

US EPA ARCHIVE DOCUMENT

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: 160-2937-1
Client Project/Site: West Lake Landfill

For:
Engineering Management Support, Inc.
7220 W. Jefferson AVE
Suite 406
Lakewood, Colorado 80235

Attn: Mr. Paul Rosasco

Rhonda Ridenhower

Authorized for release by:
7/26/2013 9:25:37 AM

Rhonda Ridenhower, Customer Service Manager
rhonda.ridenhower@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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Case Narrative

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Job ID: 160-2937-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Engineering Management Support, Inc.

Project: West Lake Landfill

Report Number: 160-2937-1

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 07/10/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.0 C.

Per client request to report all analytical runs, analyses included in the package that were not used in the final report were re-analyzed due to QC failures in the analytical sequence

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples P2-111-SD (160-2937-1), S-5 (160-2937-2), FB @ P2-110-SS (160-2937-3), P2-110-SS (160-2937-4), I-4 (160-2937-5), P2-100-SS (160-2937-6), D-3 (160-2937-7), P2-100-SD (160-2937-8), P2-112-AS (160-2937-9), DUPLICATE 01 (160-2937-10) and TRIP BLANK (160-2937-11) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 07/11/2013, 07/15/2013 and 07/16/2013.

Analytical batch 60374

Case Narrative

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Job ID: 160-2937-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

The continuing calibration verification (CCV) for Chloroethane associated with batch 60374 recovered above the upper control limit. The samples associated with this CCV were not detected above the reporting limit for the affected analyte; therefore, the data have been reported.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 60374 were outside control limits for Dichlorodifluoromethane. The associated laboratory control sample (LCS) recovery met acceptance criteria.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 60374 were outside control limits for 2-Hexanone. The MS/MSD %recoveries for these analytes are within the QC limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

In batch 60374, due to high concentration of Chlorobenzene in sample 160-2937-9, the sample will be analyzed at a dilution and only Chlorobenzene will report. Additionally, due to possible carryover of Chlorobenzene, sample 160-2937-10 will be re-analyzed and only Chlorobenzene will report. Because sample 160-2937-10 was the associated sample for the MS/MSD, the MS/MSD will not be reporting Chlorobenzene.

Analytical batch 60980

The continuing calibration verification (CCV) for Chloroethane and 2-Hexanone associated with batch 60980 recovered above the upper control limit. The samples associated with this CCV were not detected above the reporting limit for the affected analytes; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 60980 recovered outside control limits for the following analytes: Chloroethane, 2-Hexanone, and 4-Methyl-2-pentanone. These analytes were biased high in the LCS and were not detected above the reporting limit in the associated samples; therefore, the data have been reported.

The following sample was diluted 20x to bring the concentration of Chlorobenzene within the calibration range: P2-112-AS (160-2937-9). Elevated reporting limits (RLs) are provided.

Analytical batch 60998

Sample, DUPLICATE 01 (160-2937-10), was rerun for chlorobenzene only due to suspected carryover. The reanalysis results for chlorobenzene are reported in batch 60998.

No other difficulties were encountered during the VOCs analysis.

All other quality control parameters were within the acceptance limits.

METALS (ICP)-Dissolved and Total

Samples P2-111-SD (160-2937-1), S-5 (160-2937-2), P2-110-SS (160-2937-4), I-4 (160-2937-5), P2-100-SS (160-2937-6), D-3 (160-2937-7), P2-100-SD (160-2937-8), P2-112-AS (160-2937-9) and DUPLICATE 01 (160-2937-10) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 07/11/2013 and analyzed on 07/12/2013, 07/15/2013 and 07/16/2013.

Analytical batch 60554

Due to the high concentration of sodium, the matrix spike / matrix spike duplicate (MS/MSD) for prep batch 60204 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Analytical batch 60753

Due to the high concentration of calcium and magnesium, the matrix spike / matrix spike duplicate (MS/MSD) for prep batch 60204 could not be evaluated for accuracy and precision. The MS/MSD were also over instrument's upper control limit for calcium and the recovery information is considered estimated. The sample was within the instrument's range and the data is reported with this narrative. The associated laboratory control sample (LCS) met acceptance criteria.

The following samples were diluted to bring the concentration of target analytes within the calibration range: (160-2937-4 MS), (160-2937-4 MSD), (160-2937-4 SD), D-3 (160-2937-7), DUPLICATE 01 (160-2937-10), I-4 (160-2937-5), P2-100-SD (160-2937-8), P2-100-SS (160-2937-6), P2-110-SS (160-2937-4), P2-111-SD (160-2937-1), P2-112-AS (160-2937-9), S-5 (160-2937-2). Elevated reporting limits (RLs) are provided.

Case Narrative

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Job ID: 160-2937-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Analytical batch 60781

The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: D-3 (160-2937-7). Elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

MERCURY-Dissolved

Samples P2-111-SD (160-2937-1), S-5 (160-2937-2), P2-110-SS (160-2937-4), I-4 (160-2937-5), P2-100-SS (160-2937-6), D-3 (160-2937-7), P2-100-SD (160-2937-8), P2-112-AS (160-2937-9) and DUPLICATE 01 (160-2937-10) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 07/16/2013 and analyzed on 07/17/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

MERCURY-Total

Samples P2-111-SD (160-2937-1), S-5 (160-2937-2), P2-110-SS (160-2937-4), I-4 (160-2937-5), P2-100-SS (160-2937-6), D-3 (160-2937-7), P2-100-SD (160-2937-8), P2-112-AS (160-2937-9) and DUPLICATE 01 (160-2937-10) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 07/16/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

ANIONS

Samples P2-111-SD (160-2937-1), S-5 (160-2937-2), P2-110-SS (160-2937-4), I-4 (160-2937-5), P2-100-SS (160-2937-6), D-3 (160-2937-7), P2-100-SD (160-2937-8), P2-112-AS (160-2937-9) and DUPLICATE 01 (160-2937-10) were analyzed for anions in accordance with EPA Method 300.0. The samples were analyzed on 07/10/2013, 07/13/2013 and 07/16/2013.

The following samples were diluted to bring the concentrations of Chloride, Bromide, and Sulfate within the calibration range in IC batch 60393: D-3 (160-2937-7), DUPLICATE 01 (160-2937-10), I-4 (160-2937-5), P2-100-SS (160-2937-6), P2-110-SS (160-2937-4), P2-111-SD (160-2937-1), P2-112-AS (160-2937-9), S-5 (160-2937-2). Elevated reporting limits (RLs) are provided.

The following samples were diluted to bring the concentrations of Chloride, Bromide, and Sulfate within the calibration range in IC batch 62158: P2-116-SS (160-2968-10), P2-202-SS (160-2968-6), S-5 (160-2937-2). Elevated reporting limits (RLs) are provided.

The matrix spike (MS) recoveries for Bromide in IC batch 62158 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other difficulties were encountered during the anions analysis.

All other quality control parameters were within the acceptance limits.

ALKALINITY

Samples P2-111-SD (160-2937-1), S-5 (160-2937-2), P2-110-SS (160-2937-4), I-4 (160-2937-5), P2-100-SS (160-2937-6), D-3 (160-2937-7), P2-100-SD (160-2937-8), P2-112-AS (160-2937-9) and DUPLICATE 01 (160-2937-10) were analyzed for alkalinity in accordance with EPA Method 310.1. The samples were analyzed on 07/18/2013 and 07/19/2013.

The following samples were diluted to bring the concentrations of Alkalinity within the calibration range in batch 61623: D-3 (160-2937-7), DUPLICATE 01 (160-2937-10), I-4 (160-2937-5), P2-100-SD (160-2937-8), P2-112-AS (160-2937-9). Elevated reporting limits (RLs) are provided.

Case Narrative

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Job ID: 160-2937-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

The following samples were diluted to bring the concentrations of Alkalinity within the calibration range in batch 61441: P2-110-SS (160-2937-4), S-5 (160-2937-2). Elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the alkalinity analysis.

All other quality control parameters were within the acceptance limits.

Job # 2937

TestAmerica

Chain of Custody Record

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Phone (314) 298-6566 Fax (314) 258-8757

Client Information		Lab PM		Carrier Tracking Note							
Client Contact Mr. Paul Rossasco	Client: Hest & Associates, Inc. Phone: 636-939-9111	Ridemaker: Rhonda E	Lab PM: froncia ridemaker@testamericainc.com	COC No: 160-499-253.1							
Company: Engineering Management Support, Inc.	Address: 7220 W. Jefferson AVE Suite 406	Page: Page 1 of 10									
City: Lakewood	State: Zn	Job #:									
CC: 80235	Phone:	Preservation Codes: M - HCL N - None O - As/AsO2 P - Na2CO3 Q - NiAc R - Na2S2O3 S - 10% NaOH T - 10% Diodecylhydrate U - Acetic Acid V - MCAA W - pH 4.5 X - EDTA Y - BUA Z - other (specify)									
PO #:	Purchase Order not required	Special Instructions/Note:									
W/O #:		Total Number of Containers									
Project #: 16002280		Analysis Requested									
SSOWF:		Field Filtered Sample (Yes or No)									
		Field Filtrate (Yes or No)									
		3.01 - Alkalinity - 310									
		3.00 - Anion-									
		8.00C - VOA									
		8.00C - Standard List									
		Discard COC, 7/10/13									
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soil, Sludge, etc.)	Preservation Code	N	D	A	F	Total	Special Instructions/Note
P2-111-5D	7/9/13	1042	G	Water		X	X	X	X	7	
S-5*	↑	1050	G	Water		X	X	X	X	7	*VOAs after vessel, sent to preserve
FB @ P2-110-5S		1140	G	Water		X	X	X	X	3	
P2-110-5S		1213	G	Water		X	X	X	X	10	
F-4		1225	G	Water		X	X	X	X	7	
P2-100-5S		1336	G	Water		X	X	X	X	7	
D-3		1342	G	Water		X	X	X	X	7	
P2-100-5D		1432	G	Water		X	X	X	X	7	
P2-112-AS		1446	G	Water		X	X	X	X	7	
Duplicate O1		-	G	Water		X	X	X	X	7	
Trip Blank	7/9/13	-	G	Water		X	X	X	X	3	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown											
Deliverable Requested: I, II, III, IV, Other (specify)											
Empty Kit Requisitioned by:											
Requisitioned by: <i>Matt & Terry</i> Date: 7/10/13 Time: 0800											
Requisitioned by: <i>Matt & Terry</i> Date: 7/10/13 Time: 0827											
Requisitioned by: <i>Matt & Terry</i> Date: 7/10/13 Time: 0827											
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No											

Login Sample Receipt Checklist

Client: Engineering Management Support, Inc.

Job Number: 160-2937-1

Login Number: 2937

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian J

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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	2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
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	Metals bottle pH of 7, HNO ₃ added to pH of <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 <6 mm (1/4").	False	1 vial for Trip Blank received with headspace.
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

US EPA ARCHIVE DOCUMENT

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Definitions/Glossary

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

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.
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits
*	LCS or LCSD exceeds the control limits

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.
E	Result exceeded calibration range.
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
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.

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)

US EPA ARCHIVE DOCUMENT

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Method Summary

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL SL
6010C	Metals (ICP)	SW846	TAL SL
7470A	Mercury (CVAA)	SW846	TAL SL
300.0	Anions, Ion Chromatography	MCAWW	TAL SL
310.1	Alkalinity	MCAWW	TAL SL

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2937-1	P2-111-SD	Water	07/09/13 10:42	07/10/13 08:27
160-2937-2	S-5	Water	07/09/13 10:50	07/10/13 08:27
160-2937-3	FB @ P2-110-SS	Water	07/09/13 11:40	07/10/13 08:27
160-2937-4	P2-110-SS	Water	07/09/13 12:13	07/10/13 08:27
160-2937-5	I-4	Water	07/09/13 12:25	07/10/13 08:27
160-2937-6	P2-100-SS	Water	07/09/13 13:36	07/10/13 08:27
160-2937-7	D-3	Water	07/09/13 13:42	07/10/13 08:27
160-2937-8	P2-100-SD	Water	07/09/13 14:32	07/10/13 08:27
160-2937-9	P2-112-AS	Water	07/09/13 14:46	07/10/13 08:27
160-2937-10	DUPLICATE 01	Water	07/09/13 00:00	07/10/13 08:27
160-2937-11	TRIP BLANK	Water	07/09/13 00:00	07/10/13 08:27

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Detection Summary

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: P2-111-SD

Lab Sample ID: 160-2937-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	110		50	4.0	ug/L	1		6010C	Total/NA
Beryllium	0.90	J	5.0	0.61	ug/L	1		6010C	Total/NA
Calcium	92000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	100000		5000	530	ug/L	5		6010C	Total/NA
Chromium	3.1	J	10	3.1	ug/L	1		6010C	Total/NA
Magnesium	53000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	55000		5000	660	ug/L	5		6010C	Total/NA
Potassium	1800	J	5000	1700	ug/L	1		6010C	Total/NA
Sodium	20000		1000	320	ug/L	1		6010C	Total/NA
Zinc	13	J B	20	5.2	ug/L	1		6010C	Total/NA
Barium	110		50	4.0	ug/L	1		6010C	Dissolved
Calcium	90000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	95000		5000	530	ug/L	5		6010C	Dissolved
Magnesium	52000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	53000		5000	660	ug/L	5		6010C	Dissolved
Potassium	1800	J	5000	1700	ug/L	1		6010C	Dissolved
Sodium	20000		1000	320	ug/L	1		6010C	Dissolved
Zinc	7.2	J B	20	5.2	ug/L	1		6010C	Dissolved
Nitrate as N	0.075		0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	0.052	J	0.25	0.025	mg/L	1		300.0	Total/NA
Alkalinity	430	B	5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL	9.1		4.0	0.40	mg/L	20		300.0	Total/NA
Sulfate - DL	45		10	1.0	mg/L	20		300.0	Total/NA

Client Sample ID: S-5

Lab Sample ID: 160-2937-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.4	J	20	6.7	ug/L	1		8260C	Total/NA
Benzene	3.9	J	5.0	0.25	ug/L	1		8260C	Total/NA
Chlorobenzene	3.4	J	5.0	0.38	ug/L	1		8260C	Total/NA
1,2-Dichlorobenzene	2.1	J	5.0	0.28	ug/L	1		8260C	Total/NA
1,4-Dichlorobenzene	7.5		5.0	0.35	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	0.64	J	5.0	0.39	ug/L	1		8260C	Total/NA
Isopropylbenzene	2.3	J	5.0	0.26	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	0.63	J	5.0	0.40	ug/L	1		8260C	Total/NA
Toluene	2.6	J	5.0	1.0	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	4.8	J	5.0	0.57	ug/L	1		8260C	Total/NA
o-Xylene	3.6	J	5.0	0.32	ug/L	1		8260C	Total/NA
Xylenes, Total	8.4	J	10	0.85	ug/L	1		8260C	Total/NA
Aluminum	150	J	200	80	ug/L	1		6010C	Total/NA
Antimony	4.0	J	10	4.0	ug/L	1		6010C	Total/NA
Arsenic	16		10	2.0	ug/L	1		6010C	Total/NA
Barium	550		50	4.0	ug/L	1		6010C	Total/NA
Calcium	54000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	62000		5000	530	ug/L	5		6010C	Total/NA
Chromium	10		10	3.1	ug/L	1		6010C	Total/NA
Cobalt	15	J	50	4.0	ug/L	1		6010C	Total/NA
Copper	19	J	25	4.6	ug/L	1		6010C	Total/NA
Iron	21000		100	28	ug/L	1		6010C	Total/NA
Iron	22000		500	140	ug/L	5		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

Detection Summary

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: S-5 (Continued)

Lab Sample ID: 160-2937-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	25		10	1.5	ug/L	1		6010C	Total/NA
Magnesium	61000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	65000		5000	660	ug/L	5		6010C	Total/NA
Manganese	190		15	3.3	ug/L	1		6010C	Total/NA
Nickel	87		40	13	ug/L	1		6010C	Total/NA
Potassium	230000	E	5000	1700	ug/L	1		6010C	Total/NA
Potassium	230000		25000	8300	ug/L	5		6010C	Total/NA
Sodium	450000	E	1000	320	ug/L	1		6010C	Total/NA
Sodium	470000		5000	1600	ug/L	5		6010C	Total/NA
Vanadium	4.6	J	50	4.1	ug/L	1		6010C	Total/NA
Zinc	130	B	20	5.2	ug/L	1		6010C	Total/NA
Arsenic	10		10	2.0	ug/L	1		6010C	Dissolved
Barium	540		50	4.0	ug/L	1		6010C	Dissolved
Calcium	53000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	62000		5000	530	ug/L	5		6010C	Dissolved
Chromium	8.9	J	10	3.1	ug/L	1		6010C	Dissolved
Cobalt	12	J	50	4.0	ug/L	1		6010C	Dissolved
Iron	17000		100	28	ug/L	1		6010C	Dissolved
Iron	18000		500	140	ug/L	5		6010C	Dissolved
Lead	2.5	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	61000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	65000		5000	660	ug/L	5		6010C	Dissolved
Manganese	160		15	3.3	ug/L	1		6010C	Dissolved
Nickel	39	J	40	13	ug/L	1		6010C	Dissolved
Potassium	230000	E	5000	1700	ug/L	1		6010C	Dissolved
Potassium	230000		25000	8300	ug/L	5		6010C	Dissolved
Sodium	450000	E	1000	320	ug/L	1		6010C	Dissolved
Sodium	480000		5000	1600	ug/L	5		6010C	Dissolved
Zinc	16	J B	20	5.2	ug/L	1		6010C	Dissolved
Mercury	0.13	J	0.20	0.060	ug/L	1		7470A	Total/NA
Sulfate	0.44	J	0.50	0.050	mg/L	1		300.0	Total/NA
Iodide	0.15	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity - DL	2000	B	25	2.7	mg/L	5		310.1	Total/NA
Chloride - DL2	290		40	4.0	mg/L	200		300.0	Total/NA
Bromide - RADL	4.4		1.3	0.13	mg/L	5		300.0	Total/NA

Client Sample ID: FB @ P2-110-SS

Lab Sample ID: 160-2937-3

No Detections.

Client Sample ID: P2-110-SS

Lab Sample ID: 160-2937-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.4	J	5.0	0.16	ug/L	1		8260C	Total/NA
Vinyl chloride	1.1	J	5.0	0.43	ug/L	1		8260C	Total/NA
Antimony	4.0	J	10	4.0	ug/L	1		6010C	Total/NA
Barium	320		50	4.0	ug/L	1		6010C	Total/NA
Calcium	210000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	250000		5000	530	ug/L	5		6010C	Total/NA
Chromium	3.3	J	10	3.1	ug/L	1		6010C	Total/NA
Iron	6900		100	28	ug/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

Detection Summary

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: P2-110-SS (Continued)

Lab Sample ID: 160-2937-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	7200		500	140	ug/L		5	6010C	Total/NA
Lead	2.2	J	10	1.5	ug/L		1	6010C	Total/NA
Magnesium	88000	E	1000	130	ug/L		1	6010C	Total/NA
Magnesium	91000		5000	660	ug/L		5	6010C	Total/NA
Manganese	200		15	3.3	ug/L		1	6010C	Total/NA
Nickel	17	J	40	13	ug/L		1	6010C	Total/NA
Potassium	4300	J	5000	1700	ug/L		1	6010C	Total/NA
Sodium	91000		1000	320	ug/L		1	6010C	Total/NA
Zinc	5.8	J B	20	5.2	ug/L		1	6010C	Total/NA
Barium	310		50	4.0	ug/L		1	6010C	Dissolved
Calcium	210000	E	1000	110	ug/L		1	6010C	Dissolved
Calcium	240000		5000	530	ug/L		5	6010C	Dissolved
Iron	6600		100	28	ug/L		1	6010C	Dissolved
Iron	7000		500	140	ug/L		5	6010C	Dissolved
Lead	1.9	J	10	1.5	ug/L		1	6010C	Dissolved
Magnesium	84000	E	1000	130	ug/L		1	6010C	Dissolved
Magnesium	89000		5000	660	ug/L		5	6010C	Dissolved
Manganese	190		15	3.3	ug/L		1	6010C	Dissolved
Nickel	17	J	40	13	ug/L		1	6010C	Dissolved
Potassium	4200	J	5000	1700	ug/L		1	6010C	Dissolved
Sodium	89000		1000	320	ug/L		1	6010C	Dissolved
Zinc	8.9	J B	20	5.2	ug/L		1	6010C	Dissolved
Mercury	0.063	J	0.20	0.060	ug/L		1	7470A	Total/NA
Bromide	2.4		0.25	0.025	mg/L		1	300.0	Total/NA
Iodide	0.27	J	1.0	0.10	mg/L		1	300.0	Total/NA
Sulfate - DL	52		10	1.0	mg/L		20	300.0	Total/NA
Alkalinity - DL	960	B	25	2.7	mg/L		5	310.1	Total/NA
Chloride - DL2	190		20	2.0	mg/L		100	300.0	Total/NA

Client Sample ID: I-4

Lab Sample ID: 160-2937-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	3.4	J	5.0	0.28	ug/L		1	8260C	Total/NA
1,4-Dichlorobenzene	9.3		5.0	0.35	ug/L		1	8260C	Total/NA
Benzene	5.2		5.0	0.25	ug/L		1	8260C	Total/NA
Chlorobenzene	15		5.0	0.38	ug/L		1	8260C	Total/NA
Isopropylbenzene	4.4	J	5.0	0.26	ug/L		1	8260C	Total/NA
Methyl tert-butyl ether	0.50	J	5.0	0.40	ug/L		1	8260C	Total/NA
m-Xylene & p-Xylene	3.9	J	5.0	0.57	ug/L		1	8260C	Total/NA
o-Xylene	1.5	J	5.0	0.32	ug/L		1	8260C	Total/NA
Xylenes, Total	5.4	J	10	0.85	ug/L		1	8260C	Total/NA
Antimony	4.2	J	10	4.0	ug/L		1	6010C	Total/NA
Arsenic	13		10	2.0	ug/L		1	6010C	Total/NA
Barium	600		50	4.0	ug/L		1	6010C	Total/NA
Calcium	110000	E	1000	110	ug/L		1	6010C	Total/NA
Calcium	130000		5000	530	ug/L		5	6010C	Total/NA
Chromium	3.9	J	10	3.1	ug/L		1	6010C	Total/NA
Cobalt	10	J	50	4.0	ug/L		1	6010C	Total/NA
Iron	30000		100	28	ug/L		1	6010C	Total/NA
Iron	32000		500	140	ug/L		5	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

Detection Summary

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: I-4 (Continued)

Lab Sample ID: 160-2937-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	4.3	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	65000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	70000		5000	660	ug/L	5		6010C	Total/NA
Manganese	490		15	3.3	ug/L	1		6010C	Total/NA
Nickel	18	J	40	13	ug/L	1		6010C	Total/NA
Potassium	120000	E	5000	1700	ug/L	1		6010C	Total/NA
Potassium	120000		25000	8300	ug/L	5		6010C	Total/NA
Sodium	240000	E	1000	320	ug/L	1		6010C	Total/NA
Sodium	240000		5000	1600	ug/L	5		6010C	Total/NA
Zinc	11	J B	20	5.2	ug/L	1		6010C	Total/NA
Antimony	4.7	J	10	4.0	ug/L	1		6010C	Dissolved
Arsenic	14		10	2.0	ug/L	1		6010C	Dissolved
Barium	630		50	4.0	ug/L	1		6010C	Dissolved
Calcium	110000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	120000		5000	530	ug/L	5		6010C	Dissolved
Chromium	4.5	J	10	3.1	ug/L	1		6010C	Dissolved
Cobalt	4.6	J	50	4.0	ug/L	1		6010C	Dissolved
Iron	30000		100	28	ug/L	1		6010C	Dissolved
Iron	30000		500	140	ug/L	5		6010C	Dissolved
Lead	3.4	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	66000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	66000		5000	660	ug/L	5		6010C	Dissolved
Manganese	480		15	3.3	ug/L	1		6010C	Dissolved
Nickel	19	J	40	13	ug/L	1		6010C	Dissolved
Potassium	130000	E	5000	1700	ug/L	1		6010C	Dissolved
Potassium	120000		25000	8300	ug/L	5		6010C	Dissolved
Sodium	240000	E	1000	320	ug/L	1		6010C	Dissolved
Sodium	230000		5000	1600	ug/L	5		6010C	Dissolved
Zinc	7.3	J B	20	5.2	ug/L	1		6010C	Dissolved
Bromide	3.4		0.25	0.025	mg/L	1		300.0	Total/NA
Sulfate	0.16	J	0.50	0.050	mg/L	1		300.0	Total/NA
Iodide	0.15	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity - DL	1400	B	25	2.7	mg/L	5		310.1	Total/NA
Chloride - DL2	170		20	2.0	mg/L	100		300.0	Total/NA

Client Sample ID: P2-100-SS

Lab Sample ID: 160-2937-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	67		50	4.0	ug/L	1		6010C	Total/NA
Calcium	91000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	100000		5000	530	ug/L	5		6010C	Total/NA
Lead	2.1	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	52000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	55000		5000	660	ug/L	5		6010C	Total/NA
Nickel	17	J	40	13	ug/L	1		6010C	Total/NA
Potassium	2800	J	5000	1700	ug/L	1		6010C	Total/NA
Sodium	12000		1000	320	ug/L	1		6010C	Total/NA
Zinc	18	J B	20	5.2	ug/L	1		6010C	Total/NA
Barium	66		50	4.0	ug/L	1		6010C	Dissolved
Calcium	93000	E	1000	110	ug/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

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Detection Summary

Client: Engineering Management Support, Inc.
 Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: P2-100-SS (Continued)

Lab Sample ID: 160-2937-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	100000		5000	530	ug/L	5		6010C	Dissolved
Chromium	4.8	J	10	3.1	ug/L	1		6010C	Dissolved
Magnesium	52000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	55000		5000	660	ug/L	5		6010C	Dissolved
Nickel	17	J	40	13	ug/L	1		6010C	Dissolved
Potassium	2700	J	5000	1700	ug/L	1		6010C	Dissolved
Sodium	11000		1000	320	ug/L	1		6010C	Dissolved
Zinc	13	J B	20	5.2	ug/L	1		6010C	Dissolved
Nitrate as N	0.044		0.020	0.0040	mg/L	1		300.0	Total/NA
Chloride	3.7		0.20	0.020	mg/L	1		300.0	Total/NA
Alkalinity	440	B	5.0	0.54	mg/L	1		310.1	Total/NA
Sulfate - DL	40		10	1.0	mg/L	20		300.0	Total/NA

Client Sample ID: D-3

Lab Sample ID: 160-2937-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.33	J	5.0	0.25	ug/L	1		8260C	Total/NA
Chlorobenzene	2.0	J	5.0	0.38	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	0.56	J	5.0	0.40	ug/L	1		8260C	Total/NA
Antimony	5.2	J	10	4.0	ug/L	1		6010C	Total/NA
Arsenic	3.8	J	10	2.0	ug/L	1		6010C	Total/NA
Barium	2600		50	4.0	ug/L	1		6010C	Total/NA
Calcium	240000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	290000	E	5000	530	ug/L	5		6010C	Total/NA
Calcium	27000		1000	110	ug/L	1		6010C	Total/NA
Cobalt	6.1	J	50	4.0	ug/L	1		6010C	Total/NA
Iron	36000		100	28	ug/L	1		6010C	Total/NA
Iron	38000		500	140	ug/L	5		6010C	Total/NA
Lead	3.2	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	78000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	84000		5000	660	ug/L	5		6010C	Total/NA
Manganese	600		15	3.3	ug/L	1		6010C	Total/NA
Nickel	19	J	40	13	ug/L	1		6010C	Total/NA
Potassium	32000		5000	1700	ug/L	1		6010C	Total/NA
Sodium	390000	E	1000	320	ug/L	1		6010C	Total/NA
Sodium	390000		5000	1600	ug/L	5		6010C	Total/NA
Zinc	9.0	J B	20	5.2	ug/L	1		6010C	Total/NA
Arsenic	3.3	J	10	2.0	ug/L	1		6010C	Dissolved
Barium	2600		50	4.0	ug/L	1		6010C	Dissolved
Calcium	230000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	280000	E	5000	530	ug/L	5		6010C	Dissolved
Calcium	27000		1000	110	ug/L	1		6010C	Dissolved
Cobalt	5.6	J	50	4.0	ug/L	1		6010C	Dissolved
Iron	36000		100	28	ug/L	1		6010C	Dissolved
Iron	38000		500	140	ug/L	5		6010C	Dissolved
Lead	3.2	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	79000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	84000		5000	660	ug/L	5		6010C	Dissolved
Manganese	600		15	3.3	ug/L	1		6010C	Dissolved
Nickel	19	J	40	13	ug/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

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Detection Summary

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: D-3 (Continued)

Lab Sample ID: 160-2937-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	32000		5000	1700	ug/L	1		6010C	Dissolved
Sodium	390000	E	1000	320	ug/L	1		6010C	Dissolved
Sodium	390000		5000	1600	ug/L	5		6010C	Dissolved
Zinc	5.2	J B	20	5.2	ug/L	1		6010C	Dissolved
Mercury	0.071	J	0.20	0.060	ug/L	1		7470A	Total/NA
Sulfate	0.14	J	0.50	0.050	mg/L	1		300.0	Total/NA
Iodide	0.42	J	1.0	0.10	mg/L	1		300.0	Total/NA
Bromide - DL	14		5.0	0.50	mg/L	20		300.0	Total/NA
Alkalinity - DL	1300	B	25	2.7	mg/L	5		310.1	Total/NA
Chloride - DL2	470		40	4.0	mg/L	200		300.0	Total/NA

Client Sample ID: P2-100-SD

Lab Sample ID: 160-2937-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	330		50	4.0	ug/L	1		6010C	Total/NA
Calcium	81000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	88000		5000	530	ug/L	5		6010C	Total/NA
Iron	850		100	28	ug/L	1		6010C	Total/NA
Lead	1.8	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	36000		1000	130	ug/L	1		6010C	Total/NA
Manganese	67		15	3.3	ug/L	1		6010C	Total/NA
Potassium	2400	J	5000	1700	ug/L	1		6010C	Total/NA
Sodium	6700		1000	320	ug/L	1		6010C	Total/NA
Zinc	6.8	J B	20	5.2	ug/L	1		6010C	Total/NA
Arsenic	2.3	J	10	2.0	ug/L	1		6010C	Dissolved
Barium	330		50	4.0	ug/L	1		6010C	Dissolved
Calcium	80000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	84000		5000	530	ug/L	5		6010C	Dissolved
Iron	820		100	28	ug/L	1		6010C	Dissolved
Lead	1.8	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	36000		1000	130	ug/L	1		6010C	Dissolved
Manganese	66		15	3.3	ug/L	1		6010C	Dissolved
Potassium	2300	J	5000	1700	ug/L	1		6010C	Dissolved
Sodium	6200		1000	320	ug/L	1		6010C	Dissolved
Zinc	21	B	20	5.2	ug/L	1		6010C	Dissolved
Chloride	1.7		0.20	0.020	mg/L	1		300.0	Total/NA
Sulfate	9.8		0.50	0.050	mg/L	1		300.0	Total/NA
Alkalinity - DL	1800	B	25	2.7	mg/L	5		310.1	Total/NA

Client Sample ID: P2-112-AS

Lab Sample ID: 160-2937-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	22		5.0	0.35	ug/L	1		8260C	Total/NA
Benzene	32		5.0	0.25	ug/L	1		8260C	Total/NA
Chlorobenzene	3500		100	7.6	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.23	J	5.0	0.16	ug/L	1		8260C	Total/NA
Cyclohexane	0.46	J	10	0.36	ug/L	1		8260C	Total/NA
Ethylbenzene	1.0	J	5.0	0.30	ug/L	1		8260C	Total/NA
Isopropylbenzene	2.0	J	5.0	0.26	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	0.62	J	5.0	0.40	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

Detection Summary

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: P2-112-AS (Continued)

Lab Sample ID: 160-2937-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
m-Xylene & p-Xylene	0.60	J	5.0	0.57	ug/L	1		8260C	Total/NA
o-Xylene	0.38	J	5.0	0.32	ug/L	1		8260C	Total/NA
Xylenes, Total	0.98	J	10	0.85	ug/L	1		8260C	Total/NA
Aluminum	130	J	200	80	ug/L	1		6010C	Total/NA
Antimony	4.2	J	10	4.0	ug/L	1		6010C	Total/NA
Arsenic	190		10	2.0	ug/L	1		6010C	Total/NA
Barium	2400		50	4.0	ug/L	1		6010C	Total/NA
Beryllium	0.70	J	5.0	0.61	ug/L	1		6010C	Total/NA
Calcium	110000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	130000		5000	530	ug/L	5		6010C	Total/NA
Iron	36000		100	28	ug/L	1		6010C	Total/NA
Iron	38000		500	140	ug/L	5		6010C	Total/NA
Lead	4.4	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	67000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	70000		5000	660	ug/L	5		6010C	Total/NA
Manganese	200		15	3.3	ug/L	1		6010C	Total/NA
Nickel	14	J	40	13	ug/L	1		6010C	Total/NA
Potassium	65000		5000	1700	ug/L	1		6010C	Total/NA
Sodium	100000	E	1000	320	ug/L	1		6010C	Total/NA
Sodium	99000		5000	1600	ug/L	5		6010C	Total/NA
Zinc	10	J B	20	5.2	ug/L	1		6010C	Total/NA
Antimony	4.5	J	10	4.0	ug/L	1		6010C	Dissolved
Arsenic	190		10	2.0	ug/L	1		6010C	Dissolved
Barium	2300		50	4.0	ug/L	1		6010C	Dissolved
Calcium	120000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	130000		5000	530	ug/L	5		6010C	Dissolved
Chromium	4.1	J	10	3.1	ug/L	1		6010C	Dissolved
Iron	36000		100	28	ug/L	1		6010C	Dissolved
Iron	38000		500	140	ug/L	5		6010C	Dissolved
Lead	3.0	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	67000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	69000		5000	660	ug/L	5		6010C	Dissolved
Manganese	200		15	3.3	ug/L	1		6010C	Dissolved
Nickel	14	J	40	13	ug/L	1		6010C	Dissolved
Potassium	64000		5000	1700	ug/L	1		6010C	Dissolved
Selenium	3.3	J	15	2.7	ug/L	1		6010C	Dissolved
Sodium	99000		1000	320	ug/L	1		6010C	Dissolved
Sodium	96000		5000	1600	ug/L	5		6010C	Dissolved
Zinc	7.4	J B	20	5.2	ug/L	1		6010C	Dissolved
Nitrate as N	0.045		0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	0.59		0.25	0.025	mg/L	1		300.0	Total/NA
Sulfate	0.15	J	0.50	0.050	mg/L	1		300.0	Total/NA
Iodide	0.13	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity - DL	1200	B	25	2.7	mg/L	5		310.1	Total/NA
Chloride - DL2	120		20	2.0	mg/L	100		300.0	Total/NA

Client Sample ID: DUPLICATE 01

Lab Sample ID: 160-2937-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	3.3	J	5.0	0.28	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

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Detection Summary

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: DUPLICATE 01 (Continued)

Lab Sample ID: 160-2937-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	8.7		5.0	0.35	ug/L		1	8260C	Total/NA
Benzene	5.2		5.0	0.25	ug/L		1	8260C	Total/NA
Chlorobenzene	15		5.0	0.38	ug/L		1	8260C	Total/NA
Isopropylbenzene	4.4	J	5.0	0.26	ug/L		1	8260C	Total/NA
Methyl tert-butyl ether	0.49	J	5.0	0.40	ug/L		1	8260C	Total/NA
m-Xylene & p-Xylene	3.7	J	5.0	0.57	ug/L		1	8260C	Total/NA
o-Xylene	1.4	J	5.0	0.32	ug/L		1	8260C	Total/NA
Xylenes, Total	5.1	J	10	0.85	ug/L		1	8260C	Total/NA
Arsenic	14		10	2.0	ug/L		1	6010C	Total/NA
Barium	600		50	4.0	ug/L		1	6010C	Total/NA
Calcium	110000	E	1000	110	ug/L		1	6010C	Total/NA
Calcium	130000		5000	530	ug/L		5	6010C	Total/NA
Cobalt	11	J	50	4.0	ug/L		1	6010C	Total/NA
Iron	29000		100	28	ug/L		1	6010C	Total/NA
Iron	32000		500	140	ug/L		5	6010C	Total/NA
Lead	4.0	J	10	1.5	ug/L		1	6010C	Total/NA
Magnesium	64000	E	1000	130	ug/L		1	6010C	Total/NA
Magnesium	70000		5000	660	ug/L		5	6010C	Total/NA
Manganese	480		15	3.3	ug/L		1	6010C	Total/NA
Nickel	18	J	40	13	ug/L		1	6010C	Total/NA
Potassium	120000	E	5000	1700	ug/L		1	6010C	Total/NA
Potassium	120000		25000	8300	ug/L		5	6010C	Total/NA
Sodium	230000	E	1000	320	ug/L		1	6010C	Total/NA
Sodium	240000		5000	1600	ug/L		5	6010C	Total/NA
Zinc	9.8	J B	20	5.2	ug/L		1	6010C	Total/NA
Arsenic	13		10	2.0	ug/L		1	6010C	Dissolved
Barium	620		50	4.0	ug/L		1	6010C	Dissolved
Calcium	110000	E	1000	110	ug/L		1	6010C	Dissolved
Calcium	120000		5000	530	ug/L		5	6010C	Dissolved
Chromium	3.8	J	10	3.1	ug/L		1	6010C	Dissolved
Cobalt	6.3	J	50	4.0	ug/L		1	6010C	Dissolved
Iron	29000		100	28	ug/L		1	6010C	Dissolved
Iron	29000		500	140	ug/L		5	6010C	Dissolved
Lead	3.6	J	10	1.5	ug/L		1	6010C	Dissolved
Magnesium	65000	E	1000	130	ug/L		1	6010C	Dissolved
Magnesium	66000		5000	660	ug/L		5	6010C	Dissolved
Manganese	470		15	3.3	ug/L		1	6010C	Dissolved
Nickel	19	J	40	13	ug/L		1	6010C	Dissolved
Potassium	130000	E	5000	1700	ug/L		1	6010C	Dissolved
Potassium	120000		25000	8300	ug/L		5	6010C	Dissolved
Sodium	240000	E	1000	320	ug/L		1	6010C	Dissolved
Sodium	230000		5000	1600	ug/L		5	6010C	Dissolved
Zinc	12	J B	20	5.2	ug/L		1	6010C	Dissolved
Nitrate as N	0.13		0.020	0.0040	mg/L		1	300.0	Total/NA
Bromide	3.2		0.25	0.025	mg/L		1	300.0	Total/NA
Sulfate	0.14	J	0.50	0.050	mg/L		1	300.0	Total/NA
Iodide	0.15	J	1.0	0.10	mg/L		1	300.0	Total/NA
Alkalinity - DL	1400	B	25	2.7	mg/L		5	310.1	Total/NA
Chloride - DL2	170		20	2.0	mg/L		100	300.0	Total/NA

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This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

Detection Summary

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2937-11

No Detections.

US EPA ARCHIVE DOCUMENT



This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: P2-111-SD

Lab Sample ID: 160-2937-1

Date Collected: 07/09/13 10:42

Matrix: Water

Date Received: 07/10/13 08:27

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/11/13 15:07	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/11/13 15:07	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/11/13 15:07	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/11/13 15:07	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/11/13 15:07	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/11/13 15:07	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/11/13 15:07	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/11/13 15:07	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/11/13 15:07	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/11/13 15:07	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/11/13 15:07	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/11/13 15:07	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/11/13 15:07	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/11/13 15:07	1
2-Hexanone	ND		20	0.59	ug/L			07/11/13 15:07	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/11/13 15:07	1
Acetone	ND		20	6.7	ug/L			07/11/13 15:07	1
Benzene	ND		5.0	0.25	ug/L			07/11/13 15:07	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/11/13 15:07	1
Bromoform	ND		5.0	0.37	ug/L			07/11/13 15:07	1
Bromomethane	ND		10	0.40	ug/L			07/11/13 15:07	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/11/13 15:07	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/11/13 15:07	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/11/13 15:07	1
Chloroethane	ND		10	0.38	ug/L			07/11/13 15:07	1
Chloroform	ND		5.0	0.15	ug/L			07/11/13 15:07	1
Chloromethane	ND		10	0.55	ug/L			07/11/13 15:07	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/11/13 15:07	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/11/13 15:07	1
Cyclohexane	ND		10	0.36	ug/L			07/11/13 15:07	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/11/13 15:07	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/11/13 15:07	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/11/13 15:07	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/11/13 15:07	1
Methyl acetate	ND		25	2.3	ug/L			07/11/13 15:07	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/11/13 15:07	1
Methylcyclohexane	ND		10	0.26	ug/L			07/11/13 15:07	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/11/13 15:07	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/11/13 15:07	1
o-Xylene	ND		5.0	0.32	ug/L			07/11/13 15:07	1
Styrene	ND		5.0	0.35	ug/L			07/11/13 15:07	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/11/13 15:07	1
Toluene	ND		5.0	1.0	ug/L			07/11/13 15:07	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/11/13 15:07	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/11/13 15:07	1
Trichloroethene	ND		5.0	0.29	ug/L			07/11/13 15:07	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/11/13 15:07	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/11/13 15:07	1
Xylenes, Total	ND		10	0.85	ug/L			07/11/13 15:07	1

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TestAmerica St. Louis

Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: P2-111-SD

Lab Sample ID: 160-2937-1

Date Collected: 07/09/13 10:42

Matrix: Water

Date Received: 07/10/13 08:27

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		82 - 132		07/11/13 15:07	1
4-Bromofluorobenzene (Surr)	99		82 - 121		07/11/13 15:07	1
Dibromofluoromethane (Surr)	97		85 - 119		07/11/13 15:07	1
Toluene-d8 (Surr)	99		85 - 115		07/11/13 15:07	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/11/13 15:15	07/12/13 19:51	1
Antimony	ND		10	4.0	ug/L		07/11/13 15:15	07/12/13 19:51	1
Arsenic	ND		10	2.0	ug/L		07/11/13 15:15	07/12/13 19:51	1
Barium	110		50	4.0	ug/L		07/11/13 15:15	07/12/13 19:51	1
Beryllium	0.90	J	5.0	0.61	ug/L		07/11/13 15:15	07/12/13 19:51	1
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 19:51	1
Calcium	92000	E	1000	110	ug/L		07/11/13 15:15	07/12/13 19:51	1
Calcium	100000		5000	530	ug/L		07/11/13 15:15	07/15/13 16:45	5
Chromium	3.1	J	10	3.1	ug/L		07/11/13 15:15	07/12/13 19:51	1
Cobalt	ND		50	4.0	ug/L		07/11/13 15:15	07/12/13 19:51	1
Copper	ND		25	4.6	ug/L		07/11/13 15:15	07/12/13 19:51	1
Iron	ND		100	28	ug/L		07/11/13 15:15	07/12/13 19:51	1
Iron	ND		500	140	ug/L		07/11/13 15:15	07/15/13 16:45	5
Lead	ND		10	1.5	ug/L		07/11/13 15:15	07/12/13 19:51	1
Magnesium	53000	E	1000	130	ug/L		07/11/13 15:15	07/12/13 19:51	1
Magnesium	55000		5000	660	ug/L		07/11/13 15:15	07/15/13 16:45	5
Manganese	ND		15	3.3	ug/L		07/11/13 15:15	07/12/13 19:51	1
Nickel	ND		40	13	ug/L		07/11/13 15:15	07/12/13 19:51	1
Potassium	1800	J	5000	1700	ug/L		07/11/13 15:15	07/12/13 19:51	1
Selenium	ND		15	2.7	ug/L		07/11/13 15:15	07/12/13 19:51	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 19:51	1
Sodium	20000		1000	320	ug/L		07/11/13 15:15	07/12/13 19:51	1
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 19:51	1
Vanadium	ND		50	4.1	ug/L		07/11/13 15:15	07/12/13 19:51	1
Zinc	13	J B	20	5.2	ug/L		07/11/13 15:15	07/12/13 19:51	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/11/13 15:15	07/12/13 19:55	1
Antimony	ND		10	4.0	ug/L		07/11/13 15:15	07/12/13 19:55	1
Arsenic	ND		10	2.0	ug/L		07/11/13 15:15	07/12/13 19:55	1
Barium	110		50	4.0	ug/L		07/11/13 15:15	07/12/13 19:55	1
Beryllium	ND		5.0	0.61	ug/L		07/11/13 15:15	07/12/13 19:55	1
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 19:55	1
Calcium	90000	E	1000	110	ug/L		07/11/13 15:15	07/12/13 19:55	1
Calcium	95000		5000	530	ug/L		07/11/13 15:15	07/15/13 16:49	5
Chromium	ND		10	3.1	ug/L		07/11/13 15:15	07/12/13 19:55	1
Cobalt	ND		50	4.0	ug/L		07/11/13 15:15	07/12/13 19:55	1
Copper	ND		25	4.6	ug/L		07/11/13 15:15	07/12/13 19:55	1
Iron	ND		100	28	ug/L		07/11/13 15:15	07/12/13 19:55	1
Iron	ND		500	140	ug/L		07/11/13 15:15	07/15/13 16:49	5
Lead	ND		10	1.5	ug/L		07/11/13 15:15	07/12/13 19:55	1
Magnesium	52000	E	1000	130	ug/L		07/11/13 15:15	07/12/13 19:55	1

TestAmerica St. Louis

US EPA ARCHIVE DOCUMENT

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: P2-111-SD

Lab Sample ID: 160-2937-1

Date Collected: 07/09/13 10:42

Matrix: Water

Date Received: 07/10/13 08:27

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	53000		5000	660	ug/L		07/11/13 15:15	07/15/13 16:49	5
Manganese	ND		15	3.3	ug/L		07/11/13 15:15	07/12/13 19:55	1
Nickel	ND		40	13	ug/L		07/11/13 15:15	07/12/13 19:55	1
Potassium	1800 J		5000	1700	ug/L		07/11/13 15:15	07/12/13 19:55	1
Selenium	ND		15	2.7	ug/L		07/11/13 15:15	07/12/13 19:55	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 19:55	1
Sodium	20000		1000	320	ug/L		07/11/13 15:15	07/12/13 19:55	1
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 19:55	1
Vanadium	ND		50	4.1	ug/L		07/11/13 15:15	07/12/13 19:55	1
Zinc	7.2 J B		20	5.2	ug/L		07/11/13 15:15	07/12/13 19:55	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:06	07/16/13 15:35	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:18	07/17/13 10:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.075		0.020	0.0040	mg/L			07/10/13 12:25	1
Bromide	0.052 J		0.25	0.025	mg/L			07/10/13 12:25	1
Iodide	ND		1.0	0.10	mg/L			07/16/13 03:53	1
Alkalinity	430 B		5.0	0.54	mg/L			07/18/13 13:03	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.1		4.0	0.40	mg/L			07/10/13 12:45	20
Sulfate	45		10	1.0	mg/L			07/10/13 12:45	20

Client Sample ID: S-5

Lab Sample ID: 160-2937-2

Date Collected: 07/09/13 10:50

Matrix: Water

Date Received: 07/10/13 08:27

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	8.4 J		20	6.7	ug/L			07/11/13 15:34	1
Benzene	3.9 J		5.0	0.25	ug/L			07/11/13 15:34	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/11/13 15:34	1
Bromoform	ND		5.0	0.37	ug/L			07/11/13 15:34	1
Bromomethane	ND		10	0.40	ug/L			07/11/13 15:34	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/11/13 15:34	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/11/13 15:34	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/11/13 15:34	1
Chlorobenzene	3.4 J		5.0	0.38	ug/L			07/11/13 15:34	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/11/13 15:34	1
Chloroethane	ND		10	0.38	ug/L			07/11/13 15:34	1
Chloroform	ND		5.0	0.15	ug/L			07/11/13 15:34	1
Chloromethane	ND		10	0.55	ug/L			07/11/13 15:34	1
Cyclohexane	ND		10	0.36	ug/L			07/11/13 15:34	1

TestAmerica St. Louis

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: S-5

Lab Sample ID: 160-2937-2

Date Collected: 07/09/13 10:50

Matrix: Water

Date Received: 07/10/13 08:27

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/11/13 15:34	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/11/13 15:34	1
1,2-Dichlorobenzene	2.1	J	5.0	0.28	ug/L			07/11/13 15:34	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/11/13 15:34	1
1,4-Dichlorobenzene	7.5		5.0	0.35	ug/L			07/11/13 15:34	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/11/13 15:34	1
1,1-Dichloroethane	0.64	J	5.0	0.39	ug/L			07/11/13 15:34	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/11/13 15:34	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/11/13 15:34	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/11/13 15:34	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/11/13 15:34	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/11/13 15:34	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/11/13 15:34	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/11/13 15:34	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/11/13 15:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.25	ug/L			07/11/13 15:34	1
2-Hexanone	ND		20	0.59	ug/L			07/11/13 15:34	1
Isopropylbenzene	2.3	J	5.0	0.26	ug/L			07/11/13 15:34	1
Methyl acetate	ND		25	2.3	ug/L			07/11/13 15:34	1
Methylcyclohexane	ND		10	0.26	ug/L			07/11/13 15:34	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/11/13 15:34	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/11/13 15:34	1
Methyl tert-butyl ether	0.63	J	5.0	0.40	ug/L			07/11/13 15:34	1
Styrene	ND		5.0	0.35	ug/L			07/11/13 15:34	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/11/13 15:34	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/11/13 15:34	1
Toluene	2.6	J	5.0	1.0	ug/L			07/11/13 15:34	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/11/13 15:34	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/11/13 15:34	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/11/13 15:34	1
Trichloroethene	ND		5.0	0.29	ug/L			07/11/13 15:34	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/11/13 15:34	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/11/13 15:34	1
m-Xylene & p-Xylene	4.8	J	5.0	0.57	ug/L			07/11/13 15:34	1
o-Xylene	3.6	J	5.0	0.32	ug/L			07/11/13 15:34	1
Xylenes, Total	8.4	J	10	0.85	ug/L			07/11/13 15:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		82 - 121		07/11/13 15:34	1
1,2-Dichloroethane-d4 (Surr)	98		82 - 132		07/11/13 15:34	1
Toluene-d8 (Surr)	99		85 - 115		07/11/13 15:34	1
Dibromofluoromethane (Surr)	97		85 - 119		07/11/13 15:34	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	150	J	200	80	ug/L		07/11/13 15:15	07/12/13 19:36	1
Antimony	4.0	J	10	4.0	ug/L		07/11/13 15:15	07/12/13 19:36	1
Arsenic	16		10	2.0	ug/L		07/11/13 15:15	07/12/13 19:36	1
Barium	550		50	4.0	ug/L		07/11/13 15:15	07/12/13 19:36	1
Beryllium	ND		5.0	0.61	ug/L		07/11/13 15:15	07/12/13 19:36	1

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: S-5

Lab Sample ID: 160-2937-2

Date Collected: 07/09/13 10:50

Matrix: Water

Date Received: 07/10/13 08:27

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 19:36	1
Calcium	54000	E	1000	110	ug/L		07/11/13 15:15	07/12/13 19:36	1
Calcium	62000		5000	530	ug/L		07/11/13 15:15	07/15/13 16:37	5
Chromium	10		10	3.1	ug/L		07/11/13 15:15	07/12/13 19:36	1
Cobalt	15	J	50	4.0	ug/L		07/11/13 15:15	07/12/13 19:36	1
Copper	19	J	25	4.6	ug/L		07/11/13 15:15	07/12/13 19:36	1
Iron	21000		100	28	ug/L		07/11/13 15:15	07/12/13 19:36	1
Iron	22000		500	140	ug/L		07/11/13 15:15	07/15/13 16:37	5
Lead	25		10	1.5	ug/L		07/11/13 15:15	07/12/13 19:36	1
Magnesium	61000	E	1000	130	ug/L		07/11/13 15:15	07/12/13 19:36	1
Magnesium	65000		5000	660	ug/L		07/11/13 15:15	07/15/13 16:37	5
Manganese	190		15	3.3	ug/L		07/11/13 15:15	07/12/13 19:36	1
Nickel	87		40	13	ug/L		07/11/13 15:15	07/12/13 19:36	1
Potassium	230000	E	5000	1700	ug/L		07/11/13 15:15	07/12/13 19:36	1
Potassium	230000		25000	8300	ug/L		07/11/13 15:15	07/15/13 16:37	5
Selenium	ND		15	2.7	ug/L		07/11/13 15:15	07/12/13 19:36	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 19:36	1
Sodium	450000	E	1000	320	ug/L		07/11/13 15:15	07/12/13 19:36	1
Sodium	470000		5000	1600	ug/L		07/11/13 15:15	07/15/13 16:37	5
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 19:36	1
Vanadium	4.6	J	50	4.1	ug/L		07/11/13 15:15	07/12/13 19:36	1
Zinc	130	B	20	5.2	ug/L		07/11/13 15:15	07/12/13 19:36	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/11/13 15:15	07/12/13 19:40	1
Antimony	ND		10	4.0	ug/L		07/11/13 15:15	07/12/13 19:40	1
Arsenic	10		10	2.0	ug/L		07/11/13 15:15	07/12/13 19:40	1
Barium	540		50	4.0	ug/L		07/11/13 15:15	07/12/13 19:40	1
Beryllium	ND		5.0	0.61	ug/L		07/11/13 15:15	07/12/13 19:40	1
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 19:40	1
Calcium	53000	E	1000	110	ug/L		07/11/13 15:15	07/12/13 19:40	1
Calcium	62000		5000	530	ug/L		07/11/13 15:15	07/15/13 16:41	5
Chromium	8.9	J	10	3.1	ug/L		07/11/13 15:15	07/12/13 19:40	1
Cobalt	12	J	50	4.0	ug/L		07/11/13 15:15	07/12/13 19:40	1
Copper	ND		25	4.6	ug/L		07/11/13 15:15	07/12/13 19:40	1
Iron	17000		100	28	ug/L		07/11/13 15:15	07/12/13 19:40	1
Iron	18000		500	140	ug/L		07/11/13 15:15	07/15/13 16:41	5
Lead	2.5	J	10	1.5	ug/L		07/11/13 15:15	07/12/13 19:40	1
Magnesium	61000	E	1000	130	ug/L		07/11/13 15:15	07/12/13 19:40	1
Magnesium	65000		5000	660	ug/L		07/11/13 15:15	07/15/13 16:41	5
Manganese	160		15	3.3	ug/L		07/11/13 15:15	07/12/13 19:40	1
Nickel	39	J	40	13	ug/L		07/11/13 15:15	07/12/13 19:40	1
Potassium	230000	E	5000	1700	ug/L		07/11/13 15:15	07/12/13 19:40	1
Potassium	230000		25000	8300	ug/L		07/11/13 15:15	07/15/13 16:41	5
Selenium	ND		15	2.7	ug/L		07/11/13 15:15	07/12/13 19:40	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 19:40	1
Sodium	450000	E	1000	320	ug/L		07/11/13 15:15	07/12/13 19:40	1
Sodium	480000		5000	1600	ug/L		07/11/13 15:15	07/15/13 16:41	5
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 19:40	1

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: S-5

Lab Sample ID: 160-2937-2

Date Collected: 07/09/13 10:50

Matrix: Water

Date Received: 07/10/13 08:27

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	ND		50	4.1	ug/L		07/11/13 15:15	07/12/13 19:40	1
Zinc	16	J B	20	5.2	ug/L		07/11/13 15:15	07/12/13 19:40	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13	J	0.20	0.060	ug/L		07/16/13 12:06	07/16/13 15:37	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:18	07/17/13 10:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.020	0.0040	mg/L			07/10/13 14:33	1
Sulfate	0.44	J	0.50	0.050	mg/L			07/10/13 14:33	1
Iodide	0.15	J	1.0	0.10	mg/L			07/16/13 04:38	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	2000	B	25	2.7	mg/L			07/18/13 13:03	5

General Chemistry - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	290		40	4.0	mg/L			07/10/13 15:02	200

General Chemistry - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	4.4		1.3	0.13	mg/L			07/13/13 02:03	5

Client Sample ID: FB @ P2-110-SS

Lab Sample ID: 160-2937-3

Date Collected: 07/09/13 11:40

Matrix: Water

Date Received: 07/10/13 08:27

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/11/13 16:00	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/11/13 16:00	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/11/13 16:00	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/11/13 16:00	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/11/13 16:00	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/11/13 16:00	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/11/13 16:00	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/11/13 16:00	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/11/13 16:00	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/11/13 16:00	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/11/13 16:00	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/11/13 16:00	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/11/13 16:00	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/11/13 16:00	1
2-Hexanone	ND		20	0.59	ug/L			07/11/13 16:00	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/11/13 16:00	1

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: FB @ P2-110-SS

Lab Sample ID: 160-2937-3

Date Collected: 07/09/13 11:40

Matrix: Water

Date Received: 07/10/13 08:27

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			07/11/13 16:00	1
Benzene	ND		5.0	0.25	ug/L			07/11/13 16:00	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/11/13 16:00	1
Bromoform	ND		5.0	0.37	ug/L			07/11/13 16:00	1
Bromomethane	ND		10	0.40	ug/L			07/11/13 16:00	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/11/13 16:00	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/11/13 16:00	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/11/13 16:00	1
Chloroethane	ND		10	0.38	ug/L			07/11/13 16:00	1
Chloroform	ND		5.0	0.15	ug/L			07/11/13 16:00	1
Chloromethane	ND		10	0.55	ug/L			07/11/13 16:00	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/11/13 16:00	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/11/13 16:00	1
Cyclohexane	ND		10	0.36	ug/L			07/11/13 16:00	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/11/13 16:00	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/11/13 16:00	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/11/13 16:00	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/11/13 16:00	1
Methyl acetate	ND		25	2.3	ug/L			07/11/13 16:00	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/11/13 16:00	1
Methylcyclohexane	ND		10	0.26	ug/L			07/11/13 16:00	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/11/13 16:00	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/11/13 16:00	1
o-Xylene	ND		5.0	0.32	ug/L			07/11/13 16:00	1
Styrene	ND		5.0	0.35	ug/L			07/11/13 16:00	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/11/13 16:00	1
Toluene	ND		5.0	1.0	ug/L			07/11/13 16:00	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/11/13 16:00	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/11/13 16:00	1
Trichloroethene	ND		5.0	0.29	ug/L			07/11/13 16:00	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/11/13 16:00	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/11/13 16:00	1
Xylenes, Total	ND		10	0.85	ug/L			07/11/13 16:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		82 - 132		07/11/13 16:00	1
4-Bromofluorobenzene (Surr)	100		82 - 121		07/11/13 16:00	1
Dibromofluoromethane (Surr)	100		85 - 119		07/11/13 16:00	1
Toluene-d8 (Surr)	99		85 - 115		07/11/13 16:00	1

Client Sample ID: P2-110-SS

Lab Sample ID: 160-2937-4

Date Collected: 07/09/13 12:13

Matrix: Water

Date Received: 07/10/13 08:27

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/11/13 16:26	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/11/13 16:26	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/11/13 16:26	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/11/13 16:26	1

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: P2-110-SS

Lab Sample ID: 160-2937-4

Date Collected: 07/09/13 12:13

Matrix: Water

Date Received: 07/10/13 08:27

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/11/13 16:26	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/11/13 16:26	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/11/13 16:26	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/11/13 16:26	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/11/13 16:26	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/11/13 16:26	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/11/13 16:26	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/11/13 16:26	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/11/13 16:26	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/11/13 16:26	1
2-Hexanone	ND		20	0.59	ug/L			07/11/13 16:26	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/11/13 16:26	1
Acetone	ND		20	6.7	ug/L			07/11/13 16:26	1
Benzene	ND		5.0	0.25	ug/L			07/11/13 16:26	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/11/13 16:26	1
Bromoform	ND		5.0	0.37	ug/L			07/11/13 16:26	1
Bromomethane	ND		10	0.40	ug/L			07/11/13 16:26	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/11/13 16:26	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/11/13 16:26	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/11/13 16:26	1
Chloroethane	ND		10	0.38	ug/L			07/11/13 16:26	1
Chloroform	ND		5.0	0.15	ug/L			07/11/13 16:26	1
Chloromethane	ND		10	0.55	ug/L			07/11/13 16:26	1
cis-1,2-Dichloroethene	2.4	J	5.0	0.16	ug/L			07/11/13 16:26	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/11/13 16:26	1
Cyclohexane	ND		10	0.36	ug/L			07/11/13 16:26	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/11/13 16:26	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/11/13 16:26	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/11/13 16:26	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/11/13 16:26	1
Methyl acetate	ND		25	2.3	ug/L			07/11/13 16:26	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/11/13 16:26	1
Methylcyclohexane	ND		10	0.26	ug/L			07/11/13 16:26	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/11/13 16:26	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/11/13 16:26	1
o-Xylene	ND		5.0	0.32	ug/L			07/11/13 16:26	1
Styrene	ND		5.0	0.35	ug/L			07/11/13 16:26	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/11/13 16:26	1
Toluene	ND		5.0	1.0	ug/L			07/11/13 16:26	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/11/13 16:26	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/11/13 16:26	1
Trichloroethene	ND		5.0	0.29	ug/L			07/11/13 16:26	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/11/13 16:26	1
Vinyl chloride	1.1	J	5.0	0.43	ug/L			07/11/13 16:26	1
Xylenes, Total	ND		10	0.85	ug/L			07/11/13 16:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		82 - 132		07/11/13 16:26	1
4-Bromofluorobenzene (Surr)	99		82 - 121		07/11/13 16:26	1
Dibromofluoromethane (Surr)	103		85 - 119		07/11/13 16:26	1

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: P2-110-SS

Lab Sample ID: 160-2937-4

Date Collected: 07/09/13 12:13

Matrix: Water

Date Received: 07/10/13 08:27

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		85 - 115		07/11/13 16:26	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/11/13 15:15	07/12/13 19:18	1
Antimony	4.0	J	10	4.0	ug/L		07/11/13 15:15	07/12/13 19:18	1
Arsenic	ND		10	2.0	ug/L		07/11/13 15:15	07/12/13 19:18	1
Barium	320		50	4.0	ug/L		07/11/13 15:15	07/12/13 19:18	1
Beryllium	ND		5.0	0.61	ug/L		07/11/13 15:15	07/12/13 19:18	1
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 19:18	1
Calcium	210000	E	1000	110	ug/L		07/11/13 15:15	07/12/13 19:18	1
Calcium	250000		5000	530	ug/L		07/11/13 15:15	07/15/13 16:11	5
Chromium	3.3	J	10	3.1	ug/L		07/11/13 15:15	07/12/13 19:18	1
Cobalt	ND		50	4.0	ug/L		07/11/13 15:15	07/12/13 19:18	1
Copper	ND		25	4.6	ug/L		07/11/13 15:15	07/12/13 19:18	1
Iron	6900		100	28	ug/L		07/11/13 15:15	07/12/13 19:18	1
Iron	7200		500	140	ug/L		07/11/13 15:15	07/15/13 16:11	5
Lead	2.2	J	10	1.5	ug/L		07/11/13 15:15	07/12/13 19:18	1
Magnesium	88000	E	1000	130	ug/L		07/11/13 15:15	07/12/13 19:18	1
Magnesium	91000		5000	660	ug/L		07/11/13 15:15	07/15/13 16:11	5
Manganese	200		15	3.3	ug/L		07/11/13 15:15	07/12/13 19:18	1
Nickel	17	J	40	13	ug/L		07/11/13 15:15	07/12/13 19:18	1
Potassium	4300	J	5000	1700	ug/L		07/11/13 15:15	07/12/13 19:18	1
Selenium	ND		15	2.7	ug/L		07/11/13 15:15	07/12/13 19:18	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 19:18	1
Sodium	91000		1000	320	ug/L		07/11/13 15:15	07/12/13 19:18	1
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 19:18	1
Vanadium	ND		50	4.1	ug/L		07/11/13 15:15	07/12/13 19:18	1
Zinc	5.8	J B	20	5.2	ug/L		07/11/13 15:15	07/12/13 19:18	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/11/13 15:15	07/12/13 19:32	1
Antimony	ND		10	4.0	ug/L		07/11/13 15:15	07/12/13 19:32	1
Arsenic	ND		10	2.0	ug/L		07/11/13 15:15	07/12/13 19:32	1
Barium	310		50	4.0	ug/L		07/11/13 15:15	07/12/13 19:32	1
Beryllium	ND		5.0	0.61	ug/L		07/11/13 15:15	07/12/13 19:32	1
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 19:32	1
Calcium	210000	E	1000	110	ug/L		07/11/13 15:15	07/12/13 19:32	1
Calcium	240000		5000	530	ug/L		07/11/13 15:15	07/15/13 16:34	5
Chromium	ND		10	3.1	ug/L		07/11/13 15:15	07/12/13 19:32	1
Cobalt	ND		50	4.0	ug/L		07/11/13 15:15	07/12/13 19:32	1
Copper	ND		25	4.6	ug/L		07/11/13 15:15	07/12/13 19:32	1
Iron	6600		100	28	ug/L		07/11/13 15:15	07/12/13 19:32	1
Iron	7000		500	140	ug/L		07/11/13 15:15	07/15/13 16:34	5
Lead	1.9	J	10	1.5	ug/L		07/11/13 15:15	07/12/13 19:32	1
Magnesium	84000	E	1000	130	ug/L		07/11/13 15:15	07/12/13 19:32	1
Magnesium	89000		5000	660	ug/L		07/11/13 15:15	07/15/13 16:34	5
Manganese	190		15	3.3	ug/L		07/11/13 15:15	07/12/13 19:32	1

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: P2-110-SS

Lab Sample ID: 160-2937-4

Date Collected: 07/09/13 12:13

Matrix: Water

Date Received: 07/10/13 08:27

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	17	J	40	13	ug/L		07/11/13 15:15	07/12/13 19:32	1
Potassium	4200	J	5000	1700	ug/L		07/11/13 15:15	07/12/13 19:32	1
Selenium	ND		15	2.7	ug/L		07/11/13 15:15	07/12/13 19:32	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 19:32	1
Sodium	89000		1000	320	ug/L		07/11/13 15:15	07/12/13 19:32	1
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 19:32	1
Vanadium	ND		50	4.1	ug/L		07/11/13 15:15	07/12/13 19:32	1
Zinc	8.9	J B	20	5.2	ug/L		07/11/13 15:15	07/12/13 19:32	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.063	J	0.20	0.060	ug/L		07/16/13 12:06	07/16/13 15:42	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:18	07/17/13 10:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.020	0.0040	mg/L			07/10/13 15:16	1
Bromide	2.4		0.25	0.025	mg/L			07/10/13 15:16	1
Iodide	0.27	J	1.0	0.10	mg/L			07/16/13 04:52	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	52		10	1.0	mg/L			07/10/13 15:31	20
Alkalinity	960	B	25	2.7	mg/L			07/18/13 13:03	5

General Chemistry - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	190		20	2.0	mg/L			07/10/13 15:45	100

Client Sample ID: I-4

Lab Sample ID: 160-2937-5

Date Collected: 07/09/13 12:25

Matrix: Water

Date Received: 07/10/13 08:27

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/11/13 16:52	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/11/13 16:52	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/11/13 16:52	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/11/13 16:52	1
1,1-Dichloroethane	ND		5.0	0.37	ug/L			07/11/13 16:52	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/11/13 16:52	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/11/13 16:52	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/11/13 16:52	1
1,2-Dichlorobenzene	3.4	J	5.0	0.28	ug/L			07/11/13 16:52	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/11/13 16:52	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/11/13 16:52	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/11/13 16:52	1
1,4-Dichlorobenzene	9.3		5.0	0.35	ug/L			07/11/13 16:52	1

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: I-4

Lab Sample ID: 160-2937-5

Date Collected: 07/09/13 12:25

Matrix: Water

Date Received: 07/10/13 08:27

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		20	0.39	ug/L			07/11/13 16:52	1
2-Hexanone	ND		20	0.59	ug/L			07/11/13 16:52	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/11/13 16:52	1
Acetone	ND		20	6.7	ug/L			07/11/13 16:52	1
Benzene	5.2		5.0	0.25	ug/L			07/11/13 16:52	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/11/13 16:52	1
Bromoform	ND		5.0	0.37	ug/L			07/11/13 16:52	1
Bromomethane	ND		10	0.40	ug/L			07/11/13 16:52	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/11/13 16:52	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/11/13 16:52	1
Chlorobenzene	15		5.0	0.38	ug/L			07/11/13 16:52	1
Chloroethane	ND		10	0.38	ug/L			07/11/13 16:52	1
Chloroform	ND		5.0	0.15	ug/L			07/11/13 16:52	1
Chloromethane	ND		10	0.55	ug/L			07/11/13 16:52	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/11/13 16:52	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/11/13 16:52	1
Cyclohexane	ND		10	0.36	ug/L			07/11/13 16:52	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/11/13 16:52	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/11/13 16:52	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/11/13 16:52	1
Isopropylbenzene	4.4 J		5.0	0.26	ug/L			07/11/13 16:52	1
Methyl acetate	ND		25	2.3	ug/L			07/11/13 16:52	1
Methyl tert-butyl ether	0.50 J		5.0	0.40	ug/L			07/11/13 16:52	1
Methylcyclohexane	ND		10	0.26	ug/L			07/11/13 16:52	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/11/13 16:52	1
m-Xylene & p-Xylene	3.9 J		5.0	0.57	ug/L			07/11/13 16:52	1
o-Xylene	1.5 J		5.0	0.32	ug/L			07/11/13 16:52	1
Styrene	ND		5.0	0.35	ug/L			07/11/13 16:52	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/11/13 16:52	1
Toluene	ND		5.0	1.0	ug/L			07/11/13 16:52	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/11/13 16:52	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/11/13 16:52	1
Trichloroethene	ND		5.0	0.29	ug/L			07/11/13 16:52	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/11/13 16:52	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/11/13 16:52	1
Xylenes, Total	5.4 J		10	0.85	ug/L			07/11/13 16:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		82 - 132		07/11/13 16:52	1
4-Bromofluorobenzene (Surr)	101		82 - 121		07/11/13 16:52	1
Dibromofluoromethane (Surr)	104		85 - 119		07/11/13 16:52	1
Toluene-d8 (Surr)	102		85 - 115		07/11/13 16:52	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/11/13 15:15	07/12/13 19:59	1
Antimony	4.2 J		10	4.0	ug/L		07/11/13 15:15	07/12/13 19:59	1
Arsenic	13		10	2.0	ug/L		07/11/13 15:15	07/12/13 19:59	1
Barium	600		50	4.0	ug/L		07/11/13 15:15	07/12/13 19:59	1
Beryllium	ND		5.0	0.61	ug/L		07/11/13 15:15	07/12/13 19:59	1

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: I-4

Lab Sample ID: 160-2937-5

Date Collected: 07/09/13 12:25

Matrix: Water

Date Received: 07/10/13 08:27

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 19:59	1
Calcium	110000	E	1000	110	ug/L		07/11/13 15:15	07/12/13 19:59	1
Calcium	130000		5000	530	ug/L		07/11/13 15:15	07/15/13 16:53	5
Chromium	3.9	J	10	3.1	ug/L		07/11/13 15:15	07/12/13 19:59	1
Cobalt	10	J	50	4.0	ug/L		07/11/13 15:15	07/12/13 19:59	1
Copper	ND		25	4.6	ug/L		07/11/13 15:15	07/12/13 19:59	1
Iron	30000		100	28	ug/L		07/11/13 15:15	07/12/13 19:59	1
Iron	32000		500	140	ug/L		07/11/13 15:15	07/15/13 16:53	5
Lead	4.3	J	10	1.5	ug/L		07/11/13 15:15	07/12/13 19:59	1
Magnesium	65000	E	1000	130	ug/L		07/11/13 15:15	07/12/13 19:59	1
Magnesium	70000		5000	660	ug/L		07/11/13 15:15	07/15/13 16:53	5
Manganese	490		15	3.3	ug/L		07/11/13 15:15	07/12/13 19:59	1
Nickel	18	J	40	13	ug/L		07/11/13 15:15	07/12/13 19:59	1
Potassium	120000	E	5000	1700	ug/L		07/11/13 15:15	07/12/13 19:59	1
Potassium	120000		25000	8300	ug/L		07/11/13 15:15	07/15/13 16:53	5
Selenium	ND		15	2.7	ug/L		07/11/13 15:15	07/12/13 19:59	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 19:59	1
Sodium	240000	E	1000	320	ug/L		07/11/13 15:15	07/12/13 19:59	1
Sodium	240000		5000	1600	ug/L		07/11/13 15:15	07/15/13 16:53	5
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 19:59	1
Vanadium	ND		50	4.1	ug/L		07/11/13 15:15	07/12/13 19:59	1
Zinc	11	J B	20	5.2	ug/L		07/11/13 15:15	07/12/13 19:59	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/11/13 15:15	07/12/13 20:03	1
Antimony	4.7	J	10	4.0	ug/L		07/11/13 15:15	07/12/13 20:03	1
Arsenic	14		10	2.0	ug/L		07/11/13 15:15	07/12/13 20:03	1
Barium	630		50	4.0	ug/L		07/11/13 15:15	07/12/13 20:03	1
Beryllium	ND		5.0	0.61	ug/L		07/11/13 15:15	07/12/13 20:03	1
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 20:03	1
Calcium	110000	E	1000	110	ug/L		07/11/13 15:15	07/12/13 20:03	1
Calcium	120000		5000	530	ug/L		07/11/13 15:15	07/15/13 16:57	5
Chromium	4.5	J	10	3.1	ug/L		07/11/13 15:15	07/12/13 20:03	1
Cobalt	4.6	J	50	4.0	ug/L		07/11/13 15:15	07/12/13 20:03	1
Copper	ND		25	4.6	ug/L		07/11/13 15:15	07/12/13 20:03	1
Iron	30000		100	28	ug/L		07/11/13 15:15	07/12/13 20:03	1
Iron	30000		500	140	ug/L		07/11/13 15:15	07/15/13 16:57	5
Lead	3.4	J	10	1.5	ug/L		07/11/13 15:15	07/12/13 20:03	1
Magnesium	66000	E	1000	130	ug/L		07/11/13 15:15	07/12/13 20:03	1
Magnesium	66000		5000	660	ug/L		07/11/13 15:15	07/15/13 16:57	5
Manganese	480		15	3.3	ug/L		07/11/13 15:15	07/12/13 20:03	1
Nickel	19	J	40	13	ug/L		07/11/13 15:15	07/12/13 20:03	1
Potassium	130000	E	5000	1700	ug/L		07/11/13 15:15	07/12/13 20:03	1
Potassium	120000		25000	8300	ug/L		07/11/13 15:15	07/15/13 16:57	5
Selenium	ND		15	2.7	ug/L		07/11/13 15:15	07/12/13 20:03	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 20:03	1
Sodium	240000	E	1000	320	ug/L		07/11/13 15:15	07/12/13 20:03	1
Sodium	230000		5000	1600	ug/L		07/11/13 15:15	07/15/13 16:57	5
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 20:03	1

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: I-4

Lab Sample ID: 160-2937-5

Date Collected: 07/09/13 12:25

Matrix: Water

Date Received: 07/10/13 08:27

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	ND		50	4.1	ug/L		07/11/13 15:15	07/12/13 20:03	1
Zinc	7.3	J B	20	5.2	ug/L		07/11/13 15:15	07/12/13 20:03	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:06	07/16/13 15:49	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:18	07/17/13 10:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.020	0.0040	mg/L			07/10/13 16:00	1
Bromide	3.4		0.25	0.025	mg/L			07/10/13 16:00	1
Sulfate	0.16	J	0.50	0.050	mg/L			07/10/13 16:00	1
Iodide	0.15	J	1.0	0.10	mg/L			07/16/13 05:37	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	1400	B	25	2.7	mg/L			07/19/13 13:59	5

General Chemistry - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		20	2.0	mg/L			07/10/13 16:28	100

Client Sample ID: P2-100-SS

Lab Sample ID: 160-2937-6

Date Collected: 07/09/13 13:36

Matrix: Water

Date Received: 07/10/13 08:27

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/11/13 17:18	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/11/13 17:18	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/11/13 17:18	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/11/13 17:18	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/11/13 17:18	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/11/13 17:18	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/11/13 17:18	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/11/13 17:18	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/11/13 17:18	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/11/13 17:18	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/11/13 17:18	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/11/13 17:18	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/11/13 17:18	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/11/13 17:18	1
2-Hexanone	ND		20	0.59	ug/L			07/11/13 17:18	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/11/13 17:18	1
Acetone	ND		20	6.7	ug/L			07/11/13 17:18	1
Benzene	ND		5.0	0.25	ug/L			07/11/13 17:18	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/11/13 17:18	1

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: P2-100-SS

Lab Sample ID: 160-2937-6

Date Collected: 07/09/13 13:36

Matrix: Water

Date Received: 07/10/13 08:27

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		5.0	0.37	ug/L			07/11/13 17:18	1
Bromomethane	ND		10	0.40	ug/L			07/11/13 17:18	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/11/13 17:18	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/11/13 17:18	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/11/13 17:18	1
Chloroethane	ND		10	0.38	ug/L			07/11/13 17:18	1
Chloroform	ND		5.0	0.15	ug/L			07/11/13 17:18	1
Chloromethane	ND		10	0.55	ug/L			07/11/13 17:18	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/11/13 17:18	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/11/13 17:18	1
Cyclohexane	ND		10	0.36	ug/L			07/11/13 17:18	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/11/13 17:18	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/11/13 17:18	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/11/13 17:18	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/11/13 17:18	1
Methyl acetate	ND		25	2.3	ug/L			07/11/13 17:18	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/11/13 17:18	1
Methylcyclohexane	ND		10	0.26	ug/L			07/11/13 17:18	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/11/13 17:18	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/11/13 17:18	1
o-Xylene	ND		5.0	0.32	ug/L			07/11/13 17:18	1
Styrene	ND		5.0	0.35	ug/L			07/11/13 17:18	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/11/13 17:18	1
Toluene	ND		5.0	1.0	ug/L			07/11/13 17:18	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/11/13 17:18	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/11/13 17:18	1
Trichloroethene	ND		5.0	0.29	ug/L			07/11/13 17:18	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/11/13 17:18	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/11/13 17:18	1
Xylenes, Total	ND		10	0.85	ug/L			07/11/13 17:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		82 - 132		07/11/13 17:18	1
4-Bromofluorobenzene (Surr)	102		82 - 121		07/11/13 17:18	1
Dibromofluoromethane (Surr)	101		85 - 119		07/11/13 17:18	1
Toluene-d8 (Surr)	101		85 - 115		07/11/13 17:18	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/11/13 15:15	07/12/13 20:07	1
Antimony	ND		10	4.0	ug/L		07/11/13 15:15	07/12/13 20:07	1
Arsenic	ND		10	2.0	ug/L		07/11/13 15:15	07/12/13 20:07	1
Barium	67		50	4.0	ug/L		07/11/13 15:15	07/12/13 20:07	1
Beryllium	ND		5.0	0.61	ug/L		07/11/13 15:15	07/12/13 20:07	1
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 20:07	1
Calcium	91000	E	1000	110	ug/L		07/11/13 15:15	07/12/13 20:07	1
Calcium	100000		5000	530	ug/L		07/11/13 15:15	07/15/13 17:08	5
Chromium	ND		10	3.1	ug/L		07/11/13 15:15	07/12/13 20:07	1
Cobalt	ND		50	4.0	ug/L		07/11/13 15:15	07/12/13 20:07	1
Copper	ND		25	4.6	ug/L		07/11/13 15:15	07/12/13 20:07	1

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: P2-100-SS

Lab Sample ID: 160-2937-6

Date Collected: 07/09/13 13:36

Matrix: Water

Date Received: 07/10/13 08:27

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		100	28	ug/L		07/11/13 15:15	07/12/13 20:07	1
Iron	ND		500	140	ug/L		07/11/13 15:15	07/15/13 17:08	5
Lead	2.1	J	10	1.5	ug/L		07/11/13 15:15	07/12/13 20:07	1
Magnesium	52000	E	1000	130	ug/L		07/11/13 15:15	07/12/13 20:07	1
Magnesium	55000		5000	660	ug/L		07/11/13 15:15	07/15/13 17:08	5
Manganese	ND		15	3.3	ug/L		07/11/13 15:15	07/12/13 20:07	1
Nickel	17	J	40	13	ug/L		07/11/13 15:15	07/12/13 20:07	1
Potassium	2800	J	5000	1700	ug/L		07/11/13 15:15	07/12/13 20:07	1
Selenium	ND		15	2.7	ug/L		07/11/13 15:15	07/12/13 20:07	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 20:07	1
Sodium	12000		1000	320	ug/L		07/11/13 15:15	07/12/13 20:07	1
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 20:07	1
Vanadium	ND		50	4.1	ug/L		07/11/13 15:15	07/12/13 20:07	1
Zinc	18	J B	20	5.2	ug/L		07/11/13 15:15	07/12/13 20:07	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/11/13 15:15	07/12/13 20:11	1
Antimony	ND		10	4.0	ug/L		07/11/13 15:15	07/12/13 20:11	1
Arsenic	ND		10	2.0	ug/L		07/11/13 15:15	07/12/13 20:11	1
Barium	66		50	4.0	ug/L		07/11/13 15:15	07/12/13 20:11	1
Beryllium	ND		5.0	0.61	ug/L		07/11/13 15:15	07/12/13 20:11	1
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 20:11	1
Calcium	93000	E	1000	110	ug/L		07/11/13 15:15	07/12/13 20:11	1
Calcium	100000		5000	530	ug/L		07/11/13 15:15	07/15/13 17:12	5
Chromium	4.8	J	10	3.1	ug/L		07/11/13 15:15	07/12/13 20:11	1
Cobalt	ND		50	4.0	ug/L		07/11/13 15:15	07/12/13 20:11	1
Copper	ND		25	4.6	ug/L		07/11/13 15:15	07/12/13 20:11	1
Iron	ND		100	28	ug/L		07/11/13 15:15	07/12/13 20:11	1
Iron	ND		500	140	ug/L		07/11/13 15:15	07/15/13 17:12	5
Lead	ND		10	1.5	ug/L		07/11/13 15:15	07/12/13 20:11	1
Magnesium	52000	E	1000	130	ug/L		07/11/13 15:15	07/12/13 20:11	1
Magnesium	55000		5000	660	ug/L		07/11/13 15:15	07/15/13 17:12	5
Manganese	ND		15	3.3	ug/L		07/11/13 15:15	07/12/13 20:11	1
Nickel	17	J	40	13	ug/L		07/11/13 15:15	07/12/13 20:11	1
Potassium	2700	J	5000	1700	ug/L		07/11/13 15:15	07/12/13 20:11	1
Selenium	ND		15	2.7	ug/L		07/11/13 15:15	07/12/13 20:11	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 20:11	1
Sodium	11000		1000	320	ug/L		07/11/13 15:15	07/12/13 20:11	1
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 20:11	1
Vanadium	ND		50	4.1	ug/L		07/11/13 15:15	07/12/13 20:11	1
Zinc	13	J B	20	5.2	ug/L		07/11/13 15:15	07/12/13 20:11	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:06	07/16/13 15:51	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:18	07/17/13 10:41	1

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: P2-100-SS

Lab Sample ID: 160-2937-6

Date Collected: 07/09/13 13:36

Matrix: Water

Date Received: 07/10/13 08:27

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.044		0.020	0.0040	mg/L			07/10/13 17:55	1
Chloride	3.7		0.20	0.020	mg/L			07/10/13 17:55	1
Bromide	ND		0.25	0.025	mg/L			07/10/13 17:55	1
Iodide	ND		1.0	0.10	mg/L			07/16/13 05:52	1
Alkalinity	440	B	5.0	0.54	mg/L			07/19/13 13:59	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	40		10	1.0	mg/L			07/10/13 18:09	20

Client Sample ID: D-3

Lab Sample ID: 160-2937-7

Date Collected: 07/09/13 13:42

Matrix: Water

Date Received: 07/10/13 08:27

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/11/13 17:44	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/11/13 17:44	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/11/13 17:44	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/11/13 17:44	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/11/13 17:44	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/11/13 17:44	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/11/13 17:44	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/11/13 17:44	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/11/13 17:44	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/11/13 17:44	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/11/13 17:44	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/11/13 17:44	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/11/13 17:44	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/11/13 17:44	1
2-Hexanone	ND		20	0.59	ug/L			07/11/13 17:44	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/11/13 17:44	1
Acetone	ND		20	6.7	ug/L			07/11/13 17:44	1
Benzene	0.33	J	5.0	0.25	ug/L			07/11/13 17:44	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/11/13 17:44	1
Bromoform	ND		5.0	0.37	ug/L			07/11/13 17:44	1
Bromomethane	ND		10	0.40	ug/L			07/11/13 17:44	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/11/13 17:44	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/11/13 17:44	1
Chlorobenzene	2.0	J	5.0	0.38	ug/L			07/11/13 17:44	1
Chloroethane	ND		10	0.38	ug/L			07/11/13 17:44	1
Chloroform	ND		5.0	0.15	ug/L			07/11/13 17:44	1
Chloromethane	ND		10	0.55	ug/L			07/11/13 17:44	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/11/13 17:44	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/11/13 17:44	1
Cyclohexane	ND		10	0.36	ug/L			07/11/13 17:44	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/11/13 17:44	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/11/13 17:44	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/11/13 17:44	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/11/13 17:44	1

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: D-3

Lab Sample ID: 160-2937-7

Date Collected: 07/09/13 13:42

Matrix: Water

Date Received: 07/10/13 08:27

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl acetate	ND		25	2.3	ug/L			07/11/13 17:44	1
Methyl tert-butyl ether	0.56	J	5.0	0.40	ug/L			07/11/13 17:44	1
Methylcyclohexane	ND		10	0.26	ug/L			07/11/13 17:44	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/11/13 17:44	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/11/13 17:44	1
o-Xylene	ND		5.0	0.32	ug/L			07/11/13 17:44	1
Styrene	ND		5.0	0.35	ug/L			07/11/13 17:44	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/11/13 17:44	1
Toluene	ND		5.0	1.0	ug/L			07/11/13 17:44	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/11/13 17:44	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/11/13 17:44	1
Trichloroethene	ND		5.0	0.29	ug/L			07/11/13 17:44	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/11/13 17:44	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/11/13 17:44	1
Xylenes, Total	ND		10	0.85	ug/L			07/11/13 17:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		82 - 132		07/11/13 17:44	1
4-Bromofluorobenzene (Surr)	96		82 - 121		07/11/13 17:44	1
Dibromofluoromethane (Surr)	104		85 - 119		07/11/13 17:44	1
Toluene-d8 (Surr)	98		85 - 115		07/11/13 17:44	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/11/13 15:15	07/12/13 20:14	1
Antimony	5.2	J	10	4.0	ug/L		07/11/13 15:15	07/12/13 20:14	1
Arsenic	3.8	J	10	2.0	ug/L		07/11/13 15:15	07/12/13 20:14	1
Barium	2600		50	4.0	ug/L		07/11/13 15:15	07/12/13 20:14	1
Beryllium	ND		5.0	0.61	ug/L		07/11/13 15:15	07/12/13 20:14	1
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 20:14	1
Calcium	240000	E	1000	110	ug/L		07/11/13 15:15	07/12/13 20:14	1
Calcium	290000	E	5000	530	ug/L		07/11/13 15:15	07/15/13 17:16	5
Calcium	27000		1000	110	ug/L		07/11/13 15:15	07/16/13 11:15	1
Chromium	ND		10	3.1	ug/L		07/11/13 15:15	07/12/13 20:14	1
Cobalt	6.1	J	50	4.0	ug/L		07/11/13 15:15	07/12/13 20:14	1
Copper	ND		25	4.6	ug/L		07/11/13 15:15	07/12/13 20:14	1
Iron	36000		100	28	ug/L		07/11/13 15:15	07/12/13 20:14	1
Iron	38000		500	140	ug/L		07/11/13 15:15	07/15/13 17:16	5
Lead	3.2	J	10	1.5	ug/L		07/11/13 15:15	07/12/13 20:14	1
Magnesium	78000	E	1000	130	ug/L		07/11/13 15:15	07/12/13 20:14	1
Magnesium	84000		5000	660	ug/L		07/11/13 15:15	07/15/13 17:16	5
Manganese	600		15	3.3	ug/L		07/11/13 15:15	07/12/13 20:14	1
Nickel	19	J	40	13	ug/L		07/11/13 15:15	07/12/13 20:14	1
Potassium	32000		5000	1700	ug/L		07/11/13 15:15	07/12/13 20:14	1
Selenium	ND		15	2.7	ug/L		07/11/13 15:15	07/12/13 20:14	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 20:14	1
Sodium	390000	E	1000	320	ug/L		07/11/13 15:15	07/12/13 20:14	1
Sodium	390000		5000	1600	ug/L		07/11/13 15:15	07/15/13 17:16	5
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 20:14	1
Vanadium	ND		50	4.1	ug/L		07/11/13 15:15	07/12/13 20:14	1

TestAmerica St. Louis

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: D-3

Lab Sample ID: 160-2937-7

Date Collected: 07/09/13 13:42

Matrix: Water

Date Received: 07/10/13 08:27

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	9.0	J B	20	5.2	ug/L		07/11/13 15:15	07/12/13 20:14	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/11/13 15:15	07/12/13 20:18	1
Antimony	ND		10	4.0	ug/L		07/11/13 15:15	07/12/13 20:18	1
Arsenic	3.3	J	10	2.0	ug/L		07/11/13 15:15	07/12/13 20:18	1
Barium	2600		50	4.0	ug/L		07/11/13 15:15	07/12/13 20:18	1
Beryllium	ND		5.0	0.61	ug/L		07/11/13 15:15	07/12/13 20:18	1
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 20:18	1
Calcium	230000	E	1000	110	ug/L		07/11/13 15:15	07/12/13 20:18	1
Calcium	280000	E	5000	530	ug/L		07/11/13 15:15	07/15/13 17:20	5
Calcium	27000		1000	110	ug/L		07/11/13 15:15	07/16/13 11:19	1
Chromium	ND		10	3.1	ug/L		07/11/13 15:15	07/12/13 20:18	1
Cobalt	5.6	J	50	4.0	ug/L		07/11/13 15:15	07/12/13 20:18	1
Copper	ND		25	4.6	ug/L		07/11/13 15:15	07/12/13 20:18	1
Iron	36000		100	28	ug/L		07/11/13 15:15	07/12/13 20:18	1
Iron	38000		500	140	ug/L		07/11/13 15:15	07/15/13 17:20	5
Lead	3.2	J	10	1.5	ug/L		07/11/13 15:15	07/12/13 20:18	1
Magnesium	79000	E	1000	130	ug/L		07/11/13 15:15	07/12/13 20:18	1
Magnesium	84000		5000	660	ug/L		07/11/13 15:15	07/15/13 17:20	5
Manganese	600		15	3.3	ug/L		07/11/13 15:15	07/12/13 20:18	1
Nickel	19	J	40	13	ug/L		07/11/13 15:15	07/12/13 20:18	1
Potassium	32000		5000	1700	ug/L		07/11/13 15:15	07/12/13 20:18	1
Selenium	ND		15	2.7	ug/L		07/11/13 15:15	07/12/13 20:18	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 20:18	1
Sodium	390000	E	1000	320	ug/L		07/11/13 15:15	07/12/13 20:18	1
Sodium	390000		5000	1600	ug/L		07/11/13 15:15	07/15/13 17:20	5
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 20:18	1
Vanadium	ND		50	4.1	ug/L		07/11/13 15:15	07/12/13 20:18	1
Zinc	5.2	J B	20	5.2	ug/L		07/11/13 15:15	07/12/13 20:18	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.071	J	0.20	0.060	ug/L		07/16/13 12:06	07/16/13 15:52	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:18	07/17/13 10:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.020	0.0040	mg/L			07/10/13 18:24	1
Sulfate	0.14	J	0.50	0.050	mg/L			07/10/13 18:24	1
Iodide	0.42	J	1.0	0.10	mg/L			07/16/13 06:07	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	14		5.0	0.50	mg/L			07/10/13 18:38	20
Alkalinity	1300	B	25	2.7	mg/L			07/19/13 13:59	5

TestAmerica St. Louis

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: D-3

Lab Sample ID: 160-2937-7

Date Collected: 07/09/13 13:42

Matrix: Water

Date Received: 07/10/13 08:27

General Chemistry - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	470		40	4.0	mg/L			07/10/13 18:53	200

Client Sample ID: P2-100-SD

Lab Sample ID: 160-2937-8

Date Collected: 07/09/13 14:32

Matrix: Water

Date Received: 07/10/13 08:27

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/11/13 18:10	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/11/13 18:10	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/11/13 18:10	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/11/13 18:10	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/11/13 18:10	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/11/13 18:10	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/11/13 18:10	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/11/13 18:10	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/11/13 18:10	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/11/13 18:10	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/11/13 18:10	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/11/13 18:10	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/11/13 18:10	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/11/13 18:10	1
2-Hexanone	ND		20	0.59	ug/L			07/11/13 18:10	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/11/13 18:10	1
Acetone	ND		20	6.7	ug/L			07/11/13 18:10	1
Benzene	ND		5.0	0.25	ug/L			07/11/13 18:10	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/11/13 18:10	1
Bromoform	ND		5.0	0.37	ug/L			07/11/13 18:10	1
Bromomethane	ND		10	0.40	ug/L			07/11/13 18:10	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/11/13 18:10	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/11/13 18:10	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/11/13 18:10	1
Chloroethane	ND		10	0.38	ug/L			07/11/13 18:10	1
Chloroform	ND		5.0	0.15	ug/L			07/11/13 18:10	1
Chloromethane	ND		10	0.55	ug/L			07/11/13 18:10	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/11/13 18:10	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/11/13 18:10	1
Cyclohexane	ND		10	0.36	ug/L			07/11/13 18:10	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/11/13 18:10	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/11/13 18:10	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/11/13 18:10	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/11/13 18:10	1
Methyl acetate	ND		25	2.3	ug/L			07/11/13 18:10	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/11/13 18:10	1
Methylcyclohexane	ND		10	0.26	ug/L			07/11/13 18:10	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/11/13 18:10	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/11/13 18:10	1
o-Xylene	ND		5.0	0.32	ug/L			07/11/13 18:10	1
Styrene	ND		5.0	0.35	ug/L			07/11/13 18:10	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/11/13 18:10	1

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TestAmerica St. Louis

Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: P2-100-SD

Lab Sample ID: 160-2937-8

Date Collected: 07/09/13 14:32

Matrix: Water

Date Received: 07/10/13 08:27

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		5.0	1.0	ug/L			07/11/13 18:10	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/11/13 18:10	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/11/13 18:10	1
Trichloroethene	ND		5.0	0.29	ug/L			07/11/13 18:10	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/11/13 18:10	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/11/13 18:10	1
Xylenes, Total	ND		10	0.85	ug/L			07/11/13 18:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		82 - 132		07/11/13 18:10	1
4-Bromofluorobenzene (Surr)	100		82 - 121		07/11/13 18:10	1
Dibromofluoromethane (Surr)	104		85 - 119		07/11/13 18:10	1
Toluene-d8 (Surr)	102		85 - 115		07/11/13 18:10	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/11/13 15:15	07/12/13 20:22	1
Antimony	ND		10	4.0	ug/L		07/11/13 15:15	07/12/13 20:22	1
Arsenic	ND		10	2.0	ug/L		07/11/13 15:15	07/12/13 20:22	1
Barium	330		50	4.0	ug/L		07/11/13 15:15	07/12/13 20:22	1
Beryllium	ND		5.0	0.61	ug/L		07/11/13 15:15	07/12/13 20:22	1
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 20:22	1
Calcium	81000	E	1000	110	ug/L		07/11/13 15:15	07/12/13 20:22	1
Calcium	88000		5000	530	ug/L		07/11/13 15:15	07/15/13 17:23	5
Chromium	ND		10	3.1	ug/L		07/11/13 15:15	07/12/13 20:22	1
Cobalt	ND		50	4.0	ug/L		07/11/13 15:15	07/12/13 20:22	1
Copper	ND		25	4.6	ug/L		07/11/13 15:15	07/12/13 20:22	1
Iron	850		100	28	ug/L		07/11/13 15:15	07/12/13 20:22	1
Lead	1.8	J	10	1.5	ug/L		07/11/13 15:15	07/12/13 20:22	1
Magnesium	36000		1000	130	ug/L		07/11/13 15:15	07/12/13 20:22	1
Manganese	67		15	3.3	ug/L		07/11/13 15:15	07/12/13 20:22	1
Nickel	ND		40	13	ug/L		07/11/13 15:15	07/12/13 20:22	1
Potassium	2400	J	5000	1700	ug/L		07/11/13 15:15	07/12/13 20:22	1
Selenium	ND		15	2.7	ug/L		07/11/13 15:15	07/12/13 20:22	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 20:22	1
Sodium	6700		1000	320	ug/L		07/11/13 15:15	07/12/13 20:22	1
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 20:22	1
Vanadium	ND		50	4.1	ug/L		07/11/13 15:15	07/12/13 20:22	1
Zinc	6.8	J B	20	5.2	ug/L		07/11/13 15:15	07/12/13 20:22	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/11/13 15:15	07/12/13 20:26	1
Antimony	ND		10	4.0	ug/L		07/11/13 15:15	07/12/13 20:26	1
Arsenic	2.3	J	10	2.0	ug/L		07/11/13 15:15	07/12/13 20:26	1
Barium	330		50	4.0	ug/L		07/11/13 15:15	07/12/13 20:26	1
Beryllium	ND		5.0	0.61	ug/L		07/11/13 15:15	07/12/13 20:26	1
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 20:26	1
Calcium	80000	E	1000	110	ug/L		07/11/13 15:15	07/12/13 20:26	1
Calcium	84000		5000	530	ug/L		07/11/13 15:15	07/15/13 17:27	5

TestAmerica St. Louis

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: P2-100-SD

Lab Sample ID: 160-2937-8

Date Collected: 07/09/13 14:32

Matrix: Water

Date Received: 07/10/13 08:27

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		10	3.1	ug/L		07/11/13 15:15	07/12/13 20:26	1
Cobalt	ND		50	4.0	ug/L		07/11/13 15:15	07/12/13 20:26	1
Copper	ND		25	4.6	ug/L		07/11/13 15:15	07/12/13 20:26	1
Iron	820		100	28	ug/L		07/11/13 15:15	07/12/13 20:26	1
Lead	1.8	J	10	1.5	ug/L		07/11/13 15:15	07/12/13 20:26	1
Magnesium	36000		1000	130	ug/L		07/11/13 15:15	07/12/13 20:26	1
Manganese	66		15	3.3	ug/L		07/11/13 15:15	07/12/13 20:26	1
Nickel	ND		40	13	ug/L		07/11/13 15:15	07/12/13 20:26	1
Potassium	2300	J	5000	1700	ug/L		07/11/13 15:15	07/12/13 20:26	1
Selenium	ND		15	2.7	ug/L		07/11/13 15:15	07/12/13 20:26	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 20:26	1
Sodium	6200		1000	320	ug/L		07/11/13 15:15	07/12/13 20:26	1
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 20:26	1
Vanadium	ND		50	4.1	ug/L		07/11/13 15:15	07/12/13 20:26	1
Zinc	21	B	20	5.2	ug/L		07/11/13 15:15	07/12/13 20:26	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:06	07/16/13 15:54	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:18	07/17/13 10:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.020	0.0040	mg/L			07/10/13 19:07	1
Chloride	1.7		0.20	0.020	mg/L			07/10/13 19:07	1
Bromide	ND		0.25	0.025	mg/L			07/10/13 19:07	1
Sulfate	9.8		0.50	0.050	mg/L			07/10/13 19:07	1
Iodide	ND		1.0	0.10	mg/L			07/16/13 06:22	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	1800	B	25	2.7	mg/L			07/19/13 13:59	5

Client Sample ID: P2-112-AS

Lab Sample ID: 160-2937-9

Date Collected: 07/09/13 14:46

Matrix: Water

Date Received: 07/10/13 08:27

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/11/13 18:36	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/11/13 18:36	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/11/13 18:36	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/11/13 18:36	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/11/13 18:36	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/11/13 18:36	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/11/13 18:36	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/11/13 18:36	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/11/13 18:36	1

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: P2-112-AS

Lab Sample ID: 160-2937-9

Date Collected: 07/09/13 14:46

Matrix: Water

Date Received: 07/10/13 08:27

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/11/13 18:36	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/11/13 18:36	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/11/13 18:36	1
1,4-Dichlorobenzene	22		5.0	0.35	ug/L			07/11/13 18:36	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/11/13 18:36	1
2-Hexanone	ND		20	0.59	ug/L			07/11/13 18:36	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/11/13 18:36	1
Acetone	ND		20	6.7	ug/L			07/11/13 18:36	1
Benzene	32		5.0	0.25	ug/L			07/11/13 18:36	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/11/13 18:36	1
Bromoform	ND		5.0	0.37	ug/L			07/11/13 18:36	1
Bromomethane	ND		10	0.40	ug/L			07/11/13 18:36	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/11/13 18:36	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/11/13 18:36	1
Chlorobenzene	3500		100	7.6	ug/L			07/16/13 12:45	1
Chloroethane	ND		10	0.38	ug/L			07/11/13 18:36	1
Chloroform	ND		5.0	0.15	ug/L			07/11/13 18:36	1
Chloromethane	ND		10	0.55	ug/L			07/11/13 18:36	1
cis-1,2-Dichloroethene	0.23	J	5.0	0.16	ug/L			07/11/13 18:36	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/11/13 18:36	1
Cyclohexane	0.46	J	10	0.36	ug/L			07/11/13 18:36	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/11/13 18:36	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/11/13 18:36	1
Ethylbenzene	1.0	J	5.0	0.30	ug/L			07/11/13 18:36	1
Isopropylbenzene	2.0	J	5.0	0.26	ug/L			07/11/13 18:36	1
Methyl acetate	ND		25	2.3	ug/L			07/11/13 18:36	1
Methyl tert-butyl ether	0.62	J	5.0	0.40	ug/L			07/11/13 18:36	1
Methylcyclohexane	ND		10	0.26	ug/L			07/11/13 18:36	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/11/13 18:36	1
m-Xylene & p-Xylene	0.60	J	5.0	0.57	ug/L			07/11/13 18:36	1
o-Xylene	0.38	J	5.0	0.32	ug/L			07/11/13 18:36	1
Styrene	ND		5.0	0.35	ug/L			07/11/13 18:36	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/11/13 18:36	1
Toluene	ND		5.0	1.0	ug/L			07/11/13 18:36	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/11/13 18:36	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/11/13 18:36	1
Trichloroethene	ND		5.0	0.29	ug/L			07/11/13 18:36	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/11/13 18:36	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/11/13 18:36	1
Xylenes, Total	0.98	J	10	0.85	ug/L			07/11/13 18:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		82 - 132		07/11/13 18:36	1
1,2-Dichloroethane-d4 (Surr)	115		82 - 132		07/16/13 12:45	1
4-Bromofluorobenzene (Surr)	100		82 - 121		07/11/13 18:36	1
4-Bromofluorobenzene (Surr)	106		82 - 121		07/16/13 12:45	1
Dibromofluoromethane (Surr)	103		85 - 119		07/11/13 18:36	1
Dibromofluoromethane (Surr)	103		85 - 119		07/16/13 12:45	1
Toluene-d8 (Surr)	100		85 - 115		07/11/13 18:36	1
Toluene-d8 (Surr)	99		85 - 115		07/16/13 12:45	1

TestAmerica St. Louis

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: P2-112-AS

Lab Sample ID: 160-2937-9

Date Collected: 07/09/13 14:46

Matrix: Water

Date Received: 07/10/13 08:27

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	130	J	200	80	ug/L		07/11/13 15:15	07/12/13 20:38	1
Antimony	4.2	J	10	4.0	ug/L		07/11/13 15:15	07/12/13 20:38	1
Arsenic	190		10	2.0	ug/L		07/11/13 15:15	07/12/13 20:38	1
Barium	2400		50	4.0	ug/L		07/11/13 15:15	07/12/13 20:38	1
Beryllium	0.70	J	5.0	0.61	ug/L		07/11/13 15:15	07/12/13 20:38	1
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 20:38	1
Calcium	110000	E	1000	110	ug/L		07/11/13 15:15	07/12/13 20:38	1
Calcium	130000		5000	530	ug/L		07/11/13 15:15	07/15/13 17:31	5
Chromium	ND		10	3.1	ug/L		07/11/13 15:15	07/12/13 20:38	1
Cobalt	ND		50	4.0	ug/L		07/11/13 15:15	07/12/13 20:38	1
Copper	ND		25	4.6	ug/L		07/11/13 15:15	07/12/13 20:38	1
Iron	36000		100	28	ug/L		07/11/13 15:15	07/12/13 20:38	1
Iron	38000		500	140	ug/L		07/11/13 15:15	07/15/13 17:31	5
Lead	4.4	J	10	1.5	ug/L		07/11/13 15:15	07/12/13 20:38	1
Magnesium	67000	E	1000	130	ug/L		07/11/13 15:15	07/12/13 20:38	1
Magnesium	70000		5000	660	ug/L		07/11/13 15:15	07/15/13 17:31	5
Manganese	200		15	3.3	ug/L		07/11/13 15:15	07/12/13 20:38	1
Nickel	14	J	40	13	ug/L		07/11/13 15:15	07/12/13 20:38	1
Potassium	65000		5000	1700	ug/L		07/11/13 15:15	07/12/13 20:38	1
Selenium	ND		15	2.7	ug/L		07/11/13 15:15	07/12/13 20:38	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 20:38	1
Sodium	100000	E	1000	320	ug/L		07/11/13 15:15	07/12/13 20:38	1
Sodium	99000		5000	1600	ug/L		07/11/13 15:15	07/15/13 17:31	5
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 20:38	1
Vanadium	ND		50	4.1	ug/L		07/11/13 15:15	07/12/13 20:38	1
Zinc	10	J B	20	5.2	ug/L		07/11/13 15:15	07/12/13 20:38	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/11/13 15:15	07/12/13 20:41	1
Antimony	4.5	J	10	4.0	ug/L		07/11/13 15:15	07/12/13 20:41	1
Arsenic	190		10	2.0	ug/L		07/11/13 15:15	07/12/13 20:41	1
Barium	2300		50	4.0	ug/L		07/11/13 15:15	07/12/13 20:41	1
Beryllium	ND		5.0	0.61	ug/L		07/11/13 15:15	07/12/13 20:41	1
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 20:41	1
Calcium	120000	E	1000	110	ug/L		07/11/13 15:15	07/12/13 20:41	1
Calcium	130000		5000	530	ug/L		07/11/13 15:15	07/15/13 17:35	5
Chromium	4.1	J	10	3.1	ug/L		07/11/13 15:15	07/12/13 20:41	1
Cobalt	ND		50	4.0	ug/L		07/11/13 15:15	07/12/13 20:41	1
Copper	ND		25	4.6	ug/L		07/11/13 15:15	07/12/13 20:41	1
Iron	36000		100	28	ug/L		07/11/13 15:15	07/12/13 20:41	1
Iron	38000		500	140	ug/L		07/11/13 15:15	07/15/13 17:35	5
Lead	3.0	J	10	1.5	ug/L		07/11/13 15:15	07/12/13 20:41	1
Magnesium	67000	E	1000	130	ug/L		07/11/13 15:15	07/12/13 20:41	1
Magnesium	69000		5000	660	ug/L		07/11/13 15:15	07/15/13 17:35	5
Manganese	200		15	3.3	ug/L		07/11/13 15:15	07/12/13 20:41	1
Nickel	14	J	40	13	ug/L		07/11/13 15:15	07/12/13 20:41	1
Potassium	64000		5000	1700	ug/L		07/11/13 15:15	07/12/13 20:41	1
Selenium	3.3	J	15	2.7	ug/L		07/11/13 15:15	07/12/13 20:41	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 20:41	1

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: P2-112-AS

Lab Sample ID: 160-2937-9

Date Collected: 07/09/13 14:46

Matrix: Water

Date Received: 07/10/13 08:27

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	99000		1000	320	ug/L		07/11/13 15:15	07/12/13 20:41	1
Sodium	96000		5000	1600	ug/L		07/11/13 15:15	07/15/13 17:35	5
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 20:41	1
Vanadium	ND		50	4.1	ug/L		07/11/13 15:15	07/12/13 20:41	1
Zinc	7.4	J B	20	5.2	ug/L		07/11/13 15:15	07/12/13 20:41	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:06	07/16/13 15:55	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:18	07/17/13 10:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.045		0.020	0.0040	mg/L			07/10/13 20:05	1
Bromide	0.59		0.25	0.025	mg/L			07/10/13 20:05	1
Sulfate	0.15	J	0.50	0.050	mg/L			07/10/13 20:05	1
Iodide	0.13	J	1.0	0.10	mg/L			07/16/13 06:37	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	1200	B	25	2.7	mg/L			07/19/13 13:59	5

General Chemistry - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		20	2.0	mg/L			07/10/13 20:34	100

Client Sample ID: DUPLICATE 01

Lab Sample ID: 160-2937-10

Date Collected: 07/09/13 00:00

Matrix: Water

Date Received: 07/10/13 08:27

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/11/13 19:02	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/11/13 19:02	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/11/13 19:02	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/11/13 19:02	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/11/13 19:02	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/11/13 19:02	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/11/13 19:02	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/11/13 19:02	1
1,2-Dichlorobenzene	3.3	J	5.0	0.28	ug/L			07/11/13 19:02	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/11/13 19:02	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/11/13 19:02	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/11/13 19:02	1
1,4-Dichlorobenzene	8.7		5.0	0.35	ug/L			07/11/13 19:02	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/11/13 19:02	1
2-Hexanone	ND		20	0.59	ug/L			07/11/13 19:02	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/11/13 19:02	1

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: DUPLICATE 01

Lab Sample ID: 160-2937-10

Date Collected: 07/09/13 00:00

Matrix: Water

Date Received: 07/10/13 08:27

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			07/11/13 19:02	1
Benzene	5.2		5.0	0.25	ug/L			07/11/13 19:02	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/11/13 19:02	1
Bromoform	ND		5.0	0.37	ug/L			07/11/13 19:02	1
Bromomethane	ND		10	0.40	ug/L			07/11/13 19:02	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/11/13 19:02	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/11/13 19:02	1
Chlorobenzene	15		5.0	0.38	ug/L			07/15/13 14:43	1
Chloroethane	ND		10	0.38	ug/L			07/11/13 19:02	1
Chloroform	ND		5.0	0.15	ug/L			07/11/13 19:02	1
Chloromethane	ND		10	0.55	ug/L			07/11/13 19:02	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/11/13 19:02	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/11/13 19:02	1
Cyclohexane	ND		10	0.36	ug/L			07/11/13 19:02	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/11/13 19:02	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/11/13 19:02	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/11/13 19:02	1
Isopropylbenzene	4.4 J		5.0	0.26	ug/L			07/11/13 19:02	1
Methyl acetate	ND		25	2.3	ug/L			07/11/13 19:02	1
Methyl tert-butyl ether	0.49 J		5.0	0.40	ug/L			07/11/13 19:02	1
Methylcyclohexane	ND		10	0.26	ug/L			07/11/13 19:02	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/11/13 19:02	1
m-Xylene & p-Xylene	3.7 J		5.0	0.57	ug/L			07/11/13 19:02	1
o-Xylene	1.4 J		5.0	0.32	ug/L			07/11/13 19:02	1
Styrene	ND		5.0	0.35	ug/L			07/11/13 19:02	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/11/13 19:02	1
Toluene	ND		5.0	1.0	ug/L			07/11/13 19:02	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/11/13 19:02	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/11/13 19:02	1
Trichloroethene	ND		5.0	0.29	ug/L			07/11/13 19:02	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/11/13 19:02	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/11/13 19:02	1
Xylenes, Total	5.1 J		10	0.85	ug/L			07/11/13 19:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		82 - 132		07/11/13 19:02	1
1,2-Dichloroethane-d4 (Surr)	99		82 - 132		07/15/13 14:43	1
4-Bromofluorobenzene (Surr)	100		82 - 121		07/11/13 19:02	1
4-Bromofluorobenzene (Surr)	96		82 - 121		07/15/13 14:43	1
Dibromofluoromethane (Surr)	100		85 - 119		07/11/13 19:02	1
Dibromofluoromethane (Surr)	99		85 - 119		07/15/13 14:43	1
Toluene-d8 (Surr)	99		85 - 115		07/11/13 19:02	1
Toluene-d8 (Surr)	101		85 - 115		07/15/13 14:43	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/11/13 15:15	07/12/13 20:45	1
Antimony	ND		10	4.0	ug/L		07/11/13 15:15	07/12/13 20:45	1
Arsenic	14		10	2.0	ug/L		07/11/13 15:15	07/12/13 20:45	1
Barium	600		50	4.0	ug/L		07/11/13 15:15	07/12/13 20:45	1

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: DUPLICATE 01

Lab Sample ID: 160-2937-10

Date Collected: 07/09/13 00:00

Matrix: Water

Date Received: 07/10/13 08:27

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		5.0	0.61	ug/L		07/11/13 15:15	07/12/13 20:45	1
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 20:45	1
Calcium	110000	E	1000	110	ug/L		07/11/13 15:15	07/12/13 20:45	1
Calcium	130000		5000	530	ug/L		07/11/13 15:15	07/15/13 17:39	5
Chromium	ND		10	3.1	ug/L		07/11/13 15:15	07/12/13 20:45	1
Cobalt	11	J	50	4.0	ug/L		07/11/13 15:15	07/12/13 20:45	1
Copper	ND		25	4.6	ug/L		07/11/13 15:15	07/12/13 20:45	1
Iron	29000		100	28	ug/L		07/11/13 15:15	07/12/13 20:45	1
Iron	32000		500	140	ug/L		07/11/13 15:15	07/15/13 17:39	5
Lead	4.0	J	10	1.5	ug/L		07/11/13 15:15	07/12/13 20:45	1
Magnesium	64000	E	1000	130	ug/L		07/11/13 15:15	07/12/13 20:45	1
Magnesium	70000		5000	660	ug/L		07/11/13 15:15	07/15/13 17:39	5
Manganese	480		15	3.3	ug/L		07/11/13 15:15	07/12/13 20:45	1
Nickel	18	J	40	13	ug/L		07/11/13 15:15	07/12/13 20:45	1
Potassium	120000	E	5000	1700	ug/L		07/11/13 15:15	07/12/13 20:45	1
Potassium	120000		25000	8300	ug/L		07/11/13 15:15	07/15/13 17:39	5
Selenium	ND		15	2.7	ug/L		07/11/13 15:15	07/12/13 20:45	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 20:45	1
Sodium	230000	E	1000	320	ug/L		07/11/13 15:15	07/12/13 20:45	1
Sodium	240000		5000	1600	ug/L		07/11/13 15:15	07/15/13 17:39	5
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 20:45	1
Vanadium	ND		50	4.1	ug/L		07/11/13 15:15	07/12/13 20:45	1
Zinc	9.8	J B	20	5.2	ug/L		07/11/13 15:15	07/12/13 20:45	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/11/13 15:15	07/12/13 20:49	1
Antimony	ND		10	4.0	ug/L		07/11/13 15:15	07/12/13 20:49	1
Arsenic	13		10	2.0	ug/L		07/11/13 15:15	07/12/13 20:49	1
Barium	620		50	4.0	ug/L		07/11/13 15:15	07/12/13 20:49	1
Beryllium	ND		5.0	0.61	ug/L		07/11/13 15:15	07/12/13 20:49	1
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 20:49	1
Calcium	110000	E	1000	110	ug/L		07/11/13 15:15	07/12/13 20:49	1
Calcium	120000		5000	530	ug/L		07/11/13 15:15	07/15/13 17:43	5
Chromium	3.8	J	10	3.1	ug/L		07/11/13 15:15	07/12/13 20:49	1
Cobalt	6.3	J	50	4.0	ug/L		07/11/13 15:15	07/12/13 20:49	1
Copper	ND		25	4.6	ug/L		07/11/13 15:15	07/12/13 20:49	1
Iron	29000		100	28	ug/L		07/11/13 15:15	07/12/13 20:49	1
Iron	29000		500	140	ug/L		07/11/13 15:15	07/15/13 17:43	5
Lead	3.6	J	10	1.5	ug/L		07/11/13 15:15	07/12/13 20:49	1
Magnesium	65000	E	1000	130	ug/L		07/11/13 15:15	07/12/13 20:49	1
Magnesium	66000		5000	660	ug/L		07/11/13 15:15	07/15/13 17:43	5
Manganese	470		15	3.3	ug/L		07/11/13 15:15	07/12/13 20:49	1
Nickel	19	J	40	13	ug/L		07/11/13 15:15	07/12/13 20:49	1
Potassium	130000	E	5000	1700	ug/L		07/11/13 15:15	07/12/13 20:49	1
Potassium	120000		25000	8300	ug/L		07/11/13 15:15	07/15/13 17:43	5
Selenium	ND		15	2.7	ug/L		07/11/13 15:15	07/12/13 20:49	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 20:49	1
Sodium	240000	E	1000	320	ug/L		07/11/13 15:15	07/12/13 20:49	1
Sodium	230000		5000	1600	ug/L		07/11/13 15:15	07/15/13 17:43	5

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: DUPLICATE 01

Lab Sample ID: 160-2937-10

Date Collected: 07/09/13 00:00

Matrix: Water

Date Received: 07/10/13 08:27

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 20:49	1
Vanadium	ND		50	4.1	ug/L		07/11/13 15:15	07/12/13 20:49	1
Zinc	12	J B	20	5.2	ug/L		07/11/13 15:15	07/12/13 20:49	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:06	07/16/13 15:57	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:18	07/17/13 10:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.13		0.020	0.0040	mg/L			07/10/13 17:12	1
Bromide	3.2		0.25	0.025	mg/L			07/10/13 17:12	1
Sulfate	0.14	J	0.50	0.050	mg/L			07/10/13 17:12	1
Iodide	0.15	J	1.0	0.10	mg/L			07/16/13 06:52	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	1400	B	25	2.7	mg/L			07/19/13 13:59	5

General Chemistry - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		20	2.0	mg/L			07/10/13 17:41	100

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2937-11

Date Collected: 07/09/13 00:00

Matrix: Water

Date Received: 07/10/13 08:27

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/11/13 10:46	1
1,1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/11/13 10:46	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/11/13 10:46	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/11/13 10:46	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/11/13 10:46	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/11/13 10:46	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/11/13 10:46	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/11/13 10:46	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/11/13 10:46	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/11/13 10:46	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/11/13 10:46	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/11/13 10:46	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/11/13 10:46	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/11/13 10:46	1
2-Hexanone	ND		20	0.59	ug/L			07/11/13 10:46	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/11/13 10:46	1
Acetone	ND		20	6.7	ug/L			07/11/13 10:46	1
Benzene	ND		5.0	0.25	ug/L			07/11/13 10:46	1

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Client Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2937-11

Date Collected: 07/09/13 00:00

Matrix: Water

Date Received: 07/10/13 08:27

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		5.0	0.25	ug/L			07/11/13 10:46	1
Bromoform	ND		5.0	0.37	ug/L			07/11/13 10:46	1
Bromomethane	ND		10	0.40	ug/L			07/11/13 10:46	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/11/13 10:46	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/11/13 10:46	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/11/13 10:46	1
Chloroethane	ND		10	0.38	ug/L			07/11/13 10:46	1
Chloroform	ND		5.0	0.15	ug/L			07/11/13 10:46	1
Chloromethane	ND		10	0.55	ug/L			07/11/13 10:46	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/11/13 10:46	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/11/13 10:46	1
Cyclohexane	ND		10	0.36	ug/L			07/11/13 10:46	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/11/13 10:46	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/11/13 10:46	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/11/13 10:46	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/11/13 10:46	1
Methyl acetate	ND		25	2.3	ug/L			07/11/13 10:46	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/11/13 10:46	1
Methylcyclohexane	ND		10	0.26	ug/L			07/11/13 10:46	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/11/13 10:46	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/11/13 10:46	1
o-Xylene	ND		5.0	0.32	ug/L			07/11/13 10:46	1
Styrene	ND		5.0	0.35	ug/L			07/11/13 10:46	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/11/13 10:46	1
Toluene	ND		5.0	1.0	ug/L			07/11/13 10:46	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/11/13 10:46	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/11/13 10:46	1
Trichloroethene	ND		5.0	0.29	ug/L			07/11/13 10:46	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/11/13 10:46	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/11/13 10:46	1
Xylenes, Total	ND		10	0.85	ug/L			07/11/13 10:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		82 - 132		07/11/13 10:46	1
4-Bromofluorobenzene (Surr)	98		82 - 121		07/11/13 10:46	1
Dibromofluoromethane (Surr)	102		85 - 119		07/11/13 10:46	1
Toluene-d8 (Surr)	100		85 - 115		07/11/13 10:46	1

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QC Sample Results

Client: Engineering Management Support, Inc.
 Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 160-60374/2

Matrix: Water

Analysis Batch: 60374

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/11/13 10:19	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/11/13 10:19	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/11/13 10:19	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/11/13 10:19	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/11/13 10:19	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/11/13 10:19	1
Acetone	ND		20	6.7	ug/L			07/11/13 10:19	1
Benzene	ND		5.0	0.25	ug/L			07/11/13 10:19	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/11/13 10:19	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/11/13 10:19	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/11/13 10:19	1
Bromoform	ND		5.0	0.37	ug/L			07/11/13 10:19	1
Bromomethane	ND		10	0.40	ug/L			07/11/13 10:19	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/11/13 10:19	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/11/13 10:19	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/11/13 10:19	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/11/13 10:19	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/11/13 10:19	1
Chloroethane	ND		10	0.38	ug/L			07/11/13 10:19	1
Chloroform	ND		5.0	0.15	ug/L			07/11/13 10:19	1
Chloromethane	ND		10	0.55	ug/L			07/11/13 10:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.25	ug/L			07/11/13 10:19	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/11/13 10:19	1
2-Hexanone	ND		20	0.59	ug/L			07/11/13 10:19	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/11/13 10:19	1
Cyclohexane	ND		10	0.36	ug/L			07/11/13 10:19	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/11/13 10:19	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/11/13 10:19	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/11/13 10:19	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/11/13 10:19	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/11/13 10:19	1
Methyl acetate	ND		25	2.3	ug/L			07/11/13 10:19	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/11/13 10:19	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/11/13 10:19	1
Methylcyclohexane	ND		10	0.26	ug/L			07/11/13 10:19	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/11/13 10:19	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/11/13 10:19	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/11/13 10:19	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/11/13 10:19	1
Styrene	ND		5.0	0.35	ug/L			07/11/13 10:19	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/11/13 10:19	1
Toluene	ND		5.0	1.0	ug/L			07/11/13 10:19	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/11/13 10:19	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/11/13 10:19	1
o-Xylene	ND		5.0	0.32	ug/L			07/11/13 10:19	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/11/13 10:19	1
Trichloroethene	ND		5.0	0.29	ug/L			07/11/13 10:19	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/11/13 10:19	1

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QC Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

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

Lab Sample ID: MB 160-60374/2

Matrix: Water

Analysis Batch: 60374

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		5.0	0.43	ug/L			07/11/13 10:19	1
Xylenes, Total	ND		10	0.85	ug/L			07/11/13 10:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		82 - 121		07/11/13 10:19	1
1,2-Dichloroethane-d4 (Surr)	98		82 - 132		07/11/13 10:19	1
Toluene-d8 (Surr)	98		85 - 115		07/11/13 10:19	1
Dibromofluoromethane (Surr)	100		85 - 119		07/11/13 10:19	1

Lab Sample ID: LCS 160-60374/4

Matrix: Water

Analysis Batch: 60374

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	50.0	48.6		ug/L		97	71 - 123
2-Butanone (MEK)	50.0	49.8		ug/L		100	71 - 123
1,2-Dibromoethane (EDB)	50.0	49.3		ug/L		99	85 - 115
1,2-Dichlorobenzene	50.0	50.7		ug/L		101	85 - 115
1,3-Dichlorobenzene	50.0	49.7		ug/L		99	85 - 115
1,4-Dichlorobenzene	50.0	47.9		ug/L		96	85 - 115
Acetone	50.0	53.4		ug/L		107	51 - 140
Benzene	50.0	48.6		ug/L		97	85 - 115
1,1-Dichloroethane	50.0	49.0		ug/L		98	85 - 115
Bromodichloromethane	50.0	51.2		ug/L		102	85 - 117
1,2-Dichloroethane	50.0	52.9		ug/L		106	79 - 122
Bromoform	50.0	48.9		ug/L		98	85 - 115
Bromomethane	50.0	54.2		ug/L		108	70 - 135
Carbon disulfide	50.0	51.7		ug/L		103	85 - 123
1,1-Dichloroethene	50.0	50.3		ug/L		101	85 - 118
Carbon tetrachloride	50.0	50.3		ug/L		101	85 - 118
1,2-Dichloropropane	50.0	48.5		ug/L		97	85 - 115
Chlorobenzene	50.0	49.8		ug/L		100	85 - 115
Chloroethane	50.0	55.8		ug/L		112	75 - 125
Chloroform	50.0	50.8		ug/L		102	85 - 115
Chloromethane	50.0	52.0		ug/L		104	73 - 132
cis-1,2-Dichloroethene	50.0	47.7		ug/L		95	85 - 115
2-Hexanone	50.0	49.5		ug/L		99	66 - 121
cis-1,3-Dichloropropene	50.0	48.9		ug/L		98	85 - 127
Cyclohexane	50.0	51.0		ug/L		102	73 - 115
Dibromochloromethane	50.0	47.5		ug/L		95	85 - 115
Dichlorodifluoromethane	50.0	56.7		ug/L		113	62 - 115
4-Methyl-2-pentanone (MIBK)	50.0	55.6		ug/L		111	74 - 123
Ethylbenzene	50.0	50.1		ug/L		100	85 - 115
Isopropylbenzene	50.0	49.9		ug/L		100	85 - 124
Methyl acetate	250	268		ug/L		107	73 - 135
1,1,2,2-Tetrachloroethane	50.0	50.8		ug/L		102	84 - 115
Methyl tert-butyl ether	50.0	52.0		ug/L		104	73 - 115
Methylcyclohexane	50.0	51.2		ug/L		102	85 - 134

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QC Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

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

Lab Sample ID: LCS 160-60374/4

Matrix: Water

Analysis Batch: 60374

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	50.0	47.8		ug/L		96	84 - 115
1,2,4-Trichlorobenzene	50.0	49.2		ug/L		98	75 - 124
1,1,1-Trichloroethane	50.0	51.6		ug/L		103	85 - 115
1,1,2-Trichloroethane	50.0	49.3		ug/L		99	85 - 115
Styrene	50.0	50.9		ug/L		102	85 - 115
Tetrachloroethene	50.0	49.6		ug/L		99	85 - 115
Toluene	50.0	48.1		ug/L		96	85 - 115
m-Xylene & p-Xylene	50.0	50.8		ug/L		102	85 - 115
trans-1,2-Dichloroethene	50.0	47.7		ug/L		95	85 - 115
o-Xylene	50.0	49.5		ug/L		99	85 - 115
trans-1,3-Dichloropropene	50.0	45.7		ug/L		91	85 - 123
Trichloroethene	50.0	50.0		ug/L		100	85 - 115
Trichlorofluoromethane	50.0	51.2		ug/L		102	85 - 116
Vinyl chloride	50.0	49.2		ug/L		98	68 - 133
Xylenes, Total	100	100		ug/L		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		82 - 121
1,2-Dichloroethane-d4 (Surr)	103		82 - 132
Toluene-d8 (Surr)	98		85 - 115
Dibromofluoromethane (Surr)	99		85 - 119

Lab Sample ID: LCSD 160-60374/5

Matrix: Water

Analysis Batch: 60374

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
1,2-Dibromo-3-Chloropropane	50.0	50.5		ug/L		101	71 - 123	4	20
2-Butanone (MEK)	50.0	47.9		ug/L		96	71 - 123	4	20
1,2-Dibromoethane (EDB)	50.0	49.2		ug/L		98	85 - 115	0	20
1,2-Dichlorobenzene	50.0	51.6		ug/L		103	85 - 115	2	20
1,3-Dichlorobenzene	50.0	50.3		ug/L		101	85 - 115	1	20
1,4-Dichlorobenzene	50.0	48.8		ug/L		98	85 - 115	2	20
Acetone	50.0	49.9		ug/L		100	51 - 140	7	20
Benzene	50.0	51.1		ug/L		102	85 - 115	5	20
1,1-Dichloroethane	50.0	49.4		ug/L		99	85 - 115	1	20
Bromodichloromethane	50.0	51.7		ug/L		103	85 - 117	1	20
1,2-Dichloroethane	50.0	49.7		ug/L		99	79 - 122	6	20
Bromoform	50.0	49.0		ug/L		98	85 - 115	0	20
Bromomethane	50.0	56.9		ug/L		114	70 - 135	5	20
Carbon disulfide	50.0	51.5		ug/L		103	85 - 123	0	20
1,1-Dichloroethene	50.0	51.0		ug/L		102	85 - 118	1	20
Carbon tetrachloride	50.0	49.7		ug/L		99	85 - 118	1	20
1,2-Dichloropropane	50.0	51.2		ug/L		102	85 - 115	5	20
Chlorobenzene	50.0	51.2		ug/L		102	85 - 115	3	20
Chloroethane	50.0	56.0		ug/L		112	75 - 125	0	20
Chloroform	50.0	49.7		ug/L		99	85 - 115	2	20
Chloromethane	50.0	51.6		ug/L		103	73 - 132	1	20

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QC Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

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

Lab Sample ID: LCSD 160-60374/5

Matrix: Water

Analysis Batch: 60374

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
cis-1,2-Dichloroethene	50.0	49.9		ug/L		100	85 - 115	4	20
2-Hexanone	50.0	52.7		ug/L		105	66 - 121	6	20
cis-1,3-Dichloropropene	50.0	49.5		ug/L		99	85 - 127	1	20
Cyclohexane	50.0	50.8		ug/L		102	73 - 115	0	20
Dibromochloromethane	50.0	47.3		ug/L		95	85 - 115	0	20
Dichlorodifluoromethane	50.0	56.3		ug/L		113	62 - 115	1	20
4-Methyl-2-pentanone (MIBK)	50.0	52.9		ug/L		106	74 - 123	5	20
Ethylbenzene	50.0	51.4		ug/L		103	85 - 115	3	20
Isopropylbenzene	50.0	52.6		ug/L		105	85 - 124	5	20
Methyl acetate	250	267		ug/L		107	73 - 135	0	20
1,1,1,2-Tetrachloroethane	50.0	50.8		ug/L		102	84 - 115	0	20
Methyl tert-butyl ether	50.0	52.3		ug/L		105	73 - 115	1	20
Methylcyclohexane	50.0	51.9		ug/L		104	85 - 134	1	20
Methylene Chloride	50.0	49.5		ug/L		99	84 - 115	3	20
1,2,4-Trichlorobenzene	50.0	51.0		ug/L		102	75 - 124	4	20
1,1,1-Trichloroethane	50.0	50.6		ug/L		101	85 - 115	2	20
1,1,2-Trichloroethane	50.0	51.9		ug/L		104	85 - 115	5	20
Styrene	50.0	53.9		ug/L		108	85 - 115	6	20
Tetrachloroethene	50.0	50.1		ug/L		100	85 - 115	1	20
Toluene	50.0	49.2		ug/L		98	85 - 115	2	20
m-Xylene & p-Xylene	50.0	52.9		ug/L		106	85 - 115	4	20
trans-1,2-Dichloroethene	50.0	48.1		ug/L		96	85 - 115	1	20
o-Xylene	50.0	52.0		ug/L		104	85 - 115	5	20
trans-1,3-Dichloropropene	50.0	46.3		ug/L		93	85 - 123	1	20
Trichloroethene	50.0	48.9		ug/L		98	85 - 115	2	20
Trichlorofluoromethane	50.0	51.0		ug/L		102	85 - 116	0	20
Vinyl chloride	50.0	48.2		ug/L		96	68 - 133	2	20
Xylenes, Total	100	105		ug/L		105	70 - 130	4	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		82 - 121
1,2-Dichloroethane-d4 (Surr)	97		82 - 132
Toluene-d8 (Surr)	98		85 - 115
Dibromofluoromethane (Surr)	99		85 - 119

Lab Sample ID: 160-2937-10 MS

Matrix: Water

Analysis Batch: 60374

Client Sample ID: DUPLICATE 01

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND		50.0	52.8		ug/L		106	71 - 123
2-Butanone (MEK)	ND		50.0	54.9		ug/L		110	73 - 133
1,2-Dibromoethane (EDB)	ND		50.0	53.3		ug/L		107	85 - 115
1,2-Dichlorobenzene	3.3	J	50.0	57.1		ug/L		108	84 - 115
1,3-Dichlorobenzene	ND		50.0	51.4		ug/L		103	84 - 115
1,4-Dichlorobenzene	8.7		50.0	58.9		ug/L		101	85 - 115
Acetone	ND		50.0	68.7		ug/L		137	38 - 150
Benzene	5.2		50.0	59.0		ug/L		108	85 - 115

TestAmerica St. Louis

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QC Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

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

Lab Sample ID: 160-2937-10 MS

Client Sample ID: DUPLICATE 01

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 60374

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
1,1-Dichloroethane	ND		50.0	52.6		ug/L		105	85 - 115
Bromodichloromethane	ND		50.0	53.9		ug/L		108	56 - 119
1,2-Dichloroethane	ND		50.0	54.8		ug/L		110	80 - 125
Bromoform	ND		50.0	52.7		ug/L		105	84 - 116
Bromomethane	ND		50.0	55.7		ug/L		111	70 - 135
Carbon disulfide	ND		50.0	55.0		ug/L		110	85 - 127
1,1-Dichloroethene	ND		50.0	52.9		ug/L		106	85 - 118
Carbon tetrachloride	ND		50.0	51.9		ug/L		104	85 - 121
1,2-Dichloropropane	ND		50.0	52.4		ug/L		105	85 - 117
Chloroethane	ND		50.0	56.9		ug/L		114	73 - 123
Chloroform	ND		50.0	52.6		ug/L		105	85 - 115
Chloromethane	ND		50.0	58.4		ug/L		117	67 - 130
cis-1,2-Dichloroethene	ND		50.0	52.3		ug/L		105	80 - 116
2-Hexanone	ND		50.0	45.5		ug/L		91	66 - 121
cis-1,3-Dichloropropene	ND		50.0	49.7		ug/L		99	85 - 124
Cyclohexane	ND		50.0	53.4		ug/L		107	73 - 115
Dibromochloromethane	ND		50.0	50.4		ug/L		101	85 - 115
Dichlorodifluoromethane	ND		50.0	66.0	F	ug/L		132	85 - 119
4-Methyl-2-pentanone (MIBK)	ND		50.0	52.2		ug/L		104	77 - 134
Ethylbenzene	ND		50.0	54.0		ug/L		108	85 - 115
Isopropylbenzene	4.4	J	50.0	57.2		ug/L		106	85 - 124
Methyl acetate	ND		250	289		ug/L		116	49 - 150
1,1,2,2-Tetrachloroethane	ND		50.0	57.3		ug/L		115	85 - 116
Methyl tert-butyl ether	0.49	J	50.0	55.9		ug/L		111	75 - 115
Methylcyclohexane	ND		50.0	53.5		ug/L		107	85 - 137
Methylene Chloride	ND		50.0	55.0		ug/L		110	85 - 115
1,2,4-Trichlorobenzene	ND		50.0	52.0		ug/L		104	75 - 124
1,1,1-Trichloroethane	ND		50.0	53.2		ug/L		106	85 - 118
1,1,2-Trichloroethane	ND		50.0	55.5		ug/L		111	85 - 115
Styrene	ND		50.0	54.9		ug/L		110	85 - 115
Tetrachloroethene	ND		50.0	50.9		ug/L		102	85 - 118
Toluene	ND		50.0	51.7		ug/L		103	85 - 118
m-Xylene & p-Xylene	3.7	J	50.0	56.8		ug/L		106	85 - 115
trans-1,2-Dichloroethene	ND		50.0	50.4		ug/L		101	84 - 115
o-Xylene	1.4	J	50.0	54.3		ug/L		106	85 - 118
trans-1,3-Dichloropropene	ND		50.0	47.5		ug/L		95	85 - 127
Trichloroethene	ND		50.0	50.9		ug/L		102	85 - 115
Trichlorofluoromethane	ND		50.0	55.7		ug/L		111	85 - 115
Vinyl chloride	ND		50.0	52.7		ug/L		105	63 - 129
Xylenes, Total	5.1	J	100	111		ug/L		106	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		82 - 121
1,2-Dichloroethane-d4 (Surr)	105		82 - 132
Toluene-d8 (Surr)	101		85 - 115
Dibromofluoromethane (Surr)	103		85 - 119

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TestAmerica St. Louis

QC Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

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

Lab Sample ID: 160-2937-10 MSD

Matrix: Water

Analysis Batch: 60374

Client Sample ID: DUPLICATE 01

Prep Type: Total/NA

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
	Result			Result							
1,2-Dibromo-3-Chloropropane	ND		50.0	56.3		ug/L		113	71 - 123	6	20
2-Butanone (MEK)	ND		50.0	46.2		ug/L		92	73 - 133	17	20
1,2-Dibromoethane (EDB)	ND		50.0	50.9		ug/L		102	85 - 115	5	20
1,2-Dichlorobenzene	3.3	J	50.0	56.9		ug/L		107	84 - 115	0	20
1,3-Dichlorobenzene	ND		50.0	52.8		ug/L		106	84 - 115	3	20
1,4-Dichlorobenzene	8.7		50.0	58.4		ug/L		99	85 - 115	1	20
Acetone	ND		50.0	63.9		ug/L		128	38 - 150	7	20
Benzene	5.2		50.0	55.9		ug/L		101	85 - 115	5	20
1,1-Dichloroethane	ND		50.0	49.9		ug/L		100	85 - 115	5	20
Bromodichloromethane	ND		50.0	51.4		ug/L		103	56 - 119	5	20
1,2-Dichloroethane	ND		50.0	50.1		ug/L		100	80 - 125	9	20
Bromoform	ND		50.0	53.0		ug/L		106	84 - 116	1	20
Bromomethane	ND		50.0	57.1		ug/L		114	70 - 135	2	20
Carbon disulfide	ND		50.0	53.0		ug/L		106	85 - 127	4	20
1,1-Dichloroethene	ND		50.0	52.2		ug/L		104	85 - 118	1	20
Carbon tetrachloride	ND		50.0	50.0		ug/L		100	85 - 121	4	20
1,2-Dichloropropane	ND		50.0	51.2		ug/L		102	85 - 117	2	20
Chloroethane	ND		50.0	54.3		ug/L		109	73 - 123	5	20
Chloroform	ND		50.0	51.5		ug/L		103	85 - 115	2	20
Chloromethane	ND		50.0	54.3		ug/L		109	67 - 130	7	20
cis-1,2-Dichloroethene	ND		50.0	51.8		ug/L		104	80 - 116	1	20
2-Hexanone	ND		50.0	56.0	F	ug/L		112	66 - 121	21	20
cis-1,3-Dichloropropene	ND		50.0	47.5		ug/L		95	85 - 124	5	20
Cyclohexane	ND		50.0	51.4		ug/L		103	73 - 115	4	20
Dibromochloromethane	ND		50.0	49.9		ug/L		100	85 - 115	1	20
Dichlorodifluoromethane	ND		50.0	61.0	F	ug/L		122	85 - 119	8	20
4-Methyl-2-pentanone (MIBK)	ND		50.0	55.2		ug/L		110	77 - 134	6	20
Ethylbenzene	ND		50.0	52.3		ug/L		105	85 - 115	3	20
Isopropylbenzene	4.4	J	50.0	57.5		ug/L		106	85 - 124	0	20
Methyl acetate	ND		250	283		ug/L		113	49 - 150	2	20
1,1,2,2-Tetrachloroethane	ND		50.0	55.4		ug/L		111	85 - 116	3	20
Methyl tert-butyl ether	0.49	J	50.0	55.0		ug/L		109	75 - 115	2	20
Methylcyclohexane	ND		50.0	51.6		ug/L		103	85 - 137	4	20
Methylene Chloride	ND		50.0	50.5		ug/L		101	85 - 115	9	20
1,2,4-Trichlorobenzene	ND		50.0	51.4		ug/L		103	75 - 124	1	20
1,1,1-Trichloroethane	ND		50.0	51.2		ug/L		102	85 - 118	4	20
1,1,2-Trichloroethane	ND		50.0	53.5		ug/L		107	85 - 115	4	20
Styrene	ND		50.0	55.4		ug/L		111	85 - 115	1	20
Tetrachloroethene	ND		50.0	50.6		ug/L		101	85 - 118	0	20
Toluene	ND		50.0	50.3		ug/L		101	85 - 118	3	20
m-Xylene & p-Xylene	3.7	J	50.0	56.2		ug/L		105	85 - 115	1	20
trans-1,2-Dichloroethene	ND		50.0	48.2		ug/L		96	84 - 115	5	20
o-Xylene	1.4	J	50.0	53.4		ug/L		104	85 - 118	2	20
trans-1,3-Dichloropropene	ND		50.0	46.4		ug/L		93	85 - 127	2	20
Trichloroethene	ND		50.0	48.6		ug/L		97	85 - 115	5	20
Trichlorofluoromethane	ND		50.0	52.6		ug/L		105	85 - 115	6	20
Vinyl chloride	ND		50.0	50.6		ug/L		101	63 - 129	4	20
Xylenes, Total	5.1	J	100	110		ug/L		105	70 - 130	1	20

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TestAmerica St. Louis

QC Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

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

Lab Sample ID: 160-2937-10 MSD

Matrix: Water

Analysis Batch: 60374

Client Sample ID: DUPLICATE 01

Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		82 - 121
1,2-Dichloroethane-d4 (Surr)	99		82 - 132
Toluene-d8 (Surr)	99		85 - 115
Dibromofluoromethane (Surr)	99		85 - 119

Lab Sample ID: MB 160-60980/2

Matrix: Water

Analysis Batch: 60980

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/16/13 11:53	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/16/13 11:53	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/16/13 11:53	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/16/13 11:53	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/16/13 11:53	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/16/13 11:53	1
Acetone	ND		20	6.7	ug/L			07/16/13 11:53	1
Benzene	ND		5.0	0.25	ug/L			07/16/13 11:53	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/16/13 11:53	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/16/13 11:53	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/16/13 11:53	1
Bromoform	ND		5.0	0.37	ug/L			07/16/13 11:53	1
Bromomethane	ND		10	0.40	ug/L			07/16/13 11:53	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/16/13 11:53	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/16/13 11:53	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/16/13 11:53	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/16/13 11:53	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/16/13 11:53	1
Chloroethane	ND		10	0.38	ug/L			07/16/13 11:53	1
Chloroform	ND		5.0	0.15	ug/L			07/16/13 11:53	1
Chloromethane	ND		10	0.55	ug/L			07/16/13 11:53	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/16/13 11:53	1
2-Hexanone	ND		20	0.59	ug/L			07/16/13 11:53	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/16/13 11:53	1
Cyclohexane	ND		10	0.36	ug/L			07/16/13 11:53	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/16/13 11:53	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/16/13 11:53	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/16/13 11:53	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/16/13 11:53	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/16/13 11:53	1
Methyl acetate	ND		25	2.3	ug/L			07/16/13 11:53	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/16/13 11:53	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/16/13 11:53	1
Methylcyclohexane	ND		10	0.26	ug/L			07/16/13 11:53	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/16/13 11:53	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/16/13 11:53	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/16/13 11:53	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/16/13 11:53	1

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QC Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

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

Lab Sample ID: MB 160-60980/2

Matrix: Water

Analysis Batch: 60980

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		5.0	0.35	ug/L			07/16/13 11:53	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/16/13 11:53	1
Toluene	ND		5.0	1.0	ug/L			07/16/13 11:53	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/16/13 11:53	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/16/13 11:53	1
o-Xylene	ND		5.0	0.32	ug/L			07/16/13 11:53	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/16/13 11:53	1
Trichloroethene	ND		5.0	0.29	ug/L			07/16/13 11:53	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/16/13 11:53	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/16/13 11:53	1
Xylenes, Total	ND		10	0.85	ug/L			07/16/13 11:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		82 - 121		07/16/13 11:53	1
1,2-Dichloroethane-d4 (Surr)	117		82 - 132		07/16/13 11:53	1
Toluene-d8 (Surr)	102		85 - 115		07/16/13 11:53	1
Dibromofluoromethane (Surr)	100		85 - 119		07/16/13 11:53	1

Lab Sample ID: LCS 160-60980/4

Matrix: Water

Analysis Batch: 60980

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	50.0	49.5		ug/L		99	71 - 123
2-Butanone (MEK)	50.0	57.6		ug/L		115	71 - 123
1,2-Dibromoethane (EDB)	50.0	50.1		ug/L		100	85 - 115
1,2-Dichlorobenzene	50.0	49.7		ug/L		99	85 - 115
1,3-Dichlorobenzene	50.0	48.4		ug/L		97	85 - 115
1,4-Dichlorobenzene	50.0	47.1		ug/L		94	85 - 115
Acetone	50.0	58.1		ug/L		116	51 - 140
Benzene	50.0	49.6		ug/L		99	85 - 115
1,1-Dichloroethane	50.0	49.7		ug/L		99	85 - 115
Bromodichloromethane	50.0	52.1		ug/L		104	85 - 117
1,2-Dichloroethane	50.0	54.6		ug/L		109	79 - 122
Bromoform	50.0	49.4		ug/L		99	85 - 115
Bromomethane	50.0	48.8		ug/L		98	70 - 135
Carbon disulfide	50.0	46.2		ug/L		92	85 - 123
1,1-Dichloroethene	50.0	44.9		ug/L		90	85 - 118
Carbon tetrachloride	50.0	51.8		ug/L		104	85 - 118
1,2-Dichloropropane	50.0	48.4		ug/L		97	85 - 115
Chlorobenzene	50.0	49.3		ug/L		99	85 - 115
Chloroethane	50.0	65.3	*	ug/L		131	75 - 125
Chloroform	50.0	51.6		ug/L		103	85 - 115
Chloromethane	50.0	47.5		ug/L		95	73 - 132
cis-1,2-Dichloroethene	50.0	46.7		ug/L		93	85 - 115
2-Hexanone	50.0	65.0	*	ug/L		130	66 - 121
cis-1,3-Dichloropropene	50.0	48.6		ug/L		97	85 - 127
Cyclohexane	50.0	50.8		ug/L		102	73 - 115

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QC Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

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

Lab Sample ID: LCS 160-60980/4

Matrix: Water

Analysis Batch: 60980

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromochloromethane	50.0	48.6		ug/L		97	85 - 115
Dichlorodifluoromethane	50.0	44.9		ug/L		90	62 - 115
4-Methyl-2-pentanone (MIBK)	50.0	63.9	*	ug/L		128	74 - 123
Ethylbenzene	50.0	52.0		ug/L		104	85 - 115
Isopropylbenzene	50.0	51.2		ug/L		102	85 - 124
Methyl acetate	250	277		ug/L		111	73 - 135
1,1,2,2-Tetrachloroethane	50.0	52.8		ug/L		106	84 - 115
Methyl tert-butyl ether	50.0	52.9		ug/L		106	73 - 115
Methylcyclohexane	50.0	51.5		ug/L		103	85 - 134
Methylene Chloride	50.0	47.1		ug/L		94	84 - 115
1,2,4-Trichlorobenzene	50.0	47.2		ug/L		94	75 - 124
1,1,1-Trichloroethane	50.0	54.0		ug/L		108	85 - 115
1,1,2-Trichloroethane	50.0	52.4		ug/L		105	85 - 115
Styrene	50.0	50.4		ug/L		101	85 - 115
Tetrachloroethene	50.0	49.0		ug/L		98	85 - 115
Toluene	50.0	50.0		ug/L		100	85 - 115
m-Xylene & p-Xylene	50.0	49.7		ug/L		99	85 - 115
trans-1,2-Dichloroethene	50.0	46.1		ug/L		92	85 - 115
o-Xylene	50.0	49.7		ug/L		99	85 - 115
trans-1,3-Dichloropropene	50.0	48.9		ug/L		98	85 - 123
Trichloroethene	50.0	48.1		ug/L		96	85 - 115
Trichlorofluoromethane	50.0	55.4		ug/L		111	85 - 116
Vinyl chloride	50.0	47.7		ug/L		95	68 - 133
Xylenes, Total	100	99.4		ug/L		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		82 - 121
1,2-Dichloroethane-d4 (Surr)	112		82 - 132
Toluene-d8 (Surr)	100		85 - 115
Dibromofluoromethane (Surr)	99		85 - 119

Lab Sample ID: MB 160-60998/2

Matrix: Water

Analysis Batch: 60998

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/15/13 14:18	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/15/13 14:18	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/15/13 14:18	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/15/13 14:18	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/15/13 14:18	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/15/13 14:18	1
Acetone	ND		20	6.7	ug/L			07/15/13 14:18	1
Benzene	ND		5.0	0.25	ug/L			07/15/13 14:18	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/15/13 14:18	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/15/13 14:18	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/15/13 14:18	1
Bromoform	ND		5.0	0.37	ug/L			07/15/13 14:18	1

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QC Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

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

Lab Sample ID: MB 160-60998/2

Matrix: Water

Analysis Batch: 60998

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Bromomethane	ND		10	0.40	ug/L			07/15/13 14:18	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/15/13 14:18	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/15/13 14:18	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/15/13 14:18	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/15/13 14:18	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/15/13 14:18	1
Chloroethane	ND		10	0.38	ug/L			07/15/13 14:18	1
Chloroform	ND		5.0	0.15	ug/L			07/15/13 14:18	1
Chloromethane	ND		10	0.55	ug/L			07/15/13 14:18	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/15/13 14:18	1
2-Hexanone	ND		20	0.59	ug/L			07/15/13 14:18	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/15/13 14:18	1
Cyclohexane	ND		10	0.36	ug/L			07/15/13 14:18	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/15/13 14:18	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/15/13 14:18	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/15/13 14:18	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/15/13 14:18	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/15/13 14:18	1
Methyl acetate	ND		25	2.3	ug/L			07/15/13 14:18	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/15/13 14:18	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/15/13 14:18	1
Methylcyclohexane	ND		10	0.26	ug/L			07/15/13 14:18	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/15/13 14:18	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/15/13 14:18	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/15/13 14:18	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/15/13 14:18	1
Styrene	ND		5.0	0.35	ug/L			07/15/13 14:18	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/15/13 14:18	1
Toluene	ND		5.0	1.0	ug/L			07/15/13 14:18	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/15/13 14:18	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/15/13 14:18	1
o-Xylene	ND		5.0	0.32	ug/L			07/15/13 14:18	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/15/13 14:18	1
Trichloroethene	ND		5.0	0.29	ug/L			07/15/13 14:18	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/15/13 14:18	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/15/13 14:18	1
Xylenes, Total	ND		10	0.85	ug/L			07/15/13 14:18	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	93		82 - 121		07/15/13 14:18	1
1,2-Dichloroethane-d4 (Surr)	96		82 - 132		07/15/13 14:18	1
Toluene-d8 (Surr)	97		85 - 115		07/15/13 14:18	1
Dibromofluoromethane (Surr)	96		85 - 119		07/15/13 14:18	1

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TestAmerica St. Louis

QC Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

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

Lab Sample ID: LCS 160-60998/3

Matrix: Water

Analysis Batch: 60998

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	50.0	53.4		ug/L		107	71 - 123
2-Butanone (MEK)	50.0	49.4		ug/L		99	71 - 123
1,2-Dibromoethane (EDB)	50.0	51.3		ug/L		103	85 - 115
1,2-Dichlorobenzene	50.0	49.0		ug/L		98	85 - 115
1,3-Dichlorobenzene	50.0	50.8		ug/L		102	85 - 115
1,4-Dichlorobenzene	50.0	49.1		ug/L		98	85 - 115
Acetone	50.0	44.7		ug/L		89	51 - 140
Benzene	50.0	49.5		ug/L		99	85 - 115
1,1-Dichloroethane	50.0	51.6		ug/L		103	85 - 115
Bromodichloromethane	50.0	50.5		ug/L		101	85 - 117
1,2-Dichloroethane	50.0	49.9		ug/L		100	79 - 122
Bromoform	50.0	43.6		ug/L		87	85 - 115
Bromomethane	50.0	50.0		ug/L		100	70 - 135
Carbon disulfide	50.0	51.6		ug/L		103	85 - 123
1,1-Dichloroethene	50.0	50.1		ug/L		100	85 - 118
Carbon tetrachloride	50.0	50.3		ug/L		101	85 - 118
1,2-Dichloropropane	50.0	50.3		ug/L		101	85 - 115
Chlorobenzene	50.0	50.1		ug/L		100	85 - 115
Chloroethane	50.0	60.1		ug/L		120	75 - 125
Chloroform	50.0	49.3		ug/L		99	85 - 115
Chloromethane	50.0	50.8		ug/L		102	73 - 132
cis-1,2-Dichloroethene	50.0	49.9		ug/L		100	85 - 115
2-Hexanone	50.0	50.4		ug/L		101	66 - 121
cis-1,3-Dichloropropene	50.0	51.8		ug/L		104	85 - 127
Cyclohexane	50.0	50.7		ug/L		101	73 - 115
Dibromochloromethane	50.0	50.1		ug/L		100	85 - 115
Dichlorodifluoromethane	50.0	46.7		ug/L		93	62 - 115
4-Methyl-2-pentanone (MIBK)	50.0	51.6		ug/L		103	74 - 123
Ethylbenzene	50.0	46.2		ug/L		92	85 - 115
Isopropylbenzene	50.0	50.4		ug/L		101	85 - 124
Methyl acetate	250	261		ug/L		104	73 - 135
1,1,1,2-Tetrachloroethane	50.0	48.5		ug/L		97	84 - 115
Methyl tert-butyl ether	50.0	50.5		ug/L		101	73 - 115
Methylcyclohexane	50.0	52.1		ug/L		104	85 - 134
Methylene Chloride	50.0	49.4		ug/L		99	84 - 115
1,2,4-Trichlorobenzene	50.0	47.6		ug/L		95	75 - 124
1,1,1-Trichloroethane	50.0	50.6		ug/L		101	85 - 115
1,1,2-Trichloroethane	50.0	50.8		ug/L		102	85 - 115
Styrene	50.0	52.4		ug/L		105	85 - 115
Tetrachloroethene	50.0	49.3		ug/L		99	85 - 115
Toluene	50.0	49.0		ug/L		98	85 - 115
m-Xylene & p-Xylene	50.0	50.3		ug/L		101	85 - 115
trans-1,2-Dichloroethene	50.0	48.2		ug/L		96	85 - 115
o-Xylene	50.0	51.3		ug/L		103	85 - 115
trans-1,3-Dichloropropene	50.0	50.2		ug/L		100	85 - 123
Trichloroethene	50.0	49.3		ug/L		99	85 - 115
Trichlorofluoromethane	50.0	49.5		ug/L		99	85 - 116
Vinyl chloride	50.0	50.7		ug/L		101	68 - 133

TestAmerica St. Louis

QC Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

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

Lab Sample ID: LCS 160-60998/3

Matrix: Water

Analysis Batch: 60998

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Xylenes, Total	100	102		ug/L		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		82 - 121
1,2-Dichloroethane-d4 (Surr)	96		82 - 132
Toluene-d8 (Surr)	95		85 - 115
Dibromofluoromethane (Surr)	98		85 - 119

Lab Sample ID: LCSD 160-60998/4

Matrix: Water

Analysis Batch: 60998

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
1,2-Dibromo-3-Chloropropane	50.0	51.6		ug/L		103	71 - 123	3	20
2-Butanone (MEK)	50.0	53.4		ug/L		107	71 - 123	8	20
1,2-Dibromoethane (EDB)	50.0	52.6		ug/L		105	85 - 115	2	20
1,2-Dichlorobenzene	50.0	51.8		ug/L		104	85 - 115	6	20
1,3-Dichlorobenzene	50.0	51.4		ug/L		103	85 - 115	1	20
1,4-Dichlorobenzene	50.0	50.6		ug/L		101	85 - 115	3	20
Acetone	50.0	49.6		ug/L		99	51 - 140	10	20
Benzene	50.0	50.2		ug/L		100	85 - 115	1	20
1,1-Dichloroethane	50.0	51.7		ug/L		103	85 - 115	0	20
Bromodichloromethane	50.0	51.5		ug/L		103	85 - 117	2	20
1,2-Dichloroethane	50.0	50.8		ug/L		102	79 - 122	2	20
Bromoform	50.0	46.0		ug/L		92	85 - 115	5	20
Bromomethane	50.0	50.5		ug/L		101	70 - 135	1	20
Carbon disulfide	50.0	51.5		ug/L		103	85 - 123	0	20
1,1-Dichloroethene	50.0	50.4		ug/L		101	85 - 118	1	20
Carbon tetrachloride	50.0	50.4		ug/L		101	85 - 118	0	20
1,2-Dichloropropane	50.0	50.3		ug/L		101	85 - 115	0	20
Chlorobenzene	50.0	51.8		ug/L		104	85 - 115	3	20
Chloroethane	50.0	60.9		ug/L		122	75 - 125	1	20
Chloroform	50.0	50.1		ug/L		100	85 - 115	2	20
Chloromethane	50.0	51.3		ug/L		103	73 - 132	1	20
cis-1,2-Dichloroethene	50.0	50.2		ug/L		100	85 - 115	1	20
2-Hexanone	50.0	53.3		ug/L		107	66 - 121	6	20
cis-1,3-Dichloropropene	50.0	52.3		ug/L		105	85 - 127	1	20
Cyclohexane	50.0	51.0		ug/L		102	73 - 115	1	20
Dibromochloromethane	50.0	51.5		ug/L		103	85 - 115	3	20
Dichlorodifluoromethane	50.0	50.5		ug/L		101	62 - 115	8	20
4-Methyl-2-pentanone (MIBK)	50.0	54.6		ug/L		109	74 - 123	6	20
Ethylbenzene	50.0	47.0		ug/L		94	85 - 115	2	20
Isopropylbenzene	50.0	51.2		ug/L		102	85 - 124	2	20
Methyl acetate	250	269		ug/L		108	73 - 135	3	20
1,1,2,2-Tetrachloroethane	50.0	50.7		ug/L		101	84 - 115	5	20
Methyl tert-butyl ether	50.0	51.3		ug/L		103	73 - 115	2	20
Methylcyclohexane	50.0	52.3		ug/L		105	85 - 134	0	20
Methylene Chloride	50.0	50.4		ug/L		101	84 - 115	2	20

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QC Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

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

Lab Sample ID: LCSD 160-60998/4

Matrix: Water

Analysis Batch: 60998

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
1,2,4-Trichlorobenzene	50.0	47.0		ug/L		94	75 - 124	1	20
1,1,1-Trichloroethane	50.0	50.3		ug/L		101	85 - 115	1	20
1,1,2-Trichloroethane	50.0	52.5		ug/L		105	85 - 115	3	20
Styrene	50.0	53.1		ug/L		106	85 - 115	1	20
Tetrachloroethene	50.0	50.0		ug/L		100	85 - 115	2	20
Toluene	50.0	50.3		ug/L		101	85 - 115	3	20
m-Xylene & p-Xylene	50.0	50.9		ug/L		102	85 - 115	1	20
trans-1,2-Dichloroethene	50.0	49.3		ug/L		99	85 - 115	2	20
o-Xylene	50.0	51.8		ug/L		104	85 - 115	1	20
trans-1,3-Dichloropropene	50.0	51.8		ug/L		104	85 - 123	3	20
Trichloroethene	50.0	50.3		ug/L		101	85 - 115	2	20
Trichlorofluoromethane	50.0	50.8		ug/L		102	85 - 116	3	20
Vinyl chloride	50.0	50.8		ug/L		102	68 - 133	0	20
Xylenes, Total	100	103		ug/L		103	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	98		82 - 121
1,2-Dichloroethane-d4 (Surr)	98		82 - 132
Toluene-d8 (Surr)	98		85 - 115
Dibromofluoromethane (Surr)	98		85 - 119

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 160-60204/1-A

Matrix: Water

Analysis Batch: 60554

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 60204

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/11/13 15:15	07/12/13 19:10	1
Antimony	ND		10	4.0	ug/L		07/11/13 15:15	07/12/13 19:10	1
Arsenic	ND		10	2.0	ug/L		07/11/13 15:15	07/12/13 19:10	1
Barium	ND		50	4.0	ug/L		07/11/13 15:15	07/12/13 19:10	1
Beryllium	ND		5.0	0.61	ug/L		07/11/13 15:15	07/12/13 19:10	1
Cadmium	ND		5.0	0.91	ug/L		07/11/13 15:15	07/12/13 19:10	1
Calcium	ND		1000	110	ug/L		07/11/13 15:15	07/12/13 19:10	1
Chromium	ND		10	3.1	ug/L		07/11/13 15:15	07/12/13 19:10	1
Cobalt	ND		50	4.0	ug/L		07/11/13 15:15	07/12/13 19:10	1
Copper	ND		25	4.6	ug/L		07/11/13 15:15	07/12/13 19:10	1
Iron	ND		100	28	ug/L		07/11/13 15:15	07/12/13 19:10	1
Lead	ND		10	1.5	ug/L		07/11/13 15:15	07/12/13 19:10	1
Magnesium	ND		1000	130	ug/L		07/11/13 15:15	07/12/13 19:10	1
Manganese	ND		15	3.3	ug/L		07/11/13 15:15	07/12/13 19:10	1
Nickel	ND		40	13	ug/L		07/11/13 15:15	07/12/13 19:10	1
Potassium	ND		5000	1700	ug/L		07/11/13 15:15	07/12/13 19:10	1
Selenium	ND		15	2.7	ug/L		07/11/13 15:15	07/12/13 19:10	1
Silver	ND		10	6.0	ug/L		07/11/13 15:15	07/12/13 19:10	1
Sodium	ND		1000	320	ug/L		07/11/13 15:15	07/12/13 19:10	1
Thallium	ND		20	4.0	ug/L		07/11/13 15:15	07/12/13 19:10	1

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QC Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 160-60204/1-A

Matrix: Water

Analysis Batch: 60554

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 60204

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	ND		50	4.1	ug/L		07/11/13 15:15	07/12/13 19:10	1
Zinc	6.60	J	20	5.2	ug/L		07/11/13 15:15	07/12/13 19:10	1

Lab Sample ID: LCS 160-60204/2-A

Matrix: Water

Analysis Batch: 60554

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 60204

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	10000	9780		ug/L		98	80 - 120
Antimony	500	508		ug/L		102	80 - 120
Arsenic	1000	998		ug/L		100	80 - 120
Barium	1000	1030		ug/L		103	80 - 120
Beryllium	1000	1020		ug/L		102	80 - 120
Cadmium	1000	1020		ug/L		102	80 - 120
Calcium	10000	10500		ug/L		105	80 - 120
Chromium	1000	1050		ug/L		105	80 - 120
Cobalt	1000	1060		ug/L		106	80 - 120
Copper	1000	1020		ug/L		102	80 - 120
Iron	10000	10100		ug/L		101	80 - 120
Lead	1000	1070		ug/L		107	80 - 120
Magnesium	10000	10100		ug/L		101	80 - 120
Manganese	1000	1020		ug/L		102	80 - 120
Nickel	1000	1060		ug/L		106	80 - 120
Potassium	10000	9940		ug/L		99	80 - 120
Selenium	1000	1020		ug/L		102	80 - 120
Silver	100	91.3		ug/L		91	80 - 120
Sodium	10000	10100		ug/L		101	80 - 120
Thallium	200	226		ug/L		113	80 - 120
Vanadium	1000	989		ug/L		99	80 - 120
Zinc	1000	1030		ug/L		103	80 - 120

Lab Sample ID: 160-2937-4 MS

Matrix: Water

Analysis Batch: 60554

Client Sample ID: P2-110-SS

Prep Type: Total/NA

Prep Batch: 60204

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	ND		10000	9780		ug/L		98	75 - 125
Antimony	4.0	J	500	497		ug/L		99	75 - 125
Arsenic	ND		1000	976		ug/L		98	75 - 125
Barium	320		1000	1330		ug/L		101	75 - 125
Beryllium	ND		1000	1010		ug/L		101	75 - 125
Cadmium	ND		1000	981		ug/L		98	75 - 125
Calcium	210000	E	10000	209000	E 4	ug/L		-43	75 - 125
Chromium	3.3	J	1000	970		ug/L		97	75 - 125
Cobalt	ND		1000	947		ug/L		95	75 - 125
Copper	ND		1000	965		ug/L		96	75 - 125
Iron	6900		10000	16500		ug/L		96	75 - 125
Lead	2.2	J	1000	948		ug/L		95	75 - 125
Magnesium	88000	E	10000	94400	E 4	ug/L		63	75 - 125

TestAmerica St. Louis

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QC Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 160-2937-4 MS

Matrix: Water

Analysis Batch: 60554

Client Sample ID: P2-110-SS

Prep Type: Total/NA

Prep Batch: 60204

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Manganese	200		1000	1160		ug/L		96	75 - 125
Nickel	17	J	1000	955		ug/L		94	75 - 125
Potassium	4300	J	10000	14600		ug/L		103	75 - 125
Selenium	ND		1000	975		ug/L		97	75 - 125
Silver	ND		100	88.1		ug/L		88	75 - 125
Sodium	91000		10000	99400	4	ug/L		83	75 - 125
Thallium	ND		200	195		ug/L		98	75 - 125
Vanadium	ND		1000	969		ug/L		97	75 - 125
Zinc	5.8	J B	1000	982		ug/L		98	75 - 125

Lab Sample ID: 160-2937-4 MS

Matrix: Water

Analysis Batch: 60753

Client Sample ID: P2-110-SS

Prep Type: Total/NA

Prep Batch: 60204

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Calcium	250000		10000	254000	E 4	ug/L		58	75 - 125
Iron	7200		10000	17500		ug/L		103	75 - 125
Magnesium	91000		10000	100000	4	ug/L		91	75 - 125

Lab Sample ID: 160-2937-4 MSD

Matrix: Water

Analysis Batch: 60554

Client Sample ID: P2-110-SS

Prep Type: Total/NA

Prep Batch: 60204

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit
Aluminum	ND		10000	9800		ug/L		98	75 - 125	0	20
Antimony	4.0	J	500	502		ug/L		100	75 - 125	1	20
Arsenic	ND		1000	994		ug/L		99	75 - 125	2	20
Barium	320		1000	1320		ug/L		100	75 - 125	1	20
Beryllium	ND		1000	1010		ug/L		101	75 - 125	0	20
Cadmium	ND		1000	1000		ug/L		100	75 - 125	2	20
Calcium	210000	E	10000	211000	E 4	ug/L		-21	75 - 125	1	20
Chromium	3.3	J	1000	989		ug/L		99	75 - 125	2	20
Cobalt	ND		1000	968		ug/L		97	75 - 125	2	20
Copper	ND		1000	983		ug/L		98	75 - 125	2	20
Iron	6900		10000	16400		ug/L		95	75 - 125	0	20
Lead	2.2	J	1000	978		ug/L		98	75 - 125	3	20
Magnesium	88000	E	10000	92900	E 4	ug/L		48	75 - 125	2	20
Manganese	200		1000	1160		ug/L		97	75 - 125	0	20
Nickel	17	J	1000	978		ug/L		96	75 - 125	2	20
Potassium	4300	J	10000	14600		ug/L		103	75 - 125	0	20
Selenium	ND		1000	1000		ug/L		100	75 - 125	3	20
Silver	ND		100	87.5		ug/L		88	75 - 125	1	20
Sodium	91000		10000	98100	4	ug/L		70	75 - 125	1	20
Thallium	ND		200	199		ug/L		100	75 - 125	2	20
Vanadium	ND		1000	971		ug/L		97	75 - 125	0	20
Zinc	5.8	J B	1000	1010		ug/L		101	75 - 125	3	20

TestAmerica St. Louis

QC Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 160-2937-4 MSD

Matrix: Water

Analysis Batch: 60753

Client Sample ID: P2-110-SS

Prep Type: Total/NA

Prep Batch: 60204

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Calcium	250000		10000	241000	4	ug/L		-71	75 - 125	5	20
Iron	7200		10000	16500		ug/L		93	75 - 125	6	20
Magnesium	91000		10000	94100	4	ug/L		28	75 - 125	6	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 160-60784/1-A

Matrix: Water

Analysis Batch: 60965

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 60784

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:06	07/16/13 15:32	1

Lab Sample ID: LCS 160-60784/2-A

Matrix: Water

Analysis Batch: 60965

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 60784

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				Limits
Mercury	5.00	5.70		ug/L		114	80 - 120

Lab Sample ID: 160-2937-4 MS

Matrix: Water

Analysis Batch: 60965

Client Sample ID: P2-110-SS

Prep Type: Total/NA

Prep Batch: 60784

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Mercury	0.063	J	5.00	5.65		ug/L		112	80 - 120

Lab Sample ID: 160-2937-4 MSD

Matrix: Water

Analysis Batch: 60965

Client Sample ID: P2-110-SS

Prep Type: Total/NA

Prep Batch: 60784

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Mercury	0.063	J	5.00	5.69		ug/L		113	80 - 120	1	20

Lab Sample ID: MB 160-60791/1-A

Matrix: Water

Analysis Batch: 61008

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 60791

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:18	07/17/13 10:26	1

Lab Sample ID: LCS 160-60791/2-A

Matrix: Water

Analysis Batch: 61008

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 60791

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				Limits
Mercury	5.00	5.36		ug/L		107	80 - 120

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QC Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

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

Lab Sample ID: 160-2937-4 MS

Matrix: Water

Analysis Batch: 61008

Client Sample ID: P2-110-SS

Prep Type: Dissolved

Prep Batch: 60791

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		5.00	5.37		ug/L		107	80 - 120

Lab Sample ID: 160-2937-4 MSD

Matrix: Water

Analysis Batch: 61008

Client Sample ID: P2-110-SS

Prep Type: Dissolved

Prep Batch: 60791

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		5.00	5.25		ug/L		105	80 - 120	2	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 160-60393/9

Matrix: Water

Analysis Batch: 60393

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.020	0.0040	mg/L			07/10/13 11:56	1
Chloride	ND		0.20	0.020	mg/L			07/10/13 11:56	1
Bromide	ND		0.25	0.025	mg/L			07/10/13 11:56	1
Sulfate	ND		0.50	0.050	mg/L			07/10/13 11:56	1

Lab Sample ID: LCS 160-60393/10

Matrix: Water

Analysis Batch: 60393

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.400	0.399		mg/L		100	90 - 110
Chloride	2.00	1.98		mg/L		99	90 - 110
Bromide	2.00	2.03		mg/L		102	90 - 110
Sulfate	8.00	7.71		mg/L		96	90 - 110

Lab Sample ID: 160-2937-1 MS

Matrix: Water

Analysis Batch: 60393

Client Sample ID: P2-111-SD

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.075		0.400	0.452		mg/L		94	90 - 110
Bromide	0.052	J	2.00	2.00		mg/L		98	90 - 110

Lab Sample ID: 160-2937-1 DU

Matrix: Water

Analysis Batch: 60393

Client Sample ID: P2-111-SD

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	0.075		0.0789		mg/L		5	20
Bromide	0.052	J	0.0573	J	mg/L		10	20

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TestAmerica St. Louis

QC Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 160-60824/58

Matrix: Water

Analysis Batch: 60824

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iodide	ND		1.0	0.10	mg/L			07/16/13 03:23	1

Lab Sample ID: LCS 160-60824/59

Matrix: Water

Analysis Batch: 60824

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iodide	4.00	4.03		mg/L		101	90 - 110

Lab Sample ID: 160-2937-1 MS

Matrix: Water

Analysis Batch: 60824

Client Sample ID: P2-111-SD

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iodide	ND		4.00	4.03		mg/L		101	90 - 110

Lab Sample ID: 160-2937-1 DU

Matrix: Water

Analysis Batch: 60824

Client Sample ID: P2-111-SD

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Iodide	ND		ND		mg/L		NC	20

Lab Sample ID: MB 160-62158/3

Matrix: Water

Analysis Batch: 62158

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.020	0.0040	mg/L			07/12/13 13:05	1
Chloride	ND		0.20	0.020	mg/L			07/12/13 13:05	1
Bromide	ND		0.25	0.025	mg/L			07/12/13 13:05	1
Sulfate	ND		0.50	0.050	mg/L			07/12/13 13:05	1

Lab Sample ID: LCS 160-62158/4

Matrix: Water

Analysis Batch: 62158

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.400	0.412		mg/L		103	90 - 110
Chloride	2.00	1.97		mg/L		98	90 - 110
Bromide	2.00	2.01		mg/L		101	90 - 110
Sulfate	8.00	7.74		mg/L		97	90 - 110

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TestAmerica St. Louis

QC Sample Results

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 160-2937-1 MS

Matrix: Water

Analysis Batch: 60393

Client Sample ID: P2-111-SD

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL	9.1		40.0	49.1		mg/L		100	90 - 110
Sulfate - DL	45		80.0	122		mg/L		96	90 - 110

Lab Sample ID: 160-2937-1 DU

Matrix: Water

Analysis Batch: 60393

Client Sample ID: P2-111-SD

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL	9.1		9.40		mg/L		3	20
Sulfate - DL	45		45.4		mg/L		0.4	20

Method: 310.1 - Alkalinity

Lab Sample ID: MB 160-61441/1

Matrix: Water

Analysis Batch: 61441

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	0.250	J	1.3	0.14	mg/L			07/18/13 13:03	1

Lab Sample ID: LCS 160-61441/3

Matrix: Water

Analysis Batch: 61441

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	400	391		mg/L		98	90 - 110

Lab Sample ID: LLCS 160-61441/2

Matrix: Water

Analysis Batch: 61441

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	191		mg/L		96	90 - 110

Lab Sample ID: MB 160-61623/1

Matrix: Water

Analysis Batch: 61623

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	0.250	J	1.3	0.14	mg/L			07/19/13 13:59	1

Lab Sample ID: LCS 160-61623/3

Matrix: Water

Analysis Batch: 61623

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	400	392		mg/L		98	90 - 110

TestAmerica St. Louis

QC Sample Results

Client: Engineering Management Support, Inc.
 Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Method: 310.1 - Alkalinity (Continued)

Lab Sample ID: LLCS 160-61623/2

Matrix: Water

Analysis Batch: 61623

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	196		mg/L		98	90 - 110

Method: 310.1 - Alkalinity - DL

Lab Sample ID: 160-2937-5 MS

Matrix: Water

Analysis Batch: 61623

Client Sample ID: I-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity - DL	1400	B	100	1490	4	mg/L		95	80 - 120

Lab Sample ID: 160-2937-5 DU

Matrix: Water

Analysis Batch: 61623

Client Sample ID: I-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity - DL	1400	B	1400		mg/L		0.4	20

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QC Association Summary

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

GC/MS VOA

Analysis Batch: 60374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-1	P2-111-SD	Total/NA	Water	8260C	
160-2937-2	S-5	Total/NA	Water	8260C	
160-2937-3	FB @ P2-110-SS	Total/NA	Water	8260C	
160-2937-4	P2-110-SS	Total/NA	Water	8260C	
160-2937-5	I-4	Total/NA	Water	8260C	
160-2937-6	P2-100-SS	Total/NA	Water	8260C	
160-2937-7	D-3	Total/NA	Water	8260C	
160-2937-8	P2-100-SD	Total/NA	Water	8260C	
160-2937-9	P2-112-AS	Total/NA	Water	8260C	
160-2937-10	DUPLICATE 01	Total/NA	Water	8260C	
160-2937-10 MS	DUPLICATE 01	Total/NA	Water	8260C	
160-2937-10 MSD	DUPLICATE 01	Total/NA	Water	8260C	
160-2937-11	TRIP BLANK	Total/NA	Water	8260C	
LCS 160-60374/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 160-60374/5	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 160-60374/2	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 60980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-9	P2-112-AS	Total/NA	Water	8260C	
LCS 160-60980/4	Lab Control Sample	Total/NA	Water	8260C	
MB 160-60980/2	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 60998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-10	DUPLICATE 01	Total/NA	Water	8260C	
LCS 160-60998/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 160-60998/4	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 160-60998/2	Method Blank	Total/NA	Water	8260C	

Metals

Prep Batch: 60204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-1	P2-111-SD	Dissolved	Water	3010A	
160-2937-1	P2-111-SD	Total/NA	Water	3010A	
160-2937-2	S-5	Dissolved	Water	3010A	
160-2937-2	S-5	Total/NA	Water	3010A	
160-2937-4	P2-110-SS	Dissolved	Water	3010A	
160-2937-4	P2-110-SS	Total/NA	Water	3010A	
160-2937-4 MS	P2-110-SS	Total/NA	Water	3010A	
160-2937-4 MSD	P2-110-SS	Total/NA	Water	3010A	
160-2937-5	I-4	Dissolved	Water	3010A	
160-2937-5	I-4	Total/NA	Water	3010A	
160-2937-6	P2-100-SS	Dissolved	Water	3010A	
160-2937-6	P2-100-SS	Total/NA	Water	3010A	
160-2937-7	D-3	Dissolved	Water	3010A	
160-2937-7	D-3	Total/NA	Water	3010A	
160-2937-8	P2-100-SD	Dissolved	Water	3010A	
160-2937-8	P2-100-SD	Total/NA	Water	3010A	

TestAmerica St. Louis

QC Association Summary

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Metals (Continued)

Prep Batch: 60204 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-9	P2-112-AS	Dissolved	Water	3010A	
160-2937-9	P2-112-AS	Total/NA	Water	3010A	
160-2937-10	DUPLICATE 01	Dissolved	Water	3010A	
160-2937-10	DUPLICATE 01	Total/NA	Water	3010A	
LCS 160-60204/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 160-60204/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 60554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-1	P2-111-SD	Dissolved	Water	6010C	60204
160-2937-1	P2-111-SD	Total/NA	Water	6010C	60204
160-2937-2	S-5	Dissolved	Water	6010C	60204
160-2937-2	S-5	Total/NA	Water	6010C	60204
160-2937-4	P2-110-SS	Dissolved	Water	6010C	60204
160-2937-4	P2-110-SS	Total/NA	Water	6010C	60204
160-2937-4 MS	P2-110-SS	Total/NA	Water	6010C	60204
160-2937-4 MSD	P2-110-SS	Total/NA	Water	6010C	60204
160-2937-5	I-4	Dissolved	Water	6010C	60204
160-2937-5	I-4	Total/NA	Water	6010C	60204
160-2937-6	P2-100-SS	Dissolved	Water	6010C	60204
160-2937-6	P2-100-SS	Total/NA	Water	6010C	60204
160-2937-7	D-3	Dissolved	Water	6010C	60204
160-2937-7	D-3	Total/NA	Water	6010C	60204
160-2937-8	P2-100-SD	Dissolved	Water	6010C	60204
160-2937-8	P2-100-SD	Total/NA	Water	6010C	60204
160-2937-9	P2-112-AS	Dissolved	Water	6010C	60204
160-2937-9	P2-112-AS	Total/NA	Water	6010C	60204
160-2937-10	DUPLICATE 01	Dissolved	Water	6010C	60204
160-2937-10	DUPLICATE 01	Total/NA	Water	6010C	60204
LCS 160-60204/2-A	Lab Control Sample	Total/NA	Water	6010C	60204
MB 160-60204/1-A	Method Blank	Total/NA	Water	6010C	60204

Analysis Batch: 60753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-1	P2-111-SD	Dissolved	Water	6010C	60204
160-2937-1	P2-111-SD	Total/NA	Water	6010C	60204
160-2937-2	S-5	Dissolved	Water	6010C	60204
160-2937-2	S-5	Total/NA	Water	6010C	60204
160-2937-4	P2-110-SS	Dissolved	Water	6010C	60204
160-2937-4	P2-110-SS	Total/NA	Water	6010C	60204
160-2937-4 MS	P2-110-SS	Total/NA	Water	6010C	60204
160-2937-4 MSD	P2-110-SS	Total/NA	Water	6010C	60204
160-2937-5	I-4	Dissolved	Water	6010C	60204
160-2937-5	I-4	Total/NA	Water	6010C	60204
160-2937-6	P2-100-SS	Dissolved	Water	6010C	60204
160-2937-6	P2-100-SS	Total/NA	Water	6010C	60204
160-2937-7	D-3	Dissolved	Water	6010C	60204
160-2937-7	D-3	Total/NA	Water	6010C	60204
160-2937-8	P2-100-SD	Dissolved	Water	6010C	60204
160-2937-8	P2-100-SD	Total/NA	Water	6010C	60204
160-2937-9	P2-112-AS	Dissolved	Water	6010C	60204

TestAmerica St. Louis

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QC Association Summary

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Metals (Continued)

Analysis Batch: 60753 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-9	P2-112-AS	Total/NA	Water	6010C	60204
160-2937-10	DUPLICATE 01	Dissolved	Water	6010C	60204
160-2937-10	DUPLICATE 01	Total/NA	Water	6010C	60204

Analysis Batch: 60781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-7	D-3	Dissolved	Water	6010C	60204
160-2937-7	D-3	Total/NA	Water	6010C	60204

Prep Batch: 60784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-1	P2-111-SD	Total/NA	Water	7470A	
160-2937-2	S-5	Total/NA	Water	7470A	
160-2937-4	P2-110-SS	Total/NA	Water	7470A	
160-2937-4 MS	P2-110-SS	Total/NA	Water	7470A	
160-2937-4 MSD	P2-110-SS	Total/NA	Water	7470A	
160-2937-5	I-4	Total/NA	Water	7470A	
160-2937-6	P2-100-SS	Total/NA	Water	7470A	
160-2937-7	D-3	Total/NA	Water	7470A	
160-2937-8	P2-100-SD	Total/NA	Water	7470A	
160-2937-9	P2-112-AS	Total/NA	Water	7470A	
160-2937-10	DUPLICATE 01	Total/NA	Water	7470A	
LCS 160-60784/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 160-60784/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 60791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-1	P2-111-SD	Dissolved	Water	7470A	
160-2937-2	S-5	Dissolved	Water	7470A	
160-2937-4	P2-110-SS	Dissolved	Water	7470A	
160-2937-4 MS	P2-110-SS	Dissolved	Water	7470A	
160-2937-4 MSD	P2-110-SS	Dissolved	Water	7470A	
160-2937-5	I-4	Dissolved	Water	7470A	
160-2937-6	P2-100-SS	Dissolved	Water	7470A	
160-2937-7	D-3	Dissolved	Water	7470A	
160-2937-8	P2-100-SD	Dissolved	Water	7470A	
160-2937-9	P2-112-AS	Dissolved	Water	7470A	
160-2937-10	DUPLICATE 01	Dissolved	Water	7470A	
LCS 160-60791/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 160-60791/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 60965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-1	P2-111-SD	Total/NA	Water	7470A	60784
160-2937-2	S-5	Total/NA	Water	7470A	60784
160-2937-4	P2-110-SS	Total/NA	Water	7470A	60784
160-2937-4 MS	P2-110-SS	Total/NA	Water	7470A	60784
160-2937-4 MSD	P2-110-SS	Total/NA	Water	7470A	60784
160-2937-5	I-4	Total/NA	Water	7470A	60784
160-2937-6	P2-100-SS	Total/NA	Water	7470A	60784
160-2937-7	D-3	Total/NA	Water	7470A	60784

TestAmerica St. Louis

QC Association Summary

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Metals (Continued)

Analysis Batch: 60965 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-8	P2-100-SD	Total/NA	Water	7470A	60784
160-2937-9	P2-112-AS	Total/NA	Water	7470A	60784
160-2937-10	DUPLICATE 01	Total/NA	Water	7470A	60784
LCS 160-60784/2-A	Lab Control Sample	Total/NA	Water	7470A	60784
MB 160-60784/1-A	Method Blank	Total/NA	Water	7470A	60784

Analysis Batch: 61008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-1	P2-111-SD	Dissolved	Water	7470A	60791
160-2937-2	S-5	Dissolved	Water	7470A	60791
160-2937-4	P2-110-SS	Dissolved	Water	7470A	60791
160-2937-4 MS	P2-110-SS	Dissolved	Water	7470A	60791
160-2937-4 MSD	P2-110-SS	Dissolved	Water	7470A	60791
160-2937-5	I-4	Dissolved	Water	7470A	60791
160-2937-6	P2-100-SS	Dissolved	Water	7470A	60791
160-2937-7	D-3	Dissolved	Water	7470A	60791
160-2937-8	P2-100-SD	Dissolved	Water	7470A	60791
160-2937-9	P2-112-AS	Dissolved	Water	7470A	60791
160-2937-10	DUPLICATE 01	Dissolved	Water	7470A	60791
LCS 160-60791/2-A	Lab Control Sample	Total/NA	Water	7470A	60791
MB 160-60791/1-A	Method Blank	Total/NA	Water	7470A	60791

General Chemistry

Analysis Batch: 60393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-1	P2-111-SD	Total/NA	Water	300.0	
160-2937-1 - DL	P2-111-SD	Total/NA	Water	300.0	
160-2937-1 DU	P2-111-SD	Total/NA	Water	300.0	
160-2937-1 DU - DL	P2-111-SD	Total/NA	Water	300.0	
160-2937-1 MS	P2-111-SD	Total/NA	Water	300.0	
160-2937-1 MS - DL	P2-111-SD	Total/NA	Water	300.0	
160-2937-2	S-5	Total/NA	Water	300.0	
160-2937-2 - DL2	S-5	Total/NA	Water	300.0	
160-2937-4	P2-110-SS	Total/NA	Water	300.0	
160-2937-4 - DL	P2-110-SS	Total/NA	Water	300.0	
160-2937-4 - DL2	P2-110-SS	Total/NA	Water	300.0	
160-2937-5	I-4	Total/NA	Water	300.0	
160-2937-5 - DL2	I-4	Total/NA	Water	300.0	
160-2937-6	P2-100-SS	Total/NA	Water	300.0	
160-2937-6 - DL	P2-100-SS	Total/NA	Water	300.0	
160-2937-7	D-3	Total/NA	Water	300.0	
160-2937-7 - DL	D-3	Total/NA	Water	300.0	
160-2937-7 - DL2	D-3	Total/NA	Water	300.0	
160-2937-8	P2-100-SD	Total/NA	Water	300.0	
160-2937-9	P2-112-AS	Total/NA	Water	300.0	
160-2937-9 - DL2	P2-112-AS	Total/NA	Water	300.0	
160-2937-10	DUPLICATE 01	Total/NA	Water	300.0	
160-2937-10 - DL2	DUPLICATE 01	Total/NA	Water	300.0	
LCS 160-60393/10	Lab Control Sample	Total/NA	Water	300.0	

TestAmerica St. Louis

QC Association Summary

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

General Chemistry (Continued)

Analysis Batch: 60393 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 160-60393/9	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 60824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-1	P2-111-SD	Total/NA	Water	300.0	
160-2937-1 DU	P2-111-SD	Total/NA	Water	300.0	
160-2937-1 MS	P2-111-SD	Total/NA	Water	300.0	
160-2937-2	S-5	Total/NA	Water	300.0	
160-2937-4	P2-110-SS	Total/NA	Water	300.0	
160-2937-5	I-4	Total/NA	Water	300.0	
160-2937-6	P2-100-SS	Total/NA	Water	300.0	
160-2937-7	D-3	Total/NA	Water	300.0	
160-2937-8	P2-100-SD	Total/NA	Water	300.0	
160-2937-9	P2-112-AS	Total/NA	Water	300.0	
160-2937-10	DUPLICATE 01	Total/NA	Water	300.0	
LCS 160-60824/59	Lab Control Sample	Total/NA	Water	300.0	
MB 160-60824/58	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 61441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-1	P2-111-SD	Total/NA	Water	310.1	
160-2937-2 - DL	S-5	Total/NA	Water	310.1	
160-2937-4 - DL	P2-110-SS	Total/NA	Water	310.1	
LCS 160-61441/3	Lab Control Sample	Total/NA	Water	310.1	
LLCS 160-61441/2	Lab Control Sample	Total/NA	Water	310.1	
MB 160-61441/1	Method Blank	Total/NA	Water	310.1	

Analysis Batch: 61623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-5 - DL	I-4	Total/NA	Water	310.1	
160-2937-5 DU - DL	I-4	Total/NA	Water	310.1	
160-2937-5 MS - DL	I-4	Total/NA	Water	310.1	
160-2937-6	P2-100-SS	Total/NA	Water	310.1	
160-2937-7 - DL	D-3	Total/NA	Water	310.1	
160-2937-8 - DL	P2-100-SD	Total/NA	Water	310.1	
160-2937-9 - DL	P2-112-AS	Total/NA	Water	310.1	
160-2937-10 - DL	DUPLICATE 01	Total/NA	Water	310.1	
LCS 160-61623/3	Lab Control Sample	Total/NA	Water	310.1	
LLCS 160-61623/2	Lab Control Sample	Total/NA	Water	310.1	
MB 160-61623/1	Method Blank	Total/NA	Water	310.1	

Analysis Batch: 62158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2937-2 - RADL	S-5	Total/NA	Water	300.0	
LCS 160-62158/4	Lab Control Sample	Total/NA	Water	300.0	
MB 160-62158/3	Method Blank	Total/NA	Water	300.0	

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Surrogate Summary

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-2937-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (82-132)	BFB (82-121)	DBFM (85-119)	TOL (85-115)
160-2937-1	P2-111-SD	96	99	97	99
160-2937-2	S-5	98	100	97	99
160-2937-3	FB @ P2-110-SS	102	100	100	99
160-2937-4	P2-110-SS	104	99	103	101
160-2937-5	I-4	107	101	104	102
160-2937-6	P2-100-SS	103	102	101	101
160-2937-7	D-3	105	96	104	98
160-2937-8	P2-100-SD	106	100	104	102
160-2937-9	P2-112-AS	108	100	103	100
160-2937-9	P2-112-AS	115	106	103	99
160-2937-10	DUPLICATE 01	101	100	100	99
160-2937-10	DUPLICATE 01	99	96	99	101
160-2937-10 MS	DUPLICATE 01	105	97	103	101
160-2937-10 MSD	DUPLICATE 01	99	98	99	99
160-2937-11	TRIP BLANK	100	98	102	100
LCS 160-60374/4	Lab Control Sample	103	96	99	98
LCS 160-60980/4	Lab Control Sample	112	100	99	100
LCS 160-60998/3	Lab Control Sample	96	95	98	95
LCSD 160-60374/5	Lab Control Sample Dup	97	97	99	98
LCSD 160-60998/4	Lab Control Sample Dup	98	98	98	98
MB 160-60374/2	Method Blank	98	101	100	98
MB 160-60980/2	Method Blank	117	103	100	102
MB 160-60998/2	Method Blank	96	93	96	97

Surrogate Legend

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

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