 15:39	1
Copper	ND		25	4.6	ug/L		06/27/13 14:22	07/01/13 15:39	1
Iron	ND		100	16	ug/L		06/27/13 14:22	07/01/13 15:39	1
Lead	ND		10	1.3	ug/L		06/27/13 14:22	07/01/13 15:39	1
Nickel	ND		40	13	ug/L		06/27/13 14:22	07/01/13 15:39	1
Antimony	ND		10	4.0	ug/L		06/27/13 14:22	07/01/13 15:39	1
Selenium	ND		15	2.7	ug/L		06/27/13 14:22	07/01/13 15:39	1
Silver	ND		10	6.0	ug/L		06/27/13 14:22	07/01/13 15:39	1
Thallium	ND	^	20	0.88	ug/L		06/27/13 14:22	07/01/13 15:39	1
Zinc	ND		20	5.2	ug/L		06/27/13 14:22	07/01/13 15:39	1

Lab Sample ID: LCS 160-58255/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58798 — **Prep Batch: 58255**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9740		ug/L		97	85 - 115
Arsenic	1000	1020		ug/L		102	85 - 115
Beryllium	1000	1020		ug/L		102	85 - 115
Cadmium	1000	1040		ug/L		104	85 - 115
Chromium	1000	1050		ug/L		105	85 - 115
Cobalt	1000	1090		ug/L		109	85 - 115
Copper	1000	1050		ug/L		105	85 - 115
Iron	10000	10100		ug/L		101	85 - 115
Lead	1000	1080		ug/L		108	85 - 115
Nickel	1000	1080		ug/L		108	85 - 115
Antimony	500	523		ug/L		105	85 - 115
Selenium	1000	1020		ug/L		102	85 - 115
Silver	100	99.3		ug/L		99	85 - 115
Thallium	200	224	^	ug/L		112	85 - 115
Zinc	1000	1040		ug/L		104	85 - 115

Lab Sample ID: 160-2848-1 MS — **Client Sample ID: 251/252-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58798 — **Prep Batch: 58255**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	20000		100000	138000		ug/L		118	70 - 130
Arsenic	440	J	10000	10400		ug/L		99	70 - 130
Beryllium	ND		10000	10200		ug/L		102	70 - 130
Cadmium	ND		10000	9980		ug/L		100	70 - 130
Chromium	310	J	10000	10100		ug/L		98	70 - 130
Cobalt	320	J	10000	10400		ug/L		101	70 - 130

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 160-2848-1 MS — **Client Sample ID: 251/252-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58798 — **Prep Batch: 58255**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	ND		10000	9960		ug/L		100	70 - 130
Iron	990000		100000	1090000	4	ug/L		104	70 - 130
Lead	280	J	10000	10300		ug/L		101	70 - 130
Nickel	ND		10000	10400		ug/L		104	70 - 130
Antimony	230	J	5000	5230		ug/L		100	70 - 130
Selenium	ND		10000	10000		ug/L		100	70 - 130
Silver	ND		1000	930		ug/L		93	70 - 130
Thallium	ND	^	2000	2040	^	ug/L		102	70 - 130
Zinc	14000		10000	23800		ug/L		95	70 - 130

Lab Sample ID: 160-2848-1 MSD — **Client Sample ID: 251/252-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58798 — **Prep Batch: 58255**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	20000		100000	139000		ug/L		119	70 - 130	1	20
Arsenic	440	J	10000	10600		ug/L		102	70 - 130	2	20
Beryllium	ND		10000	10400		ug/L		104	70 - 130	1	20
Cadmium	ND		10000	10200		ug/L		102	70 - 130	2	20
Chromium	310	J	10000	10300		ug/L		100	70 - 130	2	20
Cobalt	320	J	10000	10700		ug/L		104	70 - 130	3	20
Copper	ND		10000	10200		ug/L		102	70 - 130	2	20
Iron	990000		100000	1080000	4	ug/L		95	70 - 130	1	20
Lead	280	J	10000	10500		ug/L		103	70 - 130	2	20
Nickel	ND		10000	10600		ug/L		106	70 - 130	2	20
Antimony	230	J	5000	5300		ug/L		101	70 - 130	1	20
Selenium	ND		10000	10300		ug/L		103	70 - 130	3	20
Silver	ND		1000	950		ug/L		95	70 - 130	2	20
Thallium	ND	^	2000	2060	^	ug/L		103	70 - 130	1	20
Zinc	14000		10000	24000		ug/L		97	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 160-58423/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58593 — **Prep Batch: 58423**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.050	ug/L		06/30/13 10:22	06/30/13 15:56	1

Lab Sample ID: LCS 160-58423/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58593 — **Prep Batch: 58423**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.85		ug/L		97	85 - 115

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2848-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 480-127018/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 127026 — **Prep Batch: 127018**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		07/02/13 00:12	07/02/13 01:25	1
SGT-HEM	ND		5.0	1.9	mg/L		07/02/13 00:12	07/02/13 01:25	1

Lab Sample ID: LCS 480-127018/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 127026 — **Prep Batch: 127018**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	38.7		mg/L		97	78 - 114
SGT-HEM	20.0	14.0		mg/L		70	64 - 132

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-126652/99 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126652

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020	0.0090	mg/L			06/28/13 14:30	1

Lab Sample ID: LCS 480-126652/100 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126652

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.07		mg/L		107	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 480-127163/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 127163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			07/02/13 14:44	1

Lab Sample ID: LCS 480-127163/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 127163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	186		mg/L		93	90 - 110

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2848-1

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-126395/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126395

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			06/27/13 21:55	1

Lab Sample ID: LCS 480-126395/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 126395

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Suspended Solids			211	208		mg/L		98	88 - 110		

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 160-57971/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57971

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
pH			7.00	7.000		SU		100	99.0 - 101.0		

Lab Sample ID: 160-2848-1 DU — **Client Sample ID: 251/252-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 57971

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	6.00	HF		6.000		SU				0	5

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2848-1

GC/MS VOA

Analysis Batch: 58207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2848-1 - DL	251/252-MSD	Total/NA	Water	624	
160-2848-2	TRIP BLANK	Total/NA	Water	624	
LCS 160-58207/4	Lab Control Sample	Total/NA	Water	624	
LCSD 160-58207/5	Lab Control Sample Dup	Total/NA	Water	624	
MB 160-58207/2	Method Blank	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 126723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2848-1	251/252-MSD	Total/NA	Water	625	
LCS 480-126723/2-A	Lab Control Sample	Total/NA	Water	625	
MB 480-126723/1-A	Method Blank	Total/NA	Water	625	

Analysis Batch: 126892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2848-1	251/252-MSD	Total/NA	Water	625	126723
LCS 480-126723/2-A	Lab Control Sample	Total/NA	Water	625	126723
MB 480-126723/1-A	Method Blank	Total/NA	Water	625	126723

Metals

Prep Batch: 58255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2848-1	251/252-MSD	Total/NA	Water	200.7/200.8	
160-2848-1	251/252-MSD	Dissolved	Water	200.7/200.8	
160-2848-1 MS	251/252-MSD	Total/NA	Water	200.7/200.8	
160-2848-1 MSD	251/252-MSD	Total/NA	Water	200.7/200.8	
LCS 160-58255/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
MB 160-58255/1-A	Method Blank	Total/NA	Water	200.7/200.8	

Prep Batch: 58423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2848-1	251/252-MSD	Total/NA	Water	245.1	
160-2848-1	251/252-MSD	Dissolved	Water	245.1	
LCS 160-58423/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 160-58423/1-A	Method Blank	Total/NA	Water	245.1	

Analysis Batch: 58593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2848-1	251/252-MSD	Total/NA	Water	245.1	58423
160-2848-1	251/252-MSD	Dissolved	Water	245.1	58423
LCS 160-58423/2-A	Lab Control Sample	Total/NA	Water	245.1	58423
MB 160-58423/1-A	Method Blank	Total/NA	Water	245.1	58423

Analysis Batch: 58798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2848-1	251/252-MSD	Total/NA	Water	200.7 Rev 4.4	58255
160-2848-1	251/252-MSD	Dissolved	Water	200.7 Rev 4.4	58255
160-2848-1 MS	251/252-MSD	Total/NA	Water	200.7 Rev 4.4	58255

Metals (Continued)

Analysis Batch: 58798 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2848-1 MSD	251/252-MSD	Total/NA	Water	200.7 Rev 4.4	58255
LCS 160-58255/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	58255
MB 160-58255/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	58255

General Chemistry

Analysis Batch: 57971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2848-1	251/252-MSD	Total/NA	Water	SM 4500 H+ B	
160-2848-1 DU	251/252-MSD	Total/NA	Water	SM 4500 H+ B	
LCS 160-57971/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 126395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2848-1	251/252-MSD	Total/NA	Water	SM 2540D	
LCS 480-126395/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-126395/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 126652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2848-1	251/252-MSD	Total/NA	Water	350.1	
LCS 480-126652/100	Lab Control Sample	Total/NA	Water	350.1	
MB 480-126652/99	Method Blank	Total/NA	Water	350.1	

Prep Batch: 127018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2848-1	251/252-MSD	Total/NA	Water	1664A	
LCS 480-127018/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 480-127018/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 127026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2848-1	251/252-MSD	Total/NA	Water	1664A	127018
LCS 480-127018/2-A	Lab Control Sample	Total/NA	Water	1664A	127018
MB 480-127018/1-A	Method Blank	Total/NA	Water	1664A	127018

Analysis Batch: 127163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2848-1	251/252-MSD	Total/NA	Water	410.4	
LCS 480-127163/4	Lab Control Sample	Total/NA	Water	410.4	
MB 480-127163/3	Method Blank	Total/NA	Water	410.4	

Surrogate Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2848-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(71-135)	(80-122)	(84-122)
160-2848-1 - DL	251/252-MSD	92	104	104
160-2848-2	TRIP BLANK	89	110	108
LCS 160-58207/4	Lab Control Sample	96	100	104
LCSD 160-58207/5	Lab Control Sample Dup	93	101	102
MB 160-58207/2	Method Blank	98	110	106

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(42-120)	(10-120)	(22-125)
160-2848-1	251/252-MSD	0 X	23 X	0 X	0 X	0 X	0 X
LCS 480-126723/2-A	Lab Control Sample	79	74	35	66	26	80
MB 480-126723/1-A	Method Blank	73	73	36	69	26	85

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = p-Terphenyl-d14

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-2848-2
Client Project/Site: Bridgeton Landfill

For:
Republic Services Inc. fka Allied Waste
Arizona Landfill
4811 W. Lower Buckeye Rd
Phoenix, Arizona 85043

Attn: Mr. Wade Ross

Authorized for release by:
7/2/2013 1:22:58 PM

Erika Starman, Project Manager I
erika.starman@testamericainc.com

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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.

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Job ID: 160-2848-2

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Republic Services Inc. fka Allied Waste

Project: Bridgeton Landfill

Report Number: 160-2848-2

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 6/26/2013 3:02 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

BIOCHEMICAL OXYGEN DEMAND

Sample 251/252-MSD (160-2848-1) was analyzed for Biochemical oxygen demand in accordance with SM 5210B. The samples were analyzed on 06/27/2013.

No difficulties were encountered during the BOD analysis.

All quality control parameters were within the acceptance limits.

CVR 024

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
BARR ENGINEERING / ED GALBRAITH	BILL ABERNATHY - FEI	6/26/13	197618
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 1
	314-502-1299		

City	State	Zip Code	Site Contact	Lab Contact

Project Name and Location (State): BRIDGETON LF / MISSOURI

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.:

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 624-VOCs	1664 HEM-FPH	5210B-BOD	625-SVOCs	200.7 245.1 T	200.7 245.1 D	2540D-TSS	4500-H 350.1	pH				Special Instructions/ Conditions of Receipt
251/252-MSD	6/26/13	1036		✓			5	1	1	4			3	1	1	1	1	1	1	1	1				
TRIP BLANK	—	—		✓						2			2												

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other 5 Days

QC Requirements (Specify):

Relinquished By	Date	Time	Received By	Date	Time
1. [signature]	6/26/13	1502	1. [signature]	6/26/13	1502
2.			2.		
3.			3.		

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2848-2

Login Number: 2848

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	
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?	False	Not requested on COC.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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	See NCM
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	

Login Sample Receipt Checklist

Client: Republic Services Inc. fka Allied Waste

Job Number: 160-2848-2

Login Number: 2848
List Number: 1
Creator: Robison, Zachary

List Source: TestAmerica Buffalo
List Creation: 06/27/13 03:11 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	3.4 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Method Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2848-2

Method	Method Description	Protocol	Laboratory
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2848-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2848-1	251/252-MSD	Water	06/26/13 10:36	06/26/13 15:02

Detection Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2848-2

Client Sample ID: 251/252-MSD

Lab Sample ID: 160-2848-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biochemical Oxygen Demand	27000		40	40	mg/L	20		SM 5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2848-2

Client Sample ID: 251/252-MSD

Lab Sample ID: 160-2848-1

Date Collected: 06/26/13 10:36

Matrix: Water

Date Received: 06/26/13 15:02

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	27000		40	40	mg/L			06/27/13 13:57	20

QC Sample Results

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2848-2

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-126429/1 USB
Matrix: Water
Analysis Batch: 126429

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			06/27/13 13:57	1

Lab Sample ID: LCS 480-126429/2
Matrix: Water
Analysis Batch: 126429

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	203		mg/L		103	85 - 115		

QC Association Summary

Client: Republic Services Inc. fka Allied Waste
Project/Site: Bridgeton Landfill

TestAmerica Job ID: 160-2848-2

General Chemistry

Analysis Batch: 126429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2848-1	251/252-MSD	Total/NA	Water	SM 5210B	
LCS 480-126429/2	Lab Control Sample	Total/NA	Water	SM 5210B	
USB 480-126429/1 USB	Method Blank	Total/NA	Water	SM 5210B	