

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: 160-3022-1
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:
8/1/2013 4:35:55 PM

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: 160-3022-1

Job ID: 160-3022-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Engineering Management Support, Inc.

Project: West Lake Landfill

Report Number: 160-3022-1

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.

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

RECEIPT

The samples were received on 07/18/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.0 C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples LR-100 (160-3022-1), D-81 (160-3022-2), PZ-204-SS (160-3022-3), LR-103 (160-3022-4), PZ-111-KS (160-3022-5), PZ-203-SS (160-3022-6), D-87 (160-3022-7), DUPLICATE 06 (160-3022-8) and TRIP BLANK (160-3022-9) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 07/21/2013 and 07/22/2013.

Analytical batch 61804

The continuing calibration verification (CCV) for Chloroethane associated with batch 61804 recovered above the upper control limit, indicating results for this analyte will be biased high.. The samples associated with this CCV were non-detects for the affected analyte;

Case Narrative

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

TestAmerica Job ID: 160-3022-1

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Laboratory: TestAmerica St. Louis (Continued)

therefore, the data have been reported.

Surrogate(4-BFB) recovery for the following sample was outside control limits: LR-100 (160-3022-1). Evidence of matrix interferences is not obvious. This sample was used for the MS/MSD analyses. The surrogate recoveries in the MS/MSD showed a pattern similar to the unspiked sample. Surrogate 4-BFB showed much lower recovery than the other three surrogates, although in the MS/MSD it fell within the lower recovery limit. This similar pattern seems to indicate a matrix effect.

The matrix spike and/or matrix spike duplicate (MS/MSD) recoveries for batch 61804 were outside control limits for Bromoform and Dichlorodifluoromethane. The associated laboratory control sample (LCS) recovery met acceptance criteria.

The MS/MSD recoveries of Chloroethane are outside the upper QC limit indicating a high bias for the results for this analyte. This analyte was not detected in the associated samples

The laboratory control sample (LCS) for batch 61804 recovered outside control limits for the following analyte: Chloroethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

No other difficulties were encountered during the VOCs analysis.

All other quality control parameters were within the acceptance limits.

METALS (ICP)-Dissolved and Total

Samples LR-100 (160-3022-1), D-81 (160-3022-2), PZ-204-SS (160-3022-3), LR-103 (160-3022-4), PZ-111-KS (160-3022-5), PZ-203-SS (160-3022-6), D-87 (160-3022-7) and DUPLICATE 06 (160-3022-8) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 07/18/2013 and analyzed on 07/19/2013 and 07/23/2013.

Analytical batch 62088

Due to the high concentration of calcium, the matrix spike / matrix spike duplicate (MS/MSD) for prep batch 61452 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Analytical batch 61766

The following samples were diluted to bring the concentration of target analytes (calcium, magnesium, manganese, and sodium) within the calibration range. Magnesium also interferes with iron: D-81 (160-3022-2), D-87 (160-3022-7), DUPLICATE 06 (160-3022-8), LR-100 (160-3022-1), LR-103 (160-3022-4), PZ-111-KS (160-3022-5), PZ-203-SS (160-3022-6), PZ-204-SS (160-3022-3). Elevated reporting limits (RLs) are provided.

Due to the high concentration of sodium, the matrix spike / matrix spike duplicate (MS/MSD) for prep batch 61452 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Analytical batch 62409

The following samples were diluted to bring the concentration of target analytes (calcium, magnesium, iron, and manganese) within the calibration range. Magnesium also interferes with iron and iron interferes with arsenic, chromium, selenium, and zinc: (160-3013-1 MS), (160-3013-1 MSD), (160-3013-1 SD), D-81 (160-3022-2), D-87 (160-3022-7), DUPLICATE 06 (160-3022-8), LR-100 (160-3022-1), LR-103 (160-3022-4), PZ-111-KS (160-3022-5), PZ-203-SS (160-3022-6), PZ-204-SS (160-3022-3), PZ-208-SS (160-3013-1). Elevated reporting limits (RLs) are provided.

The target analyte concentration for magnesium (which also interferes with iron) in the unspiked sample is such that the MS and/or MSD spike concentrations are above the instrument's linear range. MS/MSD results are considered estimated values. The said analyte concentration in the original sample is greater than 4 times the amount spiked, making % recovery information ineffective. Method performance is demonstrated by acceptable LCS recovery.

The initial calibration verification (ICV) for prep batch 61454 was above the upper control limit for thallium indicating a potential high bias. The affected samples were ND for thallium and the data is reported with this narrative.

Observations: Analytical batch 62409 and 61766

The sample results for aluminum and iron were observed outside the dissolved versus total criteria. All other elements were within QC

Case Narrative

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

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Laboratory: TestAmerica St. Louis (Continued)

limits, indicating that this is an anomaly due to matrix interference.

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)

Samples LR-100 (160-3022-1), D-81 (160-3022-2), PZ-204-SS (160-3022-3), LR-103 (160-3022-4), PZ-111-KS (160-3022-5), PZ-203-SS (160-3022-6), D-87 (160-3022-7) and DUPLICATE 06 (160-3022-8) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 07/18/2013 and analyzed on 07/19/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

TOTAL MERCURY

Samples LR-100 (160-3022-1), D-81 (160-3022-2), PZ-204-SS (160-3022-3), LR-103 (160-3022-4), PZ-111-KS (160-3022-5), PZ-203-SS (160-3022-6), D-87 (160-3022-7) and DUPLICATE 06 (160-3022-8) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 07/18/2013 and analyzed on 07/19/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

ANIONS

Samples LR-100 (160-3022-1), D-81 (160-3022-2), PZ-204-SS (160-3022-3), LR-103 (160-3022-4), PZ-111-KS (160-3022-5), PZ-203-SS (160-3022-6), D-87 (160-3022-7) and DUPLICATE 06 (160-3022-8) were analyzed for anions in accordance with EPA Method 300.0. The samples were analyzed on 07/18/2013, 07/19/2013 and 07/20/2013.

The matrix spike (MS) recovery for the following sample in Iodide batch 62155 was outside control limits due to matrix interference. The associated laboratory control sample (LCS) recovery met acceptance criteria.

The following samples were diluted to bring the concentrations of Chloride, Sulfate, and Bromide within the calibration range in IC batch 62889: D-87 (160-3022-7). Elevated reporting limits (RLs) are provided.

The following samples were diluted to bring the concentrations of Chloride and Sulfate within the calibration range in IC batch 63933: D-81 (160-3022-2), D-87 (160-3022-7), DUPLICATE 06 (160-3022-8), LR-100 (160-3022-1), LR-103 (160-3022-4), PZ-111-KS (160-3022-5), PZ-203-SS (160-3022-6), PZ-204-SS (160-3022-3). Elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the anions analysis.

All other quality control parameters were within the acceptance limits.

ALKALINITY

Samples LR-100 (160-3022-1), D-81 (160-3022-2), PZ-204-SS (160-3022-3), LR-103 (160-3022-4), PZ-111-KS (160-3022-5), PZ-203-SS (160-3022-6), D-87 (160-3022-7) and DUPLICATE 06 (160-3022-8) were analyzed for alkalinity in accordance with EPA Method 310.1. The samples were analyzed on 07/29/2013.

The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: D-87 (160-3022-7), LR-100 (160-3022-1). 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.

TestAmerica St. Louis
 13745 Rider Trail North
 Earth City, MO 63045
 Phone (314) 298-8568 Fax (314) 298-8757

Chain of Custody Record
 C-23

TestAmerica
 160-499-253.1

Client Information Client Contact: Mr. Paul Rosasco Company: Engineering Management Support, Inc. Address: 7220 W. Jefferson AVE, Suite 406 City: Lakewood State: CO, 80235 Phone: Email: paulrosasco@emsidsenwer.com Project Name: West Lake Landfill - July SIC:		Lab P/N: P160499-253.1 Carrier Tracking Ref(s): Lab P/N: 160-499-253.1 Page: Page 1 of 10 Job #:	
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required IMO #:		Analysis Requested 82800 - Standard List 82800 - VOA 00100, 1470A 300 - Arsenic 310.1 - Alkalinity - 3100 Perform MB/MSD (Yes or No) Field Filled Sample (Yes or No)	
Sample Identification LR-100 * D-81 PZ-204-55 LR-102 PZ-111-K5 PZ-203-55 D-87 Duplicate 06 Trip Black	Sample Date 7/17/13 1023 1043 1140 1215 1329 1358 1411 - 7/17/13	Sample Time 1023 1043 1140 1215 1329 1358 1411 - -	Sample Type (C=Comp, G=grab) G G G G G G G G G G
Matrix (W=water, S=solid, O=organic, I=inorganic, A=air) Water Water Water Water Water Water Water Water Water Water		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Ascorbic Acid H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - BSA Other: M - Nitrite N - None O - AsH3O2 P - Na2CO3 Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecylhydra U - Azotone V - MCAA W - pH 4.5 X - EDTA Y - BSA Z - other (specify)	
Special Instructions/Note: * VOAs affected; sent unprocessed		Total Number of Containers: X	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)			
Empty Kit Relinquished by:			
Relinquished by: <i>Matt Stumba</i> Relinquished by: <i>[Signature]</i> Relinquished by:		Date: 7/18/13 0735 Date: 7/18/13 0815 Date:	
Custody Seals Intact: A. Yes <input type="checkbox"/> B. No <input type="checkbox"/>		Cooler (temperature) °C and Other Remarks:	

Login Sample Receipt Checklist

Client: Engineering Management Support, Inc.

Job Number: 160-3022-1

Login Number: 3022

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

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.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Bottle label
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Definitions/Glossary

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

TestAmerica Job ID: 160-3022-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
*	LCS or LCSD exceeds the control limits
F	MS or MSD 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.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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)

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Method Summary

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

TestAmerica Job ID: 160-3022-1

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

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Sample Summary

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

TestAmerica Job ID: 160-3022-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-3022-1	LR-100	Water	07/17/13 10:23	07/18/13 08:15
160-3022-2	D-81	Water	07/17/13 10:43	07/18/13 08:15
160-3022-3	PZ-204-SS	Water	07/17/13 11:40	07/18/13 08:15
160-3022-4	LR-103	Water	07/17/13 12:15	07/18/13 08:15
160-3022-5	PZ-111-KS	Water	07/17/13 13:09	07/18/13 08:15
160-3022-6	PZ-203-SS	Water	07/17/13 13:58	07/18/13 08:15
160-3022-7	D-87	Water	07/17/13 14:11	07/18/13 08:15
160-3022-8	DUPLICATE 06	Water	07/17/13 00:00	07/18/13 08:15
160-3022-9	TRIP BLANK	Water	07/17/13 00:00	07/18/13 08:15

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Detection Summary

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: LR-100

Lab Sample ID: 160-3022-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	7.2		5.0	0.25	ug/L	1		8260C	Total/NA
Chlorobenzene	58		5.0	0.38	ug/L	1		8260C	Total/NA
1,4-Dichlorobenzene	5.4		5.0	0.35	ug/L	1		8260C	Total/NA
Isopropylbenzene	14		5.0	0.26	ug/L	1		8260C	Total/NA
Antimony	4.0	J	10	4.0	ug/L	1		6010C	Total/NA
Barium	430		50	4.0	ug/L	1		6010C	Total/NA
Calcium	110000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	120000		10000	1100	ug/L	10		6010C	Total/NA
Chromium	4.7	J	10	3.1	ug/L	1		6010C	Total/NA
Iron	21000		100	28	ug/L	1		6010C	Total/NA
Iron	22000		1000	280	ug/L	10		6010C	Total/NA
Lead	11		10	1.5	ug/L	1		6010C	Total/NA
Magnesium	62000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	63000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	170		15	3.3	ug/L	1		6010C	Total/NA
Nickel	23	J	40	13	ug/L	1		6010C	Total/NA
Potassium	83000		5000	1700	ug/L	1		6010C	Total/NA
Sodium	190000	E	1000	320	ug/L	1		6010C	Total/NA
Sodium	180000		10000	3200	ug/L	10		6010C	Total/NA
Zinc	25		20	5.2	ug/L	1		6010C	Total/NA
Antimony	4.6	J	10	4.0	ug/L	1		6010C	Dissolved
Barium	450		50	4.0	ug/L	1		6010C	Dissolved
Calcium	110000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	130000		10000	1100	ug/L	10		6010C	Dissolved
Chromium	6.1	J	10	3.1	ug/L	1		6010C	Dissolved
Iron	21000		100	28	ug/L	1		6010C	Dissolved
Iron	21000		1000	280	ug/L	10		6010C	Dissolved
Lead	2.6	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	61000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	61000		10000	1300	ug/L	10		6010C	Dissolved
Manganese	170		15	3.3	ug/L	1		6010C	Dissolved
Nickel	24	J	40	13	ug/L	1		6010C	Dissolved
Potassium	87000		5000	1700	ug/L	1		6010C	Dissolved
Sodium	200000	E	1000	320	ug/L	1		6010C	Dissolved
Sodium	200000		10000	3200	ug/L	10		6010C	Dissolved
Zinc	6.1	J	20	5.2	ug/L	1		6010C	Dissolved
Nitrate as N	0.0058	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	2.1		0.25	0.025	mg/L	1		300.0	Total/NA
Sulfate	0.25	J	0.50	0.050	mg/L	1		300.0	Total/NA
Iodide	0.33	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity	1200		25	2.7	mg/L	5		310.1	Total/NA
Chloride - DL2	180		20	2.0	mg/L	100		300.0	Total/NA

Client Sample ID: D-81

Lab Sample ID: 160-3022-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	4.4	J	10	4.0	ug/L	1		6010C	Total/NA
Arsenic	8.6	J	10	2.0	ug/L	1		6010C	Total/NA
Barium	350		50	4.0	ug/L	1		6010C	Total/NA
Calcium	180000	E	1000	110	ug/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

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Detection Summary

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: D-81 (Continued)

Lab Sample ID: 160-3022-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	200000		10000	1100	ug/L	10		6010C	Total/NA
Cobalt	4.4	J B	50	4.0	ug/L	1		6010C	Total/NA
Iron	15000		100	28	ug/L	1		6010C	Total/NA
Lead	2.9	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	46000		1000	130	ug/L	1		6010C	Total/NA
Manganese	850		15	3.3	ug/L	1		6010C	Total/NA
Potassium	4000	J	5000	1700	ug/L	1		6010C	Total/NA
Sodium	32000		1000	320	ug/L	1		6010C	Total/NA
Zinc	8.8	J	20	5.2	ug/L	1		6010C	Total/NA
Arsenic	9.4	J	10	2.0	ug/L	1		6010C	Dissolved
Barium	350		50	4.0	ug/L	1		6010C	Dissolved
Calcium	180000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	220000		10000	1100	ug/L	10		6010C	Dissolved
Iron	14000		100	28	ug/L	1		6010C	Dissolved
Lead	2.4	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	43000		1000	130	ug/L	1		6010C	Dissolved
Manganese	810		15	3.3	ug/L	1		6010C	Dissolved
Potassium	4200	J	5000	1700	ug/L	1		6010C	Dissolved
Sodium	33000		1000	320	ug/L	1		6010C	Dissolved
Zinc	6.3	J	20	5.2	ug/L	1		6010C	Dissolved
Nitrate as N	0.0064	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	0.23	J	0.25	0.025	mg/L	1		300.0	Total/NA
Alkalinity	630		5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL	30		4.0	0.40	mg/L	20		300.0	Total/NA
Sulfate - DL	70		10	1.0	mg/L	20		300.0	Total/NA

Client Sample ID: PZ-204-SS

Lab Sample ID: 160-3022-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	400		200	80	ug/L	1		6010C	Total/NA
Barium	180		50	4.0	ug/L	1		6010C	Total/NA
Calcium	70000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	78000		10000	1100	ug/L	10		6010C	Total/NA
Iron	1900		100	28	ug/L	1		6010C	Total/NA
Iron	1900		1000	280	ug/L	10		6010C	Total/NA
Lead	2.6	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	50000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	51000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	110		15	3.3	ug/L	1		6010C	Total/NA
Potassium	2200	J	5000	1700	ug/L	1		6010C	Total/NA
Sodium	29000		1000	320	ug/L	1		6010C	Total/NA
Zinc	16	J	20	5.2	ug/L	1		6010C	Total/NA
Aluminum	700		200	80	ug/L	1		6010C	Dissolved
Antimony	4.1	J	10	4.0	ug/L	1		6010C	Dissolved
Arsenic	2.5	J	10	2.0	ug/L	1		6010C	Dissolved
Barium	180		50	4.0	ug/L	1		6010C	Dissolved
Calcium	75000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	81000		10000	1100	ug/L	10		6010C	Dissolved
Chromium	4.0	J	10	3.1	ug/L	1		6010C	Dissolved
Iron	2500		100	28	ug/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

US EPA ARCHIVE DOCUMENT

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Detection Summary

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: PZ-204-SS (Continued)

Lab Sample ID: 160-3022-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	2.8	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	49000		1000	130	ug/L	1		6010C	Dissolved
Manganese	100		15	3.3	ug/L	1		6010C	Dissolved
Potassium	2100	J	5000	1700	ug/L	1		6010C	Dissolved
Sodium	29000		1000	320	ug/L	1		6010C	Dissolved
Zinc	17	J	20	5.2	ug/L	1		6010C	Dissolved
Nitrate as N	0.014	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Chloride	3.0		0.20	0.020	mg/L	1		300.0	Total/NA
Alkalinity	430		5.0	0.54	mg/L	1		310.1	Total/NA
Sulfate - DL	23		10	1.0	mg/L	20		300.0	Total/NA

Client Sample ID: LR-103

Lab Sample ID: 160-3022-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	120	J	200	80	ug/L	1		6010C	Total/NA
Antimony	5.5	J	10	4.0	ug/L	1		6010C	Total/NA
Arsenic	52		10	2.0	ug/L	1		6010C	Total/NA
Barium	1100		50	4.0	ug/L	1		6010C	Total/NA
Calcium	230000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	270000		10000	1100	ug/L	10		6010C	Total/NA
Iron	35000		100	28	ug/L	1		6010C	Total/NA
Iron	36000		1000	280	ug/L	10		6010C	Total/NA
Lead	4.1	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	61000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	63000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	1000		15	3.3	ug/L	1		6010C	Total/NA
Nickel	13	J	40	13	ug/L	1		6010C	Total/NA
Potassium	8600		5000	1700	ug/L	1		6010C	Total/NA
Sodium	48000		1000	320	ug/L	1		6010C	Total/NA
Zinc	6.3	J	20	5.2	ug/L	1		6010C	Total/NA
Antimony	5.3	J	10	4.0	ug/L	1		6010C	Dissolved
Arsenic	52		10	2.0	ug/L	1		6010C	Dissolved
Barium	1100		50	4.0	ug/L	1		6010C	Dissolved
Calcium	230000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	280000		10000	1100	ug/L	10		6010C	Dissolved
Iron	33000		100	28	ug/L	1		6010C	Dissolved
Iron	34000		1000	280	ug/L	10		6010C	Dissolved
Lead	3.1	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	59000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	59000		10000	1300	ug/L	10		6010C	Dissolved
Manganese	980		15	3.3	ug/L	1		6010C	Dissolved
Potassium	8800		5000	1700	ug/L	1		6010C	Dissolved
Selenium	3.2	J	15	2.7	ug/L	1		6010C	Dissolved
Sodium	51000		1000	320	ug/L	1		6010C	Dissolved
Nitrate as N	0.013	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	1.2		0.25	0.025	mg/L	1		300.0	Total/NA
Sulfate	0.22	J	0.50	0.050	mg/L	1		300.0	Total/NA
Iodide	0.40	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity	820		5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL2	130		20	2.0	mg/L	100		300.0	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: 160-3022-1

Client Sample ID: PZ-111-KS

Lab Sample ID: 160-3022-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	130	J	200	80	ug/L	1		6010C	Total/NA
Barium	6.1	J	50	4.0	ug/L	1		6010C	Total/NA
Calcium	8800		1000	110	ug/L	1		6010C	Total/NA
Chromium	4.5	J	10	3.1	ug/L	1		6010C	Total/NA
Iron	170		100	28	ug/L	1		6010C	Total/NA
Magnesium	6100		1000	130	ug/L	1		6010C	Total/NA
Potassium	7300		5000	1700	ug/L	1		6010C	Total/NA
Sodium	380000	E	1000	320	ug/L	1		6010C	Total/NA
Sodium	390000		10000	3200	ug/L	10		6010C	Total/NA
Zinc	8.0	J	20	5.2	ug/L	1		6010C	Total/NA
Aluminum	170	J	200	80	ug/L	1		6010C	Dissolved
Arsenic	3.2	J	10	2.0	ug/L	1		6010C	Dissolved
Barium	6.2	J	50	4.0	ug/L	1		6010C	Dissolved
Calcium	8800		1000	110	ug/L	1		6010C	Dissolved
Iron	160		100	28	ug/L	1		6010C	Dissolved
Magnesium	5700		1000	130	ug/L	1		6010C	Dissolved
Manganese	3.3	J	15	3.3	ug/L	1		6010C	Dissolved
Potassium	7400		5000	1700	ug/L	1		6010C	Dissolved
Sodium	390000	E	1000	320	ug/L	1		6010C	Dissolved
Sodium	410000		10000	3200	ug/L	10		6010C	Dissolved
Zinc	8.2	J	20	5.2	ug/L	1		6010C	Dissolved
Nitrate as N	0.030		0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	0.56		0.25	0.025	mg/L	1		300.0	Total/NA
Alkalinity	610		5.0	0.54	mg/L	1		310.1	Total/NA
Sulfate - DL	71		10	1.0	mg/L	20		300.0	Total/NA
Chloride - DL2	150		20	2.0	mg/L	100		300.0	Total/NA

Client Sample ID: PZ-203-SS

Lab Sample ID: 160-3022-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	230		200	80	ug/L	1		6010C	Total/NA
Antimony	4.1	J	10	4.0	ug/L	1		6010C	Total/NA
Barium	91		50	4.0	ug/L	1		6010C	Total/NA
Calcium	98000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	100000		10000	1100	ug/L	10		6010C	Total/NA
Chromium	4.7	J	10	3.1	ug/L	1		6010C	Total/NA
Cobalt	4.1	J B	50	4.0	ug/L	1		6010C	Total/NA
Iron	280		100	28	ug/L	1		6010C	Total/NA
Magnesium	42000		1000	130	ug/L	1		6010C	Total/NA
Manganese	21		15	3.3	ug/L	1		6010C	Total/NA
Potassium	2600	J	5000	1700	ug/L	1		6010C	Total/NA
Sodium	8100		1000	320	ug/L	1		6010C	Total/NA
Zinc	8.6	J	20	5.2	ug/L	1		6010C	Total/NA
Barium	89		50	4.0	ug/L	1		6010C	Dissolved
Calcium	94000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	100000		10000	1100	ug/L	10		6010C	Dissolved
Chromium	3.1	J	10	3.1	ug/L	1		6010C	Dissolved
Iron	140		100	28	ug/L	1		6010C	Dissolved
Magnesium	39000		1000	130	ug/L	1		6010C	Dissolved
Manganese	18		15	3.3	ug/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

US EPA ARCHIVE DOCUMENT

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Detection Summary

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: PZ-203-SS (Continued)

Lab Sample ID: 160-3022-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	2500	J	5000	1700	ug/L	1		6010C	Dissolved
Sodium	8000		1000	320	ug/L	1		6010C	Dissolved
Zinc	5.8	J	20	5.2	ug/L	1		6010C	Dissolved
Alkalinity	380		5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL	4.7		4.0	0.40	mg/L	20		300.0	Total/NA
Sulfate - DL	43		10	1.0	mg/L	20		300.0	Total/NA

Client Sample ID: D-87

Lab Sample ID: 160-3022-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	720		200	80	ug/L	1		6010C	Total/NA
Antimony	4.4	J	10	4.0	ug/L	1		6010C	Total/NA
Barium	1500		50	4.0	ug/L	1		6010C	Total/NA
Calcium	230000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	300000		10000	1100	ug/L	10		6010C	Total/NA
Iron	33000		100	28	ug/L	1		6010C	Total/NA
Iron	35000		1000	280	ug/L	10		6010C	Total/NA
Lead	4.8	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	67000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	71000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	620		15	3.3	ug/L	1		6010C	Total/NA
Nickel	16	J	40	13	ug/L	1		6010C	Total/NA
Potassium	13000		5000	1700	ug/L	1		6010C	Total/NA
Sodium	220000	E	1000	320	ug/L	1		6010C	Total/NA
Sodium	220000		10000	3200	ug/L	10		6010C	Total/NA
Zinc	11	J	20	5.2	ug/L	1		6010C	Total/NA
Antimony	4.7	J	10	4.0	ug/L	1		6010C	Dissolved
Arsenic	2.3	J	10	2.0	ug/L	1		6010C	Dissolved
Barium	1500		50	4.0	ug/L	1		6010C	Dissolved
Calcium	250000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	300000		10000	1100	ug/L	10		6010C	Dissolved
Chromium	4.1	J	10	3.1	ug/L	1		6010C	Dissolved
Iron	31000		100	28	ug/L	1		6010C	Dissolved
Iron	32000		1000	280	ug/L	10		6010C	Dissolved
Lead	2.9	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	64000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	66000		10000	1300	ug/L	10		6010C	Dissolved
Manganese	570		15	3.3	ug/L	1		6010C	Dissolved
Nickel	16	J	40	13	ug/L	1		6010C	Dissolved
Potassium	13000		5000	1700	ug/L	1		6010C	Dissolved
Selenium	4.0	J	15	2.7	ug/L	1		6010C	Dissolved
Sodium	220000	E	1000	320	ug/L	1		6010C	Dissolved
Sodium	220000		10000	3200	ug/L	10		6010C	Dissolved
Zinc	5.5	J	20	5.2	ug/L	1		6010C	Dissolved
Nitrate as N	0.014	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Sulfate	0.21	J	0.50	0.050	mg/L	1		300.0	Total/NA
Iodide	0.27	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity	1000		25	2.7	mg/L	5		310.1	Total/NA
Chloride - DL2	330		20	2.0	mg/L	100		300.0	Total/NA
Bromide - RADL	5.0		1.3	0.13	mg/L	5		300.0	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: 160-3022-1

Client Sample ID: DUPLICATE 06

Lab Sample ID: 160-3022-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	8.3	J	10	2.0	ug/L	1		6010C	Total/NA
Barium	350		50	4.0	ug/L	1		6010C	Total/NA
Calcium	180000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	200000		10000	1100	ug/L	10		6010C	Total/NA
Cobalt	4.6	J B	50	4.0	ug/L	1		6010C	Total/NA
Iron	15000		100	28	ug/L	1		6010C	Total/NA
Lead	3.1	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	45000		1000	130	ug/L	1		6010C	Total/NA
Manganese	860		15	3.3	ug/L	1		6010C	Total/NA
Potassium	4000	J	5000	1700	ug/L	1		6010C	Total/NA
Sodium	32000		1000	320	ug/L	1		6010C	Total/NA
Zinc	7.1	J	20	5.2	ug/L	1		6010C	Total/NA
Antimony	4.3	J	10	4.0	ug/L	1		6010C	Dissolved
Arsenic	7.9	J	10	2.0	ug/L	1		6010C	Dissolved
Barium	350		50	4.0	ug/L	1		6010C	Dissolved
Calcium	180000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	210000		10000	1100	ug/L	10		6010C	Dissolved
Iron	14000		100	28	ug/L	1		6010C	Dissolved
Lead	2.1	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	43000		1000	130	ug/L	1		6010C	Dissolved
Manganese	810		15	3.3	ug/L	1		6010C	Dissolved
Potassium	4000	J	5000	1700	ug/L	1		6010C	Dissolved
Sodium	33000		1000	320	ug/L	1		6010C	Dissolved
Nitrate as N	0.0081	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	0.23	J	0.25	0.025	mg/L	1		300.0	Total/NA
Alkalinity	630		5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL	31		4.0	0.40	mg/L	20		300.0	Total/NA
Sulfate - DL	69		10	1.0	mg/L	20		300.0	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-3022-9

No Detections.

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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: 160-3022-1

Client Sample ID: LR-100

Lab Sample ID: 160-3022-1

Date Collected: 07/17/13 10:23

Matrix: Water

Date Received: 07/18/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			07/21/13 20:53	1
Benzene	7.2		5.0	0.25	ug/L			07/21/13 20:53	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/21/13 20:53	1
Bromoform	ND		5.0	0.37	ug/L			07/21/13 20:53	1
Bromomethane	ND		10	0.40	ug/L			07/21/13 20:53	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/21/13 20:53	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/21/13 20:53	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/21/13 20:53	1
Chlorobenzene	58		5.0	0.38	ug/L			07/21/13 20:53	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/21/13 20:53	1
Chloroethane	ND *		10	0.38	ug/L			07/21/13 20:53	1
Chloroform	ND		5.0	0.15	ug/L			07/21/13 20:53	1
Chloromethane	ND		10	0.55	ug/L			07/21/13 20:53	1
Cyclohexane	ND		10	0.36	ug/L			07/21/13 20:53	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/21/13 20:53	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/21/13 20:53	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/21/13 20:53	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/21/13 20:53	1
1,4-Dichlorobenzene	5.4		5.0	0.35	ug/L			07/21/13 20:53	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/21/13 20:53	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/21/13 20:53	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/21/13 20:53	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/21/13 20:53	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/21/13 20:53	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/21/13 20:53	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/21/13 20:53	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/21/13 20:53	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/21/13 20:53	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/21/13 20:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.25	ug/L			07/21/13 20:53	1
2-Hexanone	ND		20	0.59	ug/L			07/21/13 20:53	1
Isopropylbenzene	14		5.0	0.26	ug/L			07/21/13 20:53	1
Methyl acetate	ND		25	2.3	ug/L			07/21/13 20:53	1
Methylcyclohexane	ND		10	0.26	ug/L			07/21/13 20:53	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/21/13 20:53	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/21/13 20:53	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/21/13 20:53	1
Styrene	ND		5.0	0.35	ug/L			07/21/13 20:53	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/21/13 20:53	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/21/13 20:53	1
Toluene	ND		5.0	1.0	ug/L			07/21/13 20:53	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/21/13 20:53	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/21/13 20:53	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/21/13 20:53	1
Trichloroethene	ND		5.0	0.29	ug/L			07/21/13 20:53	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/21/13 20:53	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/21/13 20:53	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/21/13 20:53	1
o-Xylene	ND		5.0	0.32	ug/L			07/21/13 20:53	1

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TestAmerica St. Louis

Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: LR-100

Lab Sample ID: 160-3022-1

Date Collected: 07/17/13 10:23

Matrix: Water

Date Received: 07/18/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		10	0.85	ug/L			07/21/13 20:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77	X	82 - 121					07/21/13 20:53	1
1,2-Dichloroethane-d4 (Surr)	102		82 - 132					07/21/13 20:53	1
Toluene-d8 (Surr)	99		85 - 115					07/21/13 20:53	1
Dibromofluoromethane (Surr)	103		85 - 119					07/21/13 20:53	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/18/13 15:33	07/23/13 15:28	1
Antimony	4.0	J	10	4.0	ug/L		07/18/13 15:33	07/23/13 15:28	1
Arsenic	ND		10	2.0	ug/L		07/18/13 15:33	07/23/13 15:28	1
Barium	430		50	4.0	ug/L		07/18/13 15:33	07/23/13 15:28	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:33	07/23/13 15:28	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:33	07/23/13 15:28	1
Calcium	110000	E	1000	110	ug/L		07/18/13 15:33	07/23/13 15:28	1
Calcium	120000		10000	1100	ug/L		07/18/13 15:33	07/23/13 16:52	10
Chromium	4.7	J	10	3.1	ug/L		07/18/13 15:33	07/23/13 15:28	1
Cobalt	ND		50	4.0	ug/L		07/18/13 15:33	07/23/13 15:28	1
Copper	ND		25	4.6	ug/L		07/18/13 15:33	07/23/13 15:28	1
Iron	21000		100	28	ug/L		07/18/13 15:33	07/23/13 15:28	1
Iron	22000		1000	280	ug/L		07/18/13 15:33	07/23/13 16:52	10
Lead	11		10	1.5	ug/L		07/18/13 15:33	07/23/13 15:28	1
Magnesium	62000	E	1000	130	ug/L		07/18/13 15:33	07/23/13 15:28	1
Magnesium	63000		10000	1300	ug/L		07/18/13 15:33	07/23/13 16:52	10
Manganese	170		15	3.3	ug/L		07/18/13 15:33	07/23/13 15:28	1
Nickel	23	J	40	13	ug/L		07/18/13 15:33	07/23/13 15:28	1
Potassium	83000		5000	1700	ug/L		07/18/13 15:33	07/23/13 15:28	1
Selenium	ND		15	2.7	ug/L		07/18/13 15:33	07/23/13 15:28	1
Silver	ND		10	6.0	ug/L		07/18/13 15:33	07/23/13 15:28	1
Sodium	190000	E	1000	320	ug/L		07/18/13 15:33	07/23/13 15:28	1
Sodium	180000		10000	3200	ug/L		07/18/13 15:33	07/23/13 16:52	10
Thallium	ND	^	20	4.0	ug/L		07/18/13 15:33	07/23/13 15:28	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:33	07/23/13 15:28	1
Zinc	25		20	5.2	ug/L		07/18/13 15:33	07/23/13 15:28	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/18/13 15:26	07/19/13 19:58	1
Antimony	4.6	J	10	4.0	ug/L		07/18/13 15:26	07/19/13 19:58	1
Arsenic	ND		10	2.0	ug/L		07/18/13 15:26	07/19/13 19:58	1
Barium	450		50	4.0	ug/L		07/18/13 15:26	07/19/13 19:58	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:26	07/19/13 19:58	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:26	07/19/13 19:58	1
Calcium	110000	E	1000	110	ug/L		07/18/13 15:26	07/19/13 19:58	1
Calcium	130000		10000	1100	ug/L		07/18/13 15:26	07/19/13 21:26	10
Chromium	6.1	J	10	3.1	ug/L		07/18/13 15:26	07/19/13 19:58	1
Cobalt	ND		50	4.0	ug/L		07/18/13 15:26	07/19/13 19:58	1
Copper	ND		25	4.6	ug/L		07/18/13 15:26	07/19/13 19:58	1

TestAmerica St. Louis

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: LR-100

Lab Sample ID: 160-3022-1

Date Collected: 07/17/13 10:23

Matrix: Water

Date Received: 07/18/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	21000		100	28	ug/L		07/18/13 15:26	07/19/13 19:58	1
Iron	21000		1000	280	ug/L		07/18/13 15:26	07/19/13 21:26	10
Lead	2.6	J	10	1.5	ug/L		07/18/13 15:26	07/19/13 19:58	1
Magnesium	61000	E	1000	130	ug/L		07/18/13 15:26	07/19/13 19:58	1
Magnesium	61000		10000	1300	ug/L		07/18/13 15:26	07/19/13 21:26	10
Manganese	170		15	3.3	ug/L		07/18/13 15:26	07/19/13 19:58	1
Nickel	24	J	40	13	ug/L		07/18/13 15:26	07/19/13 19:58	1
Potassium	87000		5000	1700	ug/L		07/18/13 15:26	07/19/13 19:58	1
Selenium	ND		15	2.7	ug/L		07/18/13 15:26	07/19/13 19:58	1
Silver	ND		10	6.0	ug/L		07/18/13 15:26	07/19/13 19:58	1
Sodium	200000	E	1000	320	ug/L		07/18/13 15:26	07/19/13 19:58	1
Sodium	200000		10000	3200	ug/L		07/18/13 15:26	07/19/13 21:26	10
Thallium	ND		20	4.0	ug/L		07/18/13 15:26	07/19/13 19:58	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:26	07/19/13 19:58	1
Zinc	6.1	J	20	5.2	ug/L		07/18/13 15:26	07/19/13 19:58	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:59	07/19/13 00:14	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		07/18/13 20:01	07/19/13 01:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0058	J	0.020	0.0040	mg/L			07/18/13 20:13	1
Bromide	2.1		0.25	0.025	mg/L			07/18/13 20:13	1
Sulfate	0.25	J	0.50	0.050	mg/L			07/18/13 20:13	1
Iodide	0.33	J	1.0	0.10	mg/L			07/19/13 17:15	1
Alkalinity	1200		25	2.7	mg/L			07/29/13 13:43	5

General Chemistry - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		20	2.0	mg/L			07/18/13 20:47	100

Client Sample ID: D-81

Lab Sample ID: 160-3022-2

Date Collected: 07/17/13 10:43

Matrix: Water

Date Received: 07/18/13 08:15

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			07/21/13 22:33	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/21/13 22:33	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/21/13 22:33	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/21/13 22:33	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/21/13 22:33	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/21/13 22:33	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/21/13 22:33	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/21/13 22:33	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/21/13 22:33	1

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: D-81

Lab Sample ID: 160-3022-2

Date Collected: 07/17/13 10:43

Matrix: Water

Date Received: 07/18/13 08:15

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			07/21/13 22:33	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/21/13 22:33	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/21/13 22:33	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/21/13 22:33	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/21/13 22:33	1
2-Hexanone	ND		20	0.59	ug/L			07/21/13 22:33	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/21/13 22:33	1
Acetone	ND		20	6.7	ug/L			07/21/13 22:33	1
Benzene	ND		5.0	0.25	ug/L			07/21/13 22:33	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/21/13 22:33	1
Bromoform	ND		5.0	0.37	ug/L			07/21/13 22:33	1
Bromomethane	ND		10	0.40	ug/L			07/21/13 22:33	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/21/13 22:33	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/21/13 22:33	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/21/13 22:33	1
Chloroethane	ND	*	10	0.38	ug/L			07/21/13 22:33	1
Chloroform	ND		5.0	0.15	ug/L			07/21/13 22:33	1
Chloromethane	ND		10	0.55	ug/L			07/21/13 22:33	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/21/13 22:33	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/21/13 22:33	1
Cyclohexane	ND		10	0.36	ug/L			07/21/13 22:33	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/21/13 22:33	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/21/13 22:33	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/21/13 22:33	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/21/13 22:33	1
Methyl acetate	ND		25	2.3	ug/L			07/21/13 22:33	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/21/13 22:33	1
Methylcyclohexane	ND		10	0.26	ug/L			07/21/13 22:33	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/21/13 22:33	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/21/13 22:33	1
o-Xylene	ND		5.0	0.32	ug/L			07/21/13 22:33	1
Styrene	ND		5.0	0.35	ug/L			07/21/13 22:33	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/21/13 22:33	1
Toluene	ND		5.0	1.0	ug/L			07/21/13 22:33	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/21/13 22:33	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/21/13 22:33	1
Trichloroethene	ND		5.0	0.29	ug/L			07/21/13 22:33	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/21/13 22:33	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/21/13 22:33	1
Xylenes, Total	ND		10	0.85	ug/L			07/21/13 22:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		82 - 132		07/21/13 22:33	1
4-Bromofluorobenzene (Surr)	87		82 - 121		07/21/13 22:33	1
Dibromofluoromethane (Surr)	101		85 - 119		07/21/13 22:33	1
Toluene-d8 (Surr)	92		85 - 115		07/21/13 22:33	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/18/13 15:33	07/23/13 15:32	1

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: D-81

Lab Sample ID: 160-3022-2

Date Collected: 07/17/13 10:43

Matrix: Water

Date Received: 07/18/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.4	J	10	4.0	ug/L		07/18/13 15:33	07/23/13 15:32	1
Arsenic	8.6	J	10	2.0	ug/L		07/18/13 15:33	07/23/13 15:32	1
Barium	350		50	4.0	ug/L		07/18/13 15:33	07/23/13 15:32	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:33	07/23/13 15:32	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:33	07/23/13 15:32	1
Calcium	180000	E	1000	110	ug/L		07/18/13 15:33	07/23/13 15:32	1
Calcium	200000		10000	1100	ug/L		07/18/13 15:33	07/23/13 16:56	10
Chromium	ND		10	3.1	ug/L		07/18/13 15:33	07/23/13 15:32	1
Cobalt	4.4	J B	50	4.0	ug/L		07/18/13 15:33	07/23/13 15:32	1
Copper	ND		25	4.6	ug/L		07/18/13 15:33	07/23/13 15:32	1
Iron	15000		100	28	ug/L		07/18/13 15:33	07/23/13 15:32	1
Lead	2.9	J	10	1.5	ug/L		07/18/13 15:33	07/23/13 15:32	1
Magnesium	46000		1000	130	ug/L		07/18/13 15:33	07/23/13 15:32	1
Manganese	850		15	3.3	ug/L		07/18/13 15:33	07/23/13 15:32	1
Nickel	ND		40	13	ug/L		07/18/13 15:33	07/23/13 15:32	1
Potassium	4000	J	5000	1700	ug/L		07/18/13 15:33	07/23/13 15:32	1
Selenium	ND		15	2.7	ug/L		07/18/13 15:33	07/23/13 15:32	1
Silver	ND		10	6.0	ug/L		07/18/13 15:33	07/23/13 15:32	1
Sodium	32000		1000	320	ug/L		07/18/13 15:33	07/23/13 15:32	1
Thallium	ND	^	20	4.0	ug/L		07/18/13 15:33	07/23/13 15:32	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:33	07/23/13 15:32	1
Zinc	8.8	J	20	5.2	ug/L		07/18/13 15:33	07/23/13 15:32	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/18/13 15:26	07/19/13 20:02	1
Antimony	ND		10	4.0	ug/L		07/18/13 15:26	07/19/13 20:02	1
Arsenic	9.4	J	10	2.0	ug/L		07/18/13 15:26	07/19/13 20:02	1
Barium	350		50	4.0	ug/L		07/18/13 15:26	07/19/13 20:02	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:26	07/19/13 20:02	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:26	07/19/13 20:02	1
Calcium	180000	E	1000	110	ug/L		07/18/13 15:26	07/19/13 20:02	1
Calcium	220000		10000	1100	ug/L		07/18/13 15:26	07/19/13 21:30	10
Chromium	ND		10	3.1	ug/L		07/18/13 15:26	07/19/13 20:02	1
Cobalt	ND		50	4.0	ug/L		07/18/13 15:26	07/19/13 20:02	1
Copper	ND		25	4.6	ug/L		07/18/13 15:26	07/19/13 20:02	1
Iron	14000		100	28	ug/L		07/18/13 15:26	07/19/13 20:02	1
Lead	2.4	J	10	1.5	ug/L		07/18/13 15:26	07/19/13 20:02	1
Magnesium	43000		1000	130	ug/L		07/18/13 15:26	07/19/13 20:02	1
Manganese	810		15	3.3	ug/L		07/18/13 15:26	07/19/13 20:02	1
Nickel	ND		40	13	ug/L		07/18/13 15:26	07/19/13 20:02	1
Potassium	4200	J	5000	1700	ug/L		07/18/13 15:26	07/19/13 20:02	1
Selenium	ND		15	2.7	ug/L		07/18/13 15:26	07/19/13 20:02	1
Silver	ND		10	6.0	ug/L		07/18/13 15:26	07/19/13 20:02	1
Sodium	33000		1000	320	ug/L		07/18/13 15:26	07/19/13 20:02	1
Thallium	ND		20	4.0	ug/L		07/18/13 15:26	07/19/13 20:02	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:26	07/19/13 20:02	1
Zinc	6.3	J	20	5.2	ug/L		07/18/13 15:26	07/19/13 20:02	1

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TestAmerica St. Louis

Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: D-81

Lab Sample ID: 160-3022-2

Date Collected: 07/17/13 10:43

Matrix: Water

Date Received: 07/18/13 08:15

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:59	07/19/13 00:16	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		07/18/13 20:01	07/19/13 01:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0064	J	0.020	0.0040	mg/L			07/18/13 23:19	1
Bromide	0.23	J	0.25	0.025	mg/L			07/18/13 23:19	1
Iodide	ND		1.0	0.10	mg/L			07/19/13 18:44	1
Alkalinity	630		5.0	0.54	mg/L			07/29/13 13:43	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30		4.0	0.40	mg/L			07/18/13 23:36	20
Sulfate	70		10	1.0	mg/L			07/18/13 23:36	20

Client Sample ID: PZ-204-SS

Lab Sample ID: 160-3022-3

Date Collected: 07/17/13 11:40

Matrix: Water

Date Received: 07/18/13 08:15

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			07/21/13 22:58	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/21/13 22:58	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/21/13 22:58	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/21/13 22:58	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/21/13 22:58	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/21/13 22:58	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/21/13 22:58	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/21/13 22:58	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/21/13 22:58	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/21/13 22:58	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/21/13 22:58	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/21/13 22:58	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/21/13 22:58	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/21/13 22:58	1
2-Hexanone	ND		20	0.59	ug/L			07/21/13 22:58	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/21/13 22:58	1
Acetone	ND		20	6.7	ug/L			07/21/13 22:58	1
Benzene	ND		5.0	0.25	ug/L			07/21/13 22:58	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/21/13 22:58	1
Bromoform	ND		5.0	0.37	ug/L			07/21/13 22:58	1
Bromomethane	ND		10	0.40	ug/L			07/21/13 22:58	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/21/13 22:58	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/21/13 22:58	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/21/13 22:58	1
Chloroethane	ND	*	10	0.38	ug/L			07/21/13 22:58	1
Chloroform	ND		5.0	0.15	ug/L			07/21/13 22:58	1

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: PZ-204-SS

Lab Sample ID: 160-3022-3

Date Collected: 07/17/13 11:40

Matrix: Water

Date Received: 07/18/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		10	0.55	ug/L			07/21/13 22:58	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/21/13 22:58	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/21/13 22:58	1
Cyclohexane	ND		10	0.36	ug/L			07/21/13 22:58	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/21/13 22:58	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/21/13 22:58	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/21/13 22:58	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/21/13 22:58	1
Methyl acetate	ND		25	2.3	ug/L			07/21/13 22:58	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/21/13 22:58	1
Methylcyclohexane	ND		10	0.26	ug/L			07/21/13 22:58	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/21/13 22:58	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/21/13 22:58	1
o-Xylene	ND		5.0	0.32	ug/L			07/21/13 22:58	1
Styrene	ND		5.0	0.35	ug/L			07/21/13 22:58	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/21/13 22:58	1
Toluene	ND		5.0	1.0	ug/L			07/21/13 22:58	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/21/13 22:58	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/21/13 22:58	1
Trichloroethene	ND		5.0	0.29	ug/L			07/21/13 22:58	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/21/13 22:58	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/21/13 22:58	1
Xylenes, Total	ND		10	0.85	ug/L			07/21/13 22:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		82 - 132		07/21/13 22:58	1
4-Bromofluorobenzene (Surr)	85		82 - 121		07/21/13 22:58	1
Dibromofluoromethane (Surr)	108		85 - 119		07/21/13 22:58	1
Toluene-d8 (Surr)	98		85 - 115		07/21/13 22:58	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	400		200	80	ug/L		07/18/13 15:33	07/23/13 15:35	1
Antimony	ND		10	4.0	ug/L		07/18/13 15:33	07/23/13 15:35	1
Arsenic	ND		10	2.0	ug/L		07/18/13 15:33	07/23/13 15:35	1
Barium	180		50	4.0	ug/L		07/18/13 15:33	07/23/13 15:35	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:33	07/23/13 15:35	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:33	07/23/13 15:35	1
Calcium	70000	E	1000	110	ug/L		07/18/13 15:33	07/23/13 15:35	1
Calcium	78000		10000	1100	ug/L		07/18/13 15:33	07/23/13 17:00	10
Chromium	ND		10	3.1	ug/L		07/18/13 15:33	07/23/13 15:35	1
Cobalt	ND		50	4.0	ug/L		07/18/13 15:33	07/23/13 15:35	1
Copper	ND		25	4.6	ug/L		07/18/13 15:33	07/23/13 15:35	1
Iron	1900		100	28	ug/L		07/18/13 15:33	07/23/13 15:35	1
Iron	1900		1000	280	ug/L		07/18/13 15:33	07/23/13 17:00	10
Lead	2.6	J	10	1.5	ug/L		07/18/13 15:33	07/23/13 15:35	1
Magnesium	50000	E	1000	130	ug/L		07/18/13 15:33	07/23/13 15:35	1
Magnesium	51000		10000	1300	ug/L		07/18/13 15:33	07/23/13 17:00	10
Manganese	110		15	3.3	ug/L		07/18/13 15:33	07/23/13 15:35	1
Nickel	ND		40	13	ug/L		07/18/13 15:33	07/23/13 15:35	1

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: PZ-204-SS

Lab Sample ID: 160-3022-3

Date Collected: 07/17/13 11:40

Matrix: Water

Date Received: 07/18/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	2200	J	5000	1700	ug/L		07/18/13 15:33	07/23/13 15:35	1
Selenium	ND		15	2.7	ug/L		07/18/13 15:33	07/23/13 15:35	1
Silver	ND		10	6.0	ug/L		07/18/13 15:33	07/23/13 15:35	1
Sodium	29000		1000	320	ug/L		07/18/13 15:33	07/23/13 15:35	1
Thallium	ND	^	20	4.0	ug/L		07/18/13 15:33	07/23/13 15:35	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:33	07/23/13 15:35	1
Zinc	16	J	20	5.2	ug/L		07/18/13 15:33	07/23/13 15:35	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	700		200	80	ug/L		07/18/13 15:26	07/19/13 20:06	1
Antimony	4.1	J	10	4.0	ug/L		07/18/13 15:26	07/19/13 20:06	1
Arsenic	2.5	J	10	2.0	ug/L		07/18/13 15:26	07/19/13 20:06	1
Barium	180		50	4.0	ug/L		07/18/13 15:26	07/19/13 20:06	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:26	07/19/13 20:06	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:26	07/19/13 20:06	1
Calcium	75000	E	1000	110	ug/L		07/18/13 15:26	07/19/13 20:06	1
Calcium	81000		10000	1100	ug/L		07/18/13 15:26	07/19/13 21:34	10
Chromium	4.0	J	10	3.1	ug/L		07/18/13 15:26	07/19/13 20:06	1
Cobalt	ND		50	4.0	ug/L		07/18/13 15:26	07/19/13 20:06	1
Copper	ND		25	4.6	ug/L		07/18/13 15:26	07/19/13 20:06	1
Iron	2500		100	28	ug/L		07/18/13 15:26	07/19/13 20:06	1
Lead	2.8	J	10	1.5	ug/L		07/18/13 15:26	07/19/13 20:06	1
Magnesium	49000		1000	130	ug/L		07/18/13 15:26	07/19/13 20:06	1
Manganese	100		15	3.3	ug/L		07/18/13 15:26	07/19/13 20:06	1
Nickel	ND		40	13	ug/L		07/18/13 15:26	07/19/13 20:06	1
Potassium	2100	J	5000	1700	ug/L		07/18/13 15:26	07/19/13 20:06	1
Selenium	ND		15	2.7	ug/L		07/18/13 15:26	07/19/13 20:06	1
Silver	ND		10	6.0	ug/L		07/18/13 15:26	07/19/13 20:06	1
Sodium	29000		1000	320	ug/L		07/18/13 15:26	07/19/13 20:06	1
Thallium	ND		20	4.0	ug/L		07/18/13 15:26	07/19/13 20:06	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:26	07/19/13 20:06	1
Zinc	17	J	20	5.2	ug/L		07/18/13 15:26	07/19/13 20:06	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:59	07/19/13 00:17	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		07/18/13 20:01	07/19/13 01:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.014	J	0.020	0.0040	mg/L			07/19/13 00:10	1
Chloride	3.0		0.20	0.020	mg/L			07/19/13 00:10	1
Bromide	ND		0.25	0.025	mg/L			07/19/13 00:10	1
Iodide	ND		1.0	0.10	mg/L			07/19/13 18:59	1
Alkalinity	430		5.0	0.54	mg/L			07/29/13 13:43	1

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: PZ-204-SS

Lab Sample ID: 160-3022-3

Date Collected: 07/17/13 11:40

Matrix: Water

Date Received: 07/18/13 08:15

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	23		10	1.0	mg/L			07/19/13 00:27	20

Client Sample ID: LR-103

Lab Sample ID: 160-3022-4

Date Collected: 07/17/13 12:15

Matrix: Water

Date Received: 07/18/13 08:15

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			07/21/13 23:23	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/21/13 23:23	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/21/13 23:23	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/21/13 23:23	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/21/13 23:23	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/21/13 23:23	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/21/13 23:23	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/21/13 23:23	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/21/13 23:23	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/21/13 23:23	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/21/13 23:23	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/21/13 23:23	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/21/13 23:23	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/21/13 23:23	1
2-Hexanone	ND		20	0.59	ug/L			07/21/13 23:23	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/21/13 23:23	1
Acetone	ND		20	6.7	ug/L			07/21/13 23:23	1
Benzene	ND		5.0	0.25	ug/L			07/21/13 23:23	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/21/13 23:23	1
Bromoform	ND		5.0	0.37	ug/L			07/21/13 23:23	1
Bromomethane	ND		10	0.40	ug/L			07/21/13 23:23	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/21/13 23:23	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/21/13 23:23	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/21/13 23:23	1
Chloroethane	ND *		10	0.38	ug/L			07/21/13 23:23	1
Chloroform	ND		5.0	0.15	ug/L			07/21/13 23:23	1
Chloromethane	ND		10	0.55	ug/L			07/21/13 23:23	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/21/13 23:23	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/21/13 23:23	1
Cyclohexane	ND		10	0.36	ug/L			07/21/13 23:23	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/21/13 23:23	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/21/13 23:23	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/21/13 23:23	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/21/13 23:23	1
Methyl acetate	ND		25	2.3	ug/L			07/21/13 23:23	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/21/13 23:23	1
Methylcyclohexane	ND		10	0.26	ug/L			07/21/13 23:23	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/21/13 23:23	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/21/13 23:23	1
o-Xylene	ND		5.0	0.32	ug/L			07/21/13 23:23	1
Styrene	ND		5.0	0.35	ug/L			07/21/13 23:23	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/21/13 23:23	1

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: LR-103

Lab Sample ID: 160-3022-4

Date Collected: 07/17/13 12:15

Matrix: Water

Date Received: 07/18/13 08:15

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			07/21/13 23:23	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/21/13 23:23	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/21/13 23:23	1
Trichloroethene	ND		5.0	0.29	ug/L			07/21/13 23:23	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/21/13 23:23	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/21/13 23:23	1
Xylenes, Total	ND		10	0.85	ug/L			07/21/13 23:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		82 - 132		07/21/13 23:23	1
4-Bromofluorobenzene (Surr)	89		82 - 121		07/21/13 23:23	1
Dibromofluoromethane (Surr)	106		85 - 119		07/21/13 23:23	1
Toluene-d8 (Surr)	97		85 - 115		07/21/13 23:23	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	120	J	200	80	ug/L		07/18/13 15:33	07/23/13 15:39	1
Antimony	5.5	J	10	4.0	ug/L		07/18/13 15:33	07/23/13 15:39	1
Arsenic	52		10	2.0	ug/L		07/18/13 15:33	07/23/13 15:39	1
Barium	1100		50	4.0	ug/L		07/18/13 15:33	07/23/13 15:39	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:33	07/23/13 15:39	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:33	07/23/13 15:39	1
Calcium	230000	E	1000	110	ug/L		07/18/13 15:33	07/23/13 15:39	1
Calcium	270000		10000	1100	ug/L		07/18/13 15:33	07/23/13 17:04	10
Chromium	ND		10	3.1	ug/L		07/18/13 15:33	07/23/13 15:39	1
Cobalt	ND		50	4.0	ug/L		07/18/13 15:33	07/23/13 15:39	1
Copper	ND		25	4.6	ug/L		07/18/13 15:33	07/23/13 15:39	1
Iron	35000		100	28	ug/L		07/18/13 15:33	07/23/13 15:39	1
Iron	36000		1000	280	ug/L		07/18/13 15:33	07/23/13 17:04	10
Lead	4.1	J	10	1.5	ug/L		07/18/13 15:33	07/23/13 15:39	1
Magnesium	61000	E	1000	130	ug/L		07/18/13 15:33	07/23/13 15:39	1
Magnesium	63000		10000	1300	ug/L		07/18/13 15:33	07/23/13 17:04	10
Manganese	1000		15	3.3	ug/L		07/18/13 15:33	07/23/13 15:39	1
Nickel	13	J	40	13	ug/L		07/18/13 15:33	07/23/13 15:39	1
Potassium	8600		5000	1700	ug/L		07/18/13 15:33	07/23/13 15:39	1
Selenium	ND		15	2.7	ug/L		07/18/13 15:33	07/23/13 15:39	1
Silver	ND		10	6.0	ug/L		07/18/13 15:33	07/23/13 15:39	1
Sodium	48000		1000	320	ug/L		07/18/13 15:33	07/23/13 15:39	1
Thallium	ND	^	20	4.0	ug/L		07/18/13 15:33	07/23/13 15:39	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:33	07/23/13 15:39	1
Zinc	6.3	J	20	5.2	ug/L		07/18/13 15:33	07/23/13 15:39	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/18/13 15:26	07/19/13 20:10	1
Antimony	5.3	J	10	4.0	ug/L		07/18/13 15:26	07/19/13 20:10	1
Arsenic	52		10	2.0	ug/L		07/18/13 15:26	07/19/13 20:10	1
Barium	1100		50	4.0	ug/L		07/18/13 15:26	07/19/13 20:10	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:26	07/19/13 20:10	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:26	07/19/13 20:10	1

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: LR-103

Lab Sample ID: 160-3022-4

Date Collected: 07/17/13 12:15

Matrix: Water

Date Received: 07/18/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	230000	E	1000	110	ug/L		07/18/13 15:26	07/19/13 20:10	1
Calcium	280000		10000	1100	ug/L		07/18/13 15:26	07/19/13 21:38	10
Chromium	ND		10	3.1	ug/L		07/18/13 15:26	07/19/13 20:10	1
Cobalt	ND		50	4.0	ug/L		07/18/13 15:26	07/19/13 20:10	1
Copper	ND		25	4.6	ug/L		07/18/13 15:26	07/19/13 20:10	1
Iron	33000		100	28	ug/L		07/18/13 15:26	07/19/13 20:10	1
Iron	34000		1000	280	ug/L		07/18/13 15:26	07/19/13 21:38	10
Lead	3.1	J	10	1.5	ug/L		07/18/13 15:26	07/19/13 20:10	1
Magnesium	59000	E	1000	130	ug/L		07/18/13 15:26	07/19/13 20:10	1
Magnesium	59000		10000	1300	ug/L		07/18/13 15:26	07/19/13 21:38	10
Manganese	980		15	3.3	ug/L		07/18/13 15:26	07/19/13 20:10	1
Nickel	ND		40	13	ug/L		07/18/13 15:26	07/19/13 20:10	1
Potassium	8800		5000	1700	ug/L		07/18/13 15:26	07/19/13 20:10	1
Selenium	3.2	J	15	2.7	ug/L		07/18/13 15:26	07/19/13 20:10	1
Silver	ND		10	6.0	ug/L		07/18/13 15:26	07/19/13 20:10	1
Sodium	51000		1000	320	ug/L		07/18/13 15:26	07/19/13 20:10	1
Thallium	ND		20	4.0	ug/L		07/18/13 15:26	07/19/13 20:10	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:26	07/19/13 20:10	1
Zinc	ND		20	5.2	ug/L		07/18/13 15:26	07/19/13 20:10	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:59	07/19/13 00:19	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		07/18/13 20:01	07/19/13 01:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.013	J	0.020	0.0040	mg/L			07/19/13 00:44	1
Bromide	1.2		0.25	0.025	mg/L			07/19/13 00:44	1
Sulfate	0.22	J	0.50	0.050	mg/L			07/19/13 00:44	1
Iodide	0.40	J	1.0	0.10	mg/L			07/19/13 19:44	1
Alkalinity	820		5.0	0.54	mg/L			07/29/13 13:43	1

General Chemistry - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		20	2.0	mg/L			07/19/13 01:18	100

Client Sample ID: PZ-111-KS

Lab Sample ID: 160-3022-5

Date Collected: 07/17/13 13:09

Matrix: Water

Date Received: 07/18/13 08:15

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			07/21/13 23:48	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/21/13 23:48	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/21/13 23:48	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/21/13 23:48	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/21/13 23:48	1

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: PZ-111-KS

Lab Sample ID: 160-3022-5

Date Collected: 07/17/13 13:09

Matrix: Water

Date Received: 07/18/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/21/13 23:48	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/21/13 23:48	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/21/13 23:48	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/21/13 23:48	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/21/13 23:48	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/21/13 23:48	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/21/13 23:48	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/21/13 23:48	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/21/13 23:48	1
2-Hexanone	ND		20	0.59	ug/L			07/21/13 23:48	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/21/13 23:48	1
Acetone	ND		20	6.7	ug/L			07/21/13 23:48	1
Benzene	ND		5.0	0.25	ug/L			07/21/13 23:48	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/21/13 23:48	1
Bromoform	ND		5.0	0.37	ug/L			07/21/13 23:48	1
Bromomethane	ND		10	0.40	ug/L			07/21/13 23:48	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/21/13 23:48	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/21/13 23:48	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/21/13 23:48	1
Chloroethane	ND *		10	0.38	ug/L			07/21/13 23:48	1
Chloroform	ND		5.0	0.15	ug/L			07/21/13 23:48	1
Chloromethane	ND		10	0.55	ug/L			07/21/13 23:48	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/21/13 23:48	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/21/13 23:48	1
Cyclohexane	ND		10	0.36	ug/L			07/21/13 23:48	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/21/13 23:48	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/21/13 23:48	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/21/13 23:48	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/21/13 23:48	1
Methyl acetate	ND		25	2.3	ug/L			07/21/13 23:48	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/21/13 23:48	1
Methylcyclohexane	ND		10	0.26	ug/L			07/21/13 23:48	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/21/13 23:48	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/21/13 23:48	1
o-Xylene	ND		5.0	0.32	ug/L			07/21/13 23:48	1
Styrene	ND		5.0	0.35	ug/L			07/21/13 23:48	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/21/13 23:48	1
Toluene	ND		5.0	1.0	ug/L			07/21/13 23:48	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/21/13 23:48	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/21/13 23:48	1
Trichloroethene	ND		5.0	0.29	ug/L			07/21/13 23:48	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/21/13 23:48	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/21/13 23:48	1
Xylenes, Total	ND		10	0.85	ug/L			07/21/13 23:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		82 - 132		07/21/13 23:48	1
4-Bromofluorobenzene (Surr)	86		82 - 121		07/21/13 23:48	1
Dibromofluoromethane (Surr)	107		85 - 119		07/21/13 23:48	1
Toluene-d8 (Surr)	100		85 - 115		07/21/13 23:48	1

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: PZ-111-KS

Lab Sample ID: 160-3022-5

Date Collected: 07/17/13 13:09

Matrix: Water

Date Received: 07/18/13 08:15

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	130	J	200	80	ug/L		07/18/13 15:33	07/23/13 15:43	1
Antimony	ND		10	4.0	ug/L		07/18/13 15:33	07/23/13 15:43	1
Arsenic	ND		10	2.0	ug/L		07/18/13 15:33	07/23/13 15:43	1
Barium	6.1	J	50	4.0	ug/L		07/18/13 15:33	07/23/13 15:43	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:33	07/23/13 15:43	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:33	07/23/13 15:43	1
Calcium	8800		1000	110	ug/L		07/18/13 15:33	07/23/13 15:43	1
Chromium	4.5	J	10	3.1	ug/L		07/18/13 15:33	07/23/13 15:43	1
Cobalt	ND		50	4.0	ug/L		07/18/13 15:33	07/23/13 15:43	1
Copper	ND		25	4.6	ug/L		07/18/13 15:33	07/23/13 15:43	1
Iron	170		100	28	ug/L		07/18/13 15:33	07/23/13 15:43	1
Lead	ND		10	1.5	ug/L		07/18/13 15:33	07/23/13 15:43	1
Magnesium	6100		1000	130	ug/L		07/18/13 15:33	07/23/13 15:43	1
Manganese	ND		15	3.3	ug/L		07/18/13 15:33	07/23/13 15:43	1
Nickel	ND		40	13	ug/L		07/18/13 15:33	07/23/13 15:43	1
Potassium	7300		5000	1700	ug/L		07/18/13 15:33	07/23/13 15:43	1
Selenium	ND		15	2.7	ug/L		07/18/13 15:33	07/23/13 15:43	1
Silver	ND		10	6.0	ug/L		07/18/13 15:33	07/23/13 15:43	1
Sodium	380000	E	1000	320	ug/L		07/18/13 15:33	07/23/13 15:43	1
Sodium	390000		10000	3200	ug/L		07/18/13 15:33	07/23/13 17:07	10
Thallium	ND	^	20	4.0	ug/L		07/18/13 15:33	07/23/13 15:43	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:33	07/23/13 15:43	1
Zinc	8.0	J	20	5.2	ug/L		07/18/13 15:33	07/23/13 15:43	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	170	J	200	80	ug/L		07/18/13 15:26	07/19/13 20:14	1
Antimony	ND		10	4.0	ug/L		07/18/13 15:26	07/19/13 20:14	1
Arsenic	3.2	J	10	2.0	ug/L		07/18/13 15:26	07/19/13 20:14	1
Barium	6.2	J	50	4.0	ug/L		07/18/13 15:26	07/19/13 20:14	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:26	07/19/13 20:14	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:26	07/19/13 20:14	1
Calcium	8800		1000	110	ug/L		07/18/13 15:26	07/19/13 20:14	1
Chromium	ND		10	3.1	ug/L		07/18/13 15:26	07/19/13 20:14	1
Cobalt	ND		50	4.0	ug/L		07/18/13 15:26	07/19/13 20:14	1
Copper	ND		25	4.6	ug/L		07/18/13 15:26	07/19/13 20:14	1
Iron	160		100	28	ug/L		07/18/13 15:26	07/19/13 20:14	1
Lead	ND		10	1.5	ug/L		07/18/13 15:26	07/19/13 20:14	1
Magnesium	5700		1000	130	ug/L		07/18/13 15:26	07/19/13 20:14	1
Manganese	3.3	J	15	3.3	ug/L		07/18/13 15:26	07/19/13 20:14	1
Nickel	ND		40	13	ug/L		07/18/13 15:26	07/19/13 20:14	1
Potassium	7400		5000	1700	ug/L		07/18/13 15:26	07/19/13 20:14	1
Selenium	ND		15	2.7	ug/L		07/18/13 15:26	07/19/13 20:14	1
Silver	ND		10	6.0	ug/L		07/18/13 15:26	07/19/13 20:14	1
Sodium	390000	E	1000	320	ug/L		07/18/13 15:26	07/19/13 20:14	1
Sodium	410000		10000	3200	ug/L		07/18/13 15:26	07/19/13 21:42	10
Thallium	ND		20	4.0	ug/L		07/18/13 15:26	07/19/13 20:14	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:26	07/19/13 20:14	1
Zinc	8.2	J	20	5.2	ug/L		07/18/13 15:26	07/19/13 20:14	1

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: PZ-111-KS

Lab Sample ID: 160-3022-5

Date Collected: 07/17/13 13:09

Matrix: Water

Date Received: 07/18/13 08:15

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:59	07/19/13 00:21	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		07/18/13 20:01	07/19/13 01:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.030		0.020	0.0040	mg/L			07/19/13 02:08	1
Bromide	0.56		0.25	0.025	mg/L			07/19/13 02:08	1
Iodide	ND		1.0	0.10	mg/L			07/19/13 20:13	1
Alkalinity	610		5.0	0.54	mg/L			07/29/13 13:43	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	71		10	1.0	mg/L			07/19/13 02:25	20

General Chemistry - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	150		20	2.0	mg/L			07/19/13 02:42	100

Client Sample ID: PZ-203-SS

Lab Sample ID: 160-3022-6

Date Collected: 07/17/13 13:58

Matrix: Water

Date Received: 07/18/13 08:15

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			07/22/13 00:13	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/22/13 00:13	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/22/13 00:13	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/22/13 00:13	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/22/13 00:13	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/22/13 00:13	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/22/13 00:13	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/22/13 00:13	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/22/13 00:13	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/22/13 00:13	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/22/13 00:13	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/22/13 00:13	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/22/13 00:13	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/22/13 00:13	1
2-Hexanone	ND		20	0.59	ug/L			07/22/13 00:13	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/22/13 00:13	1
Acetone	ND		20	6.7	ug/L			07/22/13 00:13	1
Benzene	ND		5.0	0.25	ug/L			07/22/13 00:13	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/22/13 00:13	1
Bromoform	ND		5.0	0.37	ug/L			07/22/13 00:13	1
Bromomethane	ND		10	0.40	ug/L			07/22/13 00:13	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/22/13 00:13	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/22/13 00:13	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/22/13 00:13	1

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: PZ-203-SS

Lab Sample ID: 160-3022-6

Date Collected: 07/17/13 13:58

Matrix: Water

Date Received: 07/18/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND	*	10	0.38	ug/L			07/22/13 00:13	1
Chloroform	ND		5.0	0.15	ug/L			07/22/13 00:13	1
Chloromethane	ND		10	0.55	ug/L			07/22/13 00:13	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/22/13 00:13	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/22/13 00:13	1
Cyclohexane	ND		10	0.36	ug/L			07/22/13 00:13	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/22/13 00:13	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/22/13 00:13	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/22/13 00:13	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/22/13 00:13	1
Methyl acetate	ND		25	2.3	ug/L			07/22/13 00:13	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/22/13 00:13	1
Methylcyclohexane	ND		10	0.26	ug/L			07/22/13 00:13	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/22/13 00:13	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/22/13 00:13	1
o-Xylene	ND		5.0	0.32	ug/L			07/22/13 00:13	1
Styrene	ND		5.0	0.35	ug/L			07/22/13 00:13	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/22/13 00:13	1
Toluene	ND		5.0	1.0	ug/L			07/22/13 00:13	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/22/13 00:13	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/22/13 00:13	1
Trichloroethene	ND		5.0	0.29	ug/L			07/22/13 00:13	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/22/13 00:13	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/22/13 00:13	1
Xylenes, Total	ND		10	0.85	ug/L			07/22/13 00:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		82 - 132		07/22/13 00:13	1
4-Bromofluorobenzene (Surr)	86		82 - 121		07/22/13 00:13	1
Dibromofluoromethane (Surr)	99		85 - 119		07/22/13 00:13	1
Toluene-d8 (Surr)	93		85 - 115		07/22/13 00:13	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	230		200	80	ug/L		07/18/13 15:33	07/23/13 15:47	1
Antimony	4.1	J	10	4.0	ug/L		07/18/13 15:33	07/23/13 15:47	1
Arsenic	ND		10	2.0	ug/L		07/18/13 15:33	07/23/13 15:47	1
Barium	91		50	4.0	ug/L		07/18/13 15:33	07/23/13 15:47	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:33	07/23/13 15:47	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:33	07/23/13 15:47	1
Calcium	98000	E	1000	110	ug/L		07/18/13 15:33	07/23/13 15:47	1
Calcium	100000		10000	1100	ug/L		07/18/13 15:33	07/23/13 17:11	10
Chromium	4.7	J	10	3.1	ug/L		07/18/13 15:33	07/23/13 15:47	1
Cobalt	4.1	J B	50	4.0	ug/L		07/18/13 15:33	07/23/13 15:47	1
Copper	ND		25	4.6	ug/L		07/18/13 15:33	07/23/13 15:47	1
Iron	280		100	28	ug/L		07/18/13 15:33	07/23/13 15:47	1
Lead	ND		10	1.5	ug/L		07/18/13 15:33	07/23/13 15:47	1
Magnesium	42000		1000	130	ug/L		07/18/13 15:33	07/23/13 15:47	1
Manganese	21		15	3.3	ug/L		07/18/13 15:33	07/23/13 15:47	1
Nickel	ND		40	13	ug/L		07/18/13 15:33	07/23/13 15:47	1

TestAmerica St. Louis

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: PZ-203-SS

Lab Sample ID: 160-3022-6

Date Collected: 07/17/13 13:58

Matrix: Water

Date Received: 07/18/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	2600	J	5000	1700	ug/L		07/18/13 15:33	07/23/13 15:47	1
Selenium	ND		15	2.7	ug/L		07/18/13 15:33	07/23/13 15:47	1
Silver	ND		10	6.0	ug/L		07/18/13 15:33	07/23/13 15:47	1
Sodium	8100		1000	320	ug/L		07/18/13 15:33	07/23/13 15:47	1
Thallium	ND	^	20	4.0	ug/L		07/18/13 15:33	07/23/13 15:47	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:33	07/23/13 15:47	1
Zinc	8.6	J	20	5.2	ug/L		07/18/13 15:33	07/23/13 15:47	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/18/13 15:26	07/19/13 20:18	1
Antimony	ND		10	4.0	ug/L		07/18/13 15:26	07/19/13 20:18	1
Arsenic	ND		10	2.0	ug/L		07/18/13 15:26	07/19/13 20:18	1
Barium	89		50	4.0	ug/L		07/18/13 15:26	07/19/13 20:18	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:26	07/19/13 20:18	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:26	07/19/13 20:18	1
Calcium	94000	E	1000	110	ug/L		07/18/13 15:26	07/19/13 20:18	1
Calcium	100000		10000	1100	ug/L		07/18/13 15:26	07/19/13 21:46	10
Chromium	3.1	J	10	3.1	ug/L		07/18/13 15:26	07/19/13 20:18	1
Cobalt	ND		50	4.0	ug/L		07/18/13 15:26	07/19/13 20:18	1
Copper	ND		25	4.6	ug/L		07/18/13 15:26	07/19/13 20:18	1
Iron	140		100	28	ug/L		07/18/13 15:26	07/19/13 20:18	1
Lead	ND		10	1.5	ug/L		07/18/13 15:26	07/19/13 20:18	1
Magnesium	39000		1000	130	ug/L		07/18/13 15:26	07/19/13 20:18	1
Manganese	18		15	3.3	ug/L		07/18/13 15:26	07/19/13 20:18	1
Nickel	ND		40	13	ug/L		07/18/13 15:26	07/19/13 20:18	1
Potassium	2500	J	5000	1700	ug/L		07/18/13 15:26	07/19/13 20:18	1
Selenium	ND		15	2.7	ug/L		07/18/13 15:26	07/19/13 20:18	1
Silver	ND		10	6.0	ug/L		07/18/13 15:26	07/19/13 20:18	1
Sodium	8000		1000	320	ug/L		07/18/13 15:26	07/19/13 20:18	1
Thallium	ND		20	4.0	ug/L		07/18/13 15:26	07/19/13 20:18	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:26	07/19/13 20:18	1
Zinc	5.8	J	20	5.2	ug/L		07/18/13 15:26	07/19/13 20:18	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:59	07/19/13 00:22	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		07/18/13 20:01	07/19/13 01:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.020	0.0040	mg/L			07/19/13 02:59	1
Bromide	ND		0.25	0.025	mg/L			07/19/13 02:59	1
Iodide	ND		1.0	0.10	mg/L			07/19/13 20:43	1
Alkalinity	380		5.0	0.54	mg/L			07/29/13 13:43	1

TestAmerica St. Louis

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: PZ-203-SS

Lab Sample ID: 160-3022-6

Date Collected: 07/17/13 13:58

Matrix: Water

Date Received: 07/18/13 08:15

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.7		4.0	0.40	mg/L			07/19/13 03:16	20
Sulfate	43		10	1.0	mg/L			07/19/13 03:16	20

Client Sample ID: D-87

Lab Sample ID: 160-3022-7

Date Collected: 07/17/13 14:11

Matrix: Water

Date Received: 07/18/13 08:15

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			07/22/13 00:39	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/22/13 00:39	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/22/13 00:39	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/22/13 00:39	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/22/13 00:39	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/22/13 00:39	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/22/13 00:39	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/22/13 00:39	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/22/13 00:39	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/22/13 00:39	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/22/13 00:39	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/22/13 00:39	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/22/13 00:39	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/22/13 00:39	1
2-Hexanone	ND		20	0.59	ug/L			07/22/13 00:39	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/22/13 00:39	1
Acetone	ND		20	6.7	ug/L			07/22/13 00:39	1
Benzene	ND		5.0	0.25	ug/L			07/22/13 00:39	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/22/13 00:39	1
Bromoform	ND		5.0	0.37	ug/L			07/22/13 00:39	1
Bromomethane	ND		10	0.40	ug/L			07/22/13 00:39	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/22/13 00:39	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/22/13 00:39	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/22/13 00:39	1
Chloroethane	ND *		10	0.38	ug/L			07/22/13 00:39	1
Chloroform	ND		5.0	0.15	ug/L			07/22/13 00:39	1
Chloromethane	ND		10	0.55	ug/L			07/22/13 00:39	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/22/13 00:39	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/22/13 00:39	1
Cyclohexane	ND		10	0.36	ug/L			07/22/13 00:39	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/22/13 00:39	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/22/13 00:39	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/22/13 00:39	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/22/13 00:39	1
Methyl acetate	ND		25	2.3	ug/L			07/22/13 00:39	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/22/13 00:39	1
Methylcyclohexane	ND		10	0.26	ug/L			07/22/13 00:39	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/22/13 00:39	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/22/13 00:39	1
o-Xylene	ND		5.0	0.32	ug/L			07/22/13 00:39	1
Styrene	ND		5.0	0.35	ug/L			07/22/13 00:39	1

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: D-87

Lab Sample ID: 160-3022-7

Date Collected: 07/17/13 14:11

Matrix: Water

Date Received: 07/18/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		5.0	0.28	ug/L			07/22/13 00:39	1
Toluene	ND		5.0	1.0	ug/L			07/22/13 00:39	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/22/13 00:39	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/22/13 00:39	1
Trichloroethene	ND		5.0	0.29	ug/L			07/22/13 00:39	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/22/13 00:39	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/22/13 00:39	1
Xylenes, Total	ND		10	0.85	ug/L			07/22/13 00:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		82 - 132					07/22/13 00:39	1
4-Bromofluorobenzene (Surr)	86		82 - 121					07/22/13 00:39	1
Dibromofluoromethane (Surr)	107		85 - 119					07/22/13 00:39	1
Toluene-d8 (Surr)	101		85 - 115					07/22/13 00:39	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	720		200	80	ug/L		07/18/13 15:33	07/23/13 15:51	1
Antimony	4.4	J	10	4.0	ug/L		07/18/13 15:33	07/23/13 15:51	1
Arsenic	ND		10	2.0	ug/L		07/18/13 15:33	07/23/13 15:51	1
Barium	1500		50	4.0	ug/L		07/18/13 15:33	07/23/13 15:51	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:33	07/23/13 15:51	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:33	07/23/13 15:51	1
Calcium	230000	E	1000	110	ug/L		07/18/13 15:33	07/23/13 15:51	1
Calcium	300000		10000	1100	ug/L		07/18/13 15:33	07/23/13 17:15	10
Chromium	ND		10	3.1	ug/L		07/18/13 15:33	07/23/13 15:51	1
Cobalt	ND		50	4.0	ug/L		07/18/13 15:33	07/23/13 15:51	1
Copper	ND		25	4.6	ug/L		07/18/13 15:33	07/23/13 15:51	1
Iron	33000		100	28	ug/L		07/18/13 15:33	07/23/13 15:51	1
Iron	35000		1000	280	ug/L		07/18/13 15:33	07/23/13 17:15	10
Lead	4.8	J	10	1.5	ug/L		07/18/13 15:33	07/23/13 15:51	1
Magnesium	67000	E	1000	130	ug/L		07/18/13 15:33	07/23/13 15:51	1
Magnesium	71000		10000	1300	ug/L		07/18/13 15:33	07/23/13 17:15	10
Manganese	620		15	3.3	ug/L		07/18/13 15:33	07/23/13 15:51	1
Nickel	16	J	40	13	ug/L		07/18/13 15:33	07/23/13 15:51	1
Potassium	13000		5000	1700	ug/L		07/18/13 15:33	07/23/13 15:51	1
Selenium	ND		15	2.7	ug/L		07/18/13 15:33	07/23/13 15:51	1
Silver	ND		10	6.0	ug/L		07/18/13 15:33	07/23/13 15:51	1
Sodium	220000	E	1000	320	ug/L		07/18/13 15:33	07/23/13 15:51	1
Sodium	220000		10000	3200	ug/L		07/18/13 15:33	07/23/13 17:15	10
Thallium	ND	^	20	4.0	ug/L		07/18/13 15:33	07/23/13 15:51	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:33	07/23/13 15:51	1
Zinc	11	J	20	5.2	ug/L		07/18/13 15:33	07/23/13 15:51	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/18/13 15:26	07/19/13 20:22	1
Antimony	4.7	J	10	4.0	ug/L		07/18/13 15:26	07/19/13 20:22	1
Arsenic	2.3	J	10	2.0	ug/L		07/18/13 15:26	07/19/13 20:22	1
Barium	1500		50	4.0	ug/L		07/18/13 15:26	07/19/13 20:22	1

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: D-87

Lab Sample ID: 160-3022-7

Date Collected: 07/17/13 14:11

Matrix: Water

Date Received: 07/18/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:26	07/19/13 20:22	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:26	07/19/13 20:22	1
Calcium	250000	E	1000	110	ug/L		07/18/13 15:26	07/19/13 20:22	1
Calcium	300000		10000	1100	ug/L		07/18/13 15:26	07/19/13 21:50	10
Chromium	4.1	J	10	3.1	ug/L		07/18/13 15:26	07/19/13 20:22	1
Cobalt	ND		50	4.0	ug/L		07/18/13 15:26	07/19/13 20:22	1
Copper	ND		25	4.6	ug/L		07/18/13 15:26	07/19/13 20:22	1
Iron	31000		100	28	ug/L		07/18/13 15:26	07/19/13 20:22	1
Iron	32000		1000	280	ug/L		07/18/13 15:26	07/19/13 21:50	10
Lead	2.9	J	10	1.5	ug/L		07/18/13 15:26	07/19/13 20:22	1
Magnesium	64000	E	1000	130	ug/L		07/18/13 15:26	07/19/13 20:22	1
Magnesium	66000		10000	1300	ug/L		07/18/13 15:26	07/19/13 21:50	10
Manganese	570		15	3.3	ug/L		07/18/13 15:26	07/19/13 20:22	1
Nickel	16	J	40	13	ug/L		07/18/13 15:26	07/19/13 20:22	1
Potassium	13000		5000	1700	ug/L		07/18/13 15:26	07/19/13 20:22	1
Selenium	4.0	J	15	2.7	ug/L		07/18/13 15:26	07/19/13 20:22	1
Silver	ND		10	6.0	ug/L		07/18/13 15:26	07/19/13 20:22	1
Sodium	220000	E	1000	320	ug/L		07/18/13 15:26	07/19/13 20:22	1
Sodium	220000		10000	3200	ug/L		07/18/13 15:26	07/19/13 21:50	10
Thallium	ND		20	4.0	ug/L		07/18/13 15:26	07/19/13 20:22	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:26	07/19/13 20:22	1
Zinc	5.5	J	20	5.2	ug/L		07/18/13 15:26	07/19/13 20:22	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:59	07/19/13 00:27	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		07/18/13 20:01	07/19/13 01:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.014	J	0.020	0.0040	mg/L			07/19/13 03:33	1
Sulfate	0.21	J	0.50	0.050	mg/L			07/19/13 03:33	1
Iodide	0.27	J	1.0	0.10	mg/L			07/19/13 20:58	1
Alkalinity	1000		25	2.7	mg/L			07/29/13 13:43	5

General Chemistry - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	330		20	2.0	mg/L			07/19/13 04:07	100

General Chemistry - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	5.0		1.3	0.13	mg/L			07/20/13 00:39	5

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: DUPLICATE 06

Lab Sample ID: 160-3022-8

Date Collected: 07/17/13 00:00

Matrix: Water

Date Received: 07/18/13 08:15

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			07/22/13 01:04	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/22/13 01:04	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/22/13 01:04	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/22/13 01:04	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/22/13 01:04	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/22/13 01:04	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/22/13 01:04	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/22/13 01:04	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/22/13 01:04	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/22/13 01:04	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/22/13 01:04	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/22/13 01:04	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/22/13 01:04	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/22/13 01:04	1
2-Hexanone	ND		20	0.59	ug/L			07/22/13 01:04	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/22/13 01:04	1
Acetone	ND		20	6.7	ug/L			07/22/13 01:04	1
Benzene	ND		5.0	0.25	ug/L			07/22/13 01:04	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/22/13 01:04	1
Bromoform	ND		5.0	0.37	ug/L			07/22/13 01:04	1
Bromomethane	ND		10	0.40	ug/L			07/22/13 01:04	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/22/13 01:04	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/22/13 01:04	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/22/13 01:04	1
Chloroethane	ND *		10	0.38	ug/L			07/22/13 01:04	1
Chloroform	ND		5.0	0.15	ug/L			07/22/13 01:04	1
Chloromethane	ND		10	0.55	ug/L			07/22/13 01:04	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/22/13 01:04	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/22/13 01:04	1
Cyclohexane	ND		10	0.36	ug/L			07/22/13 01:04	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/22/13 01:04	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/22/13 01:04	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/22/13 01:04	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/22/13 01:04	1
Methyl acetate	ND		25	2.3	ug/L			07/22/13 01:04	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/22/13 01:04	1
Methylcyclohexane	ND		10	0.26	ug/L			07/22/13 01:04	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/22/13 01:04	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/22/13 01:04	1
o-Xylene	ND		5.0	0.32	ug/L			07/22/13 01:04	1
Styrene	ND		5.0	0.35	ug/L			07/22/13 01:04	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/22/13 01:04	1
Toluene	ND		5.0	1.0	ug/L			07/22/13 01:04	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/22/13 01:04	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/22/13 01:04	1
Trichloroethene	ND		5.0	0.29	ug/L			07/22/13 01:04	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/22/13 01:04	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/22/13 01:04	1
Xylenes, Total	ND		10	0.85	ug/L			07/22/13 01:04	1

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TestAmerica St. Louis

Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: DUPLICATE 06

Lab Sample ID: 160-3022-8

Date Collected: 07/17/13 00:00

Matrix: Water

Date Received: 07/18/13 08:15

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		82 - 132		07/22/13 01:04	1
4-Bromofluorobenzene (Surr)	90		82 - 121		07/22/13 01:04	1
Dibromofluoromethane (Surr)	103		85 - 119		07/22/13 01:04	1
Toluene-d8 (Surr)	95		85 - 115		07/22/13 01:04	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/18/13 15:33	07/23/13 15:55	1
Antimony	ND		10	4.0	ug/L		07/18/13 15:33	07/23/13 15:55	1
Arsenic	8.3	J	10	2.0	ug/L		07/18/13 15:33	07/23/13 15:55	1
Barium	350		50	4.0	ug/L		07/18/13 15:33	07/23/13 15:55	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:33	07/23/13 15:55	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:33	07/23/13 15:55	1
Calcium	180000	E	1000	110	ug/L		07/18/13 15:33	07/23/13 15:55	1
Calcium	200000		10000	1100	ug/L		07/18/13 15:33	07/23/13 17:19	10
Chromium	ND		10	3.1	ug/L		07/18/13 15:33	07/23/13 15:55	1
Cobalt	4.6	J B	50	4.0	ug/L		07/18/13 15:33	07/23/13 15:55	1
Copper	ND		25	4.6	ug/L		07/18/13 15:33	07/23/13 15:55	1
Iron	15000		100	28	ug/L		07/18/13 15:33	07/23/13 15:55	1
Lead	3.1	J	10	1.5	ug/L		07/18/13 15:33	07/23/13 15:55	1
Magnesium	45000		1000	130	ug/L		07/18/13 15:33	07/23/13 15:55	1
Manganese	860		15	3.3	ug/L		07/18/13 15:33	07/23/13 15:55	1
Nickel	ND		40	13	ug/L		07/18/13 15:33	07/23/13 15:55	1
Potassium	4000	J	5000	1700	ug/L		07/18/13 15:33	07/23/13 15:55	1
Selenium	ND		15	2.7	ug/L		07/18/13 15:33	07/23/13 15:55	1
Silver	ND		10	6.0	ug/L		07/18/13 15:33	07/23/13 15:55	1
Sodium	32000		1000	320	ug/L		07/18/13 15:33	07/23/13 15:55	1
Thallium	ND ^		20	4.0	ug/L		07/18/13 15:33	07/23/13 15:55	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:33	07/23/13 15:55	1
Zinc	7.1	J	20	5.2	ug/L		07/18/13 15:33	07/23/13 15:55	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/18/13 15:26	07/19/13 20:33	1
Antimony	4.3	J	10	4.0	ug/L		07/18/13 15:26	07/19/13 20:33	1
Arsenic	7.9	J	10	2.0	ug/L		07/18/13 15:26	07/19/13 20:33	1
Barium	350		50	4.0	ug/L		07/18/13 15:26	07/19/13 20:33	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:26	07/19/13 20:33	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:26	07/19/13 20:33	1
Calcium	180000	E	1000	110	ug/L		07/18/13 15:26	07/19/13 20:33	1
Calcium	210000		10000	1100	ug/L		07/18/13 15:26	07/19/13 21:53	10
Chromium	ND		10	3.1	ug/L		07/18/13 15:26	07/19/13 20:33	1
Cobalt	ND		50	4.0	ug/L		07/18/13 15:26	07/19/13 20:33	1
Copper	ND		25	4.6	ug/L		07/18/13 15:26	07/19/13 20:33	1
Iron	14000		100	28	ug/L		07/18/13 15:26	07/19/13 20:33	1
Lead	2.1	J	10	1.5	ug/L		07/18/13 15:26	07/19/13 20:33	1
Magnesium	43000		1000	130	ug/L		07/18/13 15:26	07/19/13 20:33	1
Manganese	810		15	3.3	ug/L		07/18/13 15:26	07/19/13 20:33	1
Nickel	ND		40	13	ug/L		07/18/13 15:26	07/19/13 20:33	1
Potassium	4000	J	5000	1700	ug/L		07/18/13 15:26	07/19/13 20:33	1

TestAmerica St. Louis

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: DUPLICATE 06

Lab Sample ID: 160-3022-8

Date Collected: 07/17/13 00:00

Matrix: Water

Date Received: 07/18/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		15	2.7	ug/L		07/18/13 15:26	07/19/13 20:33	1
Silver	ND		10	6.0	ug/L		07/18/13 15:26	07/19/13 20:33	1
Sodium	33000		1000	320	ug/L		07/18/13 15:26	07/19/13 20:33	1
Thallium	ND		20	4.0	ug/L		07/18/13 15:26	07/19/13 20:33	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:26	07/19/13 20:33	1
Zinc	ND		20	5.2	ug/L		07/18/13 15:26	07/19/13 20:33	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:59	07/19/13 00:29	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		07/18/13 20:01	07/19/13 01:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0081	J	0.020	0.0040	mg/L			07/19/13 04:58	1
Bromide	0.23	J	0.25	0.025	mg/L			07/19/13 04:58	1
Iodide	ND		1.0	0.10	mg/L			07/19/13 21:28	1
Alkalinity	630		5.0	0.54	mg/L			07/29/13 13:43	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	31		4.0	0.40	mg/L			07/19/13 05:14	20
Sulfate	69		10	1.0	mg/L			07/19/13 05:14	20

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-3022-9

Date Collected: 07/17/13 00:00

Matrix: Water

Date Received: 07/18/13 08:15

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			07/21/13 20:03	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/21/13 20:03	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/21/13 20:03	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/21/13 20:03	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/21/13 20:03	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/21/13 20:03	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/21/13 20:03	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/21/13 20:03	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/21/13 20:03	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/21/13 20:03	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/21/13 20:03	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/21/13 20:03	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/21/13 20:03	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/21/13 20:03	1
2-Hexanone	ND		20	0.59	ug/L			07/21/13 20:03	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/21/13 20:03	1
Acetone	ND		20	6.7	ug/L			07/21/13 20:03	1
Benzene	ND		5.0	0.25	ug/L			07/21/13 20:03	1

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Client Sample Results

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

TestAmerica Job ID: 160-3022-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-3022-9

Date Collected: 07/17/13 00:00

Matrix: Water

Date Received: 07/18/13 08:15

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			07/21/13 20:03	1
Bromoform	ND		5.0	0.37	ug/L			07/21/13 20:03	1
Bromomethane	ND		10	0.40	ug/L			07/21/13 20:03	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/21/13 20:03	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/21/13 20:03	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/21/13 20:03	1
Chloroethane	ND	*	10	0.38	ug/L			07/21/13 20:03	1
Chloroform	ND		5.0	0.15	ug/L			07/21/13 20:03	1
Chloromethane	ND		10	0.55	ug/L			07/21/13 20:03	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/21/13 20:03	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/21/13 20:03	1
Cyclohexane	ND		10	0.36	ug/L			07/21/13 20:03	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/21/13 20:03	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/21/13 20:03	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/21/13 20:03	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/21/13 20:03	1
Methyl acetate	ND		25	2.3	ug/L			07/21/13 20:03	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/21/13 20:03	1
Methylcyclohexane	ND		10	0.26	ug/L			07/21/13 20:03	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/21/13 20:03	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/21/13 20:03	1
o-Xylene	ND		5.0	0.32	ug/L			07/21/13 20:03	1
Styrene	ND		5.0	0.35	ug/L			07/21/13 20:03	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/21/13 20:03	1
Toluene	ND		5.0	1.0	ug/L			07/21/13 20:03	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/21/13 20:03	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/21/13 20:03	1
Trichloroethene	ND		5.0	0.29	ug/L			07/21/13 20:03	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/21/13 20:03	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/21/13 20:03	1
Xylenes, Total	ND		10	0.85	ug/L			07/21/13 20:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		82 - 132		07/21/13 20:03	1
4-Bromofluorobenzene (Surr)	84		82 - 121		07/21/13 20:03	1
Dibromofluoromethane (Surr)	99		85 - 119		07/21/13 20:03	1
Toluene-d8 (Surr)	95		85 - 115		07/21/13 20:03	1

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QC Sample Results

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

TestAmerica Job ID: 160-3022-1

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

Lab Sample ID: MB 160-61804/3-A

Matrix: Water

Analysis Batch: 61804

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			07/21/13 19:14	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/21/13 19:14	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/21/13 19:14	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/21/13 19:14	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/21/13 19:14	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/21/13 19:14	1
Acetone	ND		20	6.7	ug/L			07/21/13 19:14	1
Benzene	ND		5.0	0.25	ug/L			07/21/13 19:14	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/21/13 19:14	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/21/13 19:14	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/21/13 19:14	1
Bromoform	ND		5.0	0.37	ug/L			07/21/13 19:14	1
Bromomethane	ND		10	0.40	ug/L			07/21/13 19:14	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/21/13 19:14	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/21/13 19:14	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/21/13 19:14	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/21/13 19:14	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/21/13 19:14	1
Chloroethane	ND		10	0.38	ug/L			07/21/13 19:14	1
Chloroform	ND		5.0	0.15	ug/L			07/21/13 19:14	1
Chloromethane	ND		10	0.55	ug/L			07/21/13 19:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.25	ug/L			07/21/13 19:14	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/21/13 19:14	1
2-Hexanone	ND		20	0.59	ug/L			07/21/13 19:14	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/21/13 19:14	1
Cyclohexane	ND		10	0.36	ug/L			07/21/13 19:14	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/21/13 19:14	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/21/13 19:14	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/21/13 19:14	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/21/13 19:14	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/21/13 19:14	1
Methyl acetate	ND		25	2.3	ug/L			07/21/13 19:14	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/21/13 19:14	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/21/13 19:14	1
Methylcyclohexane	ND		10	0.26	ug/L			07/21/13 19:14	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/21/13 19:14	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/21/13 19:14	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/21/13 19:14	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/21/13 19:14	1
Styrene	ND		5.0	0.35	ug/L			07/21/13 19:14	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/21/13 19:14	1
Toluene	ND		5.0	1.0	ug/L			07/21/13 19:14	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/21/13 19:14	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/21/13 19:14	1
o-Xylene	ND		5.0	0.32	ug/L			07/21/13 19:14	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/21/13 19:14	1
Trichloroethene	ND		5.0	0.29	ug/L			07/21/13 19:14	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/21/13 19:14	1

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TestAmerica St. Louis

QC Sample Results

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

TestAmerica Job ID: 160-3022-1

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

Lab Sample ID: MB 160-61804/3-A

Matrix: Water

Analysis Batch: 61804

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			07/21/13 19:14	1
Xylenes, Total	ND		10	0.85	ug/L			07/21/13 19:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		82 - 121		07/21/13 19:14	1
1,2-Dichloroethane-d4 (Surr)	95		82 - 132		07/21/13 19:14	1
Toluene-d8 (Surr)	94		85 - 115		07/21/13 19:14	1
Dibromofluoromethane (Surr)	95		85 - 119		07/21/13 19:14	1

Lab Sample ID: LCS 160-61804/4-A

Matrix: Water

Analysis Batch: 61804

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	51.0		ug/L		102	71 - 123
2-Butanone (MEK)	50.0	60.4		ug/L		121	71 - 123
1,2-Dibromoethane (EDB)	50.0	53.1		ug/L		106	85 - 115
1,2-Dichlorobenzene	50.0	49.8		ug/L		100	85 - 115
1,3-Dichlorobenzene	50.0	50.4		ug/L		101	85 - 115
1,4-Dichlorobenzene	50.0	51.1		ug/L		102	85 - 115
Acetone	50.0	59.1		ug/L		118	51 - 140
Benzene	50.0	50.6		ug/L		101	85 - 115
1,1-Dichloroethane	50.0	55.6		ug/L		111	85 - 115
Bromodichloromethane	50.0	48.9		ug/L		98	85 - 117
1,2-Dichloroethane	50.0	49.8		ug/L		100	79 - 122
Bromoform	50.0	45.7		ug/L		91	85 - 115
Bromomethane	50.0	59.1		ug/L		118	70 - 135
Carbon disulfide	50.0	52.0		ug/L		104	85 - 123
1,1-Dichloroethene	50.0	50.4		ug/L		101	85 - 118
Carbon tetrachloride	50.0	50.3		ug/L		101	85 - 118
1,2-Dichloropropane	50.0	55.1		ug/L		110	85 - 115
Chlorobenzene	50.0	53.2		ug/L		106	85 - 115
Chloroethane	50.0	84.9	*	ug/L		170	75 - 125
Chloroform	50.0	50.3		ug/L		101	85 - 115
Chloromethane	50.0	53.6		ug/L		107	73 - 132
cis-1,2-Dichloroethene	50.0	52.8		ug/L		106	85 - 115
2-Hexanone	50.0	55.0		ug/L		110	66 - 121
cis-1,3-Dichloropropene	50.0	53.2		ug/L		106	85 - 127
Cyclohexane	50.0	52.5		ug/L		105	73 - 115
Dibromochloromethane	50.0	50.4		ug/L		101	85 - 115
Dichlorodifluoromethane	50.0	44.4		ug/L		89	62 - 115
4-Methyl-2-pentanone (MIBK)	50.0	55.6		ug/L		111	74 - 123
Ethylbenzene	50.0	47.9		ug/L		96	85 - 115
Isopropylbenzene	50.0	51.0		ug/L		102	85 - 124
Methyl acetate	250	306		ug/L		122	73 - 135
1,1,2,2-Tetrachloroethane	50.0	53.2		ug/L		106	84 - 115
Methyl tert-butyl ether	50.0	53.9		ug/L		108	73 - 115
Methylcyclohexane	50.0	53.9		ug/L		108	85 - 134

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QC Sample Results

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

TestAmerica Job ID: 160-3022-1

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

Lab Sample ID: LCS 160-61804/4-A

Matrix: Water

Analysis Batch: 61804

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	54.2		ug/L		108	84 - 115
1,2,4-Trichlorobenzene	50.0	40.3		ug/L		81	75 - 124
1,1,1-Trichloroethane	50.0	48.2		ug/L		96	85 - 115
1,1,2-Trichloroethane	50.0	55.0		ug/L		110	85 - 115
Styrene	50.0	53.0		ug/L		106	85 - 115
Tetrachloroethene	50.0	49.4		ug/L		99	85 - 115
Toluene	50.0	48.7		ug/L		97	85 - 115
m-Xylene & p-Xylene	50.0	51.5		ug/L		103	85 - 115
trans-1,2-Dichloroethene	50.0	51.4		ug/L		103	85 - 115
o-Xylene	50.0	52.1		ug/L		104	85 - 115
trans-1,3-Dichloropropene	50.0	55.8		ug/L		112	85 - 123
Trichloroethene	50.0	50.5		ug/L		101	85 - 115
Trichlorofluoromethane	50.0	52.9		ug/L		106	85 - 116
Vinyl chloride	50.0	55.0		ug/L		110	68 - 133
Xylenes, Total	100	104		ug/L		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		82 - 121
1,2-Dichloroethane-d4 (Surr)	100		82 - 132
Toluene-d8 (Surr)	95		85 - 115
Dibromofluoromethane (Surr)	100		85 - 119

Lab Sample ID: 160-3022-1 MS

Matrix: Water

Analysis Batch: 61804

Client Sample ID: LR-100

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	46.4		ug/L		93	71 - 123
2-Butanone (MEK)	ND		50.0	52.2		ug/L		104	73 - 133
1,2-Dibromoethane (EDB)	ND		50.0	48.4		ug/L		97	85 - 115
1,2-Dichlorobenzene	ND		50.0	50.9		ug/L		102	84 - 115
1,3-Dichlorobenzene	ND		50.0	51.5		ug/L		103	84 - 115
1,4-Dichlorobenzene	5.4		50.0	57.1		ug/L		103	85 - 115
Acetone	ND		50.0	48.6		ug/L		97	38 - 150
Benzene	7.2		50.0	58.7		ug/L		103	85 - 115
1,1-Dichloroethane	ND		50.0	54.2		ug/L		108	85 - 115
Bromodichloromethane	ND		50.0	50.4		ug/L		101	56 - 119
1,2-Dichloroethane	ND		50.0	50.0		ug/L		100	80 - 125
Bromoform	ND		50.0	41.7	F	ug/L		83	84 - 116
Bromomethane	ND		50.0	63.4		ug/L		127	70 - 135
Carbon disulfide	ND		50.0	50.2		ug/L		100	85 - 127
1,1-Dichloroethene	ND		50.0	46.9		ug/L		94	85 - 118
Carbon tetrachloride	ND		50.0	47.0		ug/L		94	85 - 121
1,2-Dichloropropane	ND		50.0	53.6		ug/L		107	85 - 117
Chlorobenzene	58		50.0	109		ug/L		102	85 - 115
Chloroethane	ND *		50.0	95.0	F	ug/L		190	73 - 123
Chloroform	ND		50.0	48.3		ug/L		97	85 - 115
Chloromethane	ND		50.0	48.8		ug/L		98	67 - 130

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QC Sample Results

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

TestAmerica Job ID: 160-3022-1

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

Lab Sample ID: 160-3022-1 MS

Matrix: Water

Analysis Batch: 61804

Client Sample ID: LR-100

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
cis-1,2-Dichloroethene	ND		50.0	51.0		ug/L		102	80 - 116
2-Hexanone	ND		50.0	47.6		ug/L		95	66 - 121
cis-1,3-Dichloropropene	ND		50.0	52.0		ug/L		104	85 - 124
Cyclohexane	ND		50.0	51.6		ug/L		103	73 - 115
Dibromochloromethane	ND		50.0	48.4		ug/L		97	85 - 115
Dichlorodifluoromethane	ND		50.0	38.6	F	ug/L		77	85 - 119
4-Methyl-2-pentanone (MIBK)	ND		50.0	54.2		ug/L		108	77 - 134
Ethylbenzene	ND		50.0	49.8		ug/L		100	85 - 115
Isopropylbenzene	14		50.0	64.9		ug/L		102	85 - 124
Methyl acetate	ND		250	264		ug/L		106	49 - 150
1,1,1,2-Tetrachloroethane	ND		50.0	48.4		ug/L		97	85 - 116
Methyl tert-butyl ether	ND		50.0	49.2		ug/L		98	75 - 115
Methylcyclohexane	ND		50.0	55.1		ug/L		110	85 - 137
Methylene Chloride	ND		50.0	51.7		ug/L		103	85 - 115
1,2,4-Trichlorobenzene	ND		50.0	42.8		ug/L		86	75 - 124
1,1,1-Trichloroethane	ND		50.0	46.8		ug/L		94	85 - 118
1,1,2-Trichloroethane	ND		50.0	52.2		ug/L		104	85 - 115
Styrene	ND		50.0	56.9		ug/L		114	85 - 115
Tetrachloroethene	ND		50.0	52.3		ug/L		105	85 - 118
Toluene	ND		50.0	53.3		ug/L		107	85 - 118
m-Xylene & p-Xylene	ND		50.0	52.9		ug/L		106	85 - 115
trans-1,2-Dichloroethene	ND		50.0	47.7		ug/L		95	84 - 115
o-Xylene	ND		50.0	56.0		ug/L		112	85 - 118
trans-1,3-Dichloropropene	ND		50.0	53.3		ug/L		107	85 - 127
Trichloroethene	ND		50.0	50.3		ug/L		101	85 - 115
Trichlorofluoromethane	ND		50.0	43.9		ug/L		88	85 - 115
Vinyl chloride	ND		50.0	53.7		ug/L		107	63 - 129
Xylenes, Total	ND		100	109		ug/L		109	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	87		82 - 121
1,2-Dichloroethane-d4 (Surr)	98		82 - 132
Toluene-d8 (Surr)	103		85 - 115
Dibromofluoromethane (Surr)	98		85 - 119

Lab Sample ID: 160-3022-1 MSD

Matrix: Water

Analysis Batch: 61804

Client Sample ID: LR-100

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
1,2-Dibromo-3-Chloropropane	ND		50.0	46.5		ug/L		93	71 - 123	0	20
2-Butanone (MEK)	ND		50.0	53.6		ug/L		107	73 - 133	3	20
1,2-Dibromoethane (EDB)	ND		50.0	50.7		ug/L		101	85 - 115	5	20
1,2-Dichlorobenzene	ND		50.0	51.1		ug/L		102	84 - 115	0	20
1,3-Dichlorobenzene	ND		50.0	52.6		ug/L		105	84 - 115	2	20
1,4-Dichlorobenzene	5.4		50.0	56.7		ug/L		102	85 - 115	1	20
Acetone	ND		50.0	54.0		ug/L		108	38 - 150	10	20
Benzene	7.2		50.0	59.6		ug/L		105	85 - 115	2	20

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QC Sample Results

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

TestAmerica Job ID: 160-3022-1

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

Lab Sample ID: 160-3022-1 MSD

Client Sample ID: LR-100

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 61804

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
1,1-Dichloroethane	ND		50.0	54.0		ug/L		108	85 - 115	0	20
Bromodichloromethane	ND		50.0	47.6		ug/L		95	56 - 119	6	20
1,2-Dichloroethane	ND		50.0	49.4		ug/L		99	80 - 125	1	20
Bromoform	ND		50.0	43.1		ug/L		86	84 - 116	3	20
Bromomethane	ND		50.0	59.6		ug/L		119	70 - 135	6	20
Carbon disulfide	ND		50.0	51.7		ug/L		103	85 - 127	3	20
1,1-Dichloroethene	ND		50.0	49.7		ug/L		99	85 - 118	6	20
Carbon tetrachloride	ND		50.0	49.4		ug/L		99	85 - 121	5	20
1,2-Dichloropropane	ND		50.0	52.5		ug/L		105	85 - 117	2	20
Chlorobenzene	58		50.0	110		ug/L		105	85 - 115	1	20
Chloroethane	ND	*	50.0	92.7	F	ug/L		185	73 - 123	2	20
Chloroform	ND		50.0	49.6		ug/L		99	85 - 115	3	20
Chloromethane	ND		50.0	50.3		ug/L		101	67 - 130	3	20
cis-1,2-Dichloroethene	ND		50.0	52.2		ug/L		104	80 - 116	2	20
2-Hexanone	ND		50.0	51.3		ug/L		103	66 - 121	7	20
cis-1,3-Dichloropropene	ND		50.0	50.1		ug/L		100	85 - 124	4	20
Cyclohexane	ND		50.0	53.5		ug/L		107	73 - 115	4	20
Dibromochloromethane	ND		50.0	50.0		ug/L		100	85 - 115	3	20
Dichlorodifluoromethane	ND		50.0	41.2	F	ug/L		82	85 - 119	7	20
4-Methyl-2-pentanone (MIBK)	ND		50.0	54.2		ug/L		108	77 - 134	0	20
Ethylbenzene	ND		50.0	50.8		ug/L		102	85 - 115	2	20
Isopropylbenzene	14		50.0	67.7		ug/L		107	85 - 124	4	20
Methyl acetate	ND		250	267		ug/L		107	49 - 150	1	20
1,1,2,2-Tetrachloroethane	ND		50.0	50.5		ug/L		101	85 - 116	4	20
Methyl tert-butyl ether	ND		50.0	51.4		ug/L		103	75 - 115	4	20
Methylcyclohexane	ND		50.0	55.8		ug/L		112	85 - 137	1	20
Methylene Chloride	ND		50.0	51.8		ug/L		104	85 - 115	0	20
1,2,4-Trichlorobenzene	ND		50.0	40.6		ug/L		81	75 - 124	5	20
1,1,1-Trichloroethane	ND		50.0	48.9		ug/L		98	85 - 118	4	20
1,1,2-Trichloroethane	ND		50.0	53.5		ug/L		107	85 - 115	2	20
Styrene	ND		50.0	56.2		ug/L		112	85 - 115	1	20
Tetrachloroethene	ND		50.0	52.7		ug/L		105	85 - 118	1	20
Toluene	ND		50.0	52.4		ug/L		105	85 - 118	2	20
m-Xylene & p-Xylene	ND		50.0	54.0		ug/L		108	85 - 115	2	20
trans-1,2-Dichloroethene	ND		50.0	49.8		ug/L		100	84 - 115	4	20
o-Xylene	ND		50.0	55.4		ug/L		111	85 - 118	1	20
trans-1,3-Dichloropropene	ND		50.0	51.5		ug/L		103	85 - 127	3	20
Trichloroethene	ND		50.0	50.8		ug/L		102	85 - 115	1	20
Trichlorofluoromethane	ND		50.0	48.6		ug/L		97	85 - 115	10	20
Vinyl chloride	ND		50.0	54.9		ug/L		110	63 - 129	2	20
Xylenes, Total	ND		100	109		ug/L		109	70 - 130	0	20

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	90		82 - 121
1,2-Dichloroethane-d4 (Surr)	99		82 - 132
Toluene-d8 (Surr)	99		85 - 115
Dibromofluoromethane (Surr)	100		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: 160-3022-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 160-61452/1-A
Matrix: Water
Analysis Batch: 61766

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 61452

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/18/13 15:26	07/19/13 19:01	1
Antimony	ND		10	4.0	ug/L		07/18/13 15:26	07/19/13 19:01	1
Arsenic	ND		10	2.0	ug/L		07/18/13 15:26	07/19/13 19:01	1
Barium	ND		50	4.0	ug/L		07/18/13 15:26	07/19/13 19:01	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:26	07/19/13 19:01	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:26	07/19/13 19:01	1
Calcium	ND		1000	110	ug/L		07/18/13 15:26	07/19/13 19:01	1
Chromium	ND		10	3.1	ug/L		07/18/13 15:26	07/19/13 19:01	1
Cobalt	ND		50	4.0	ug/L		07/18/13 15:26	07/19/13 19:01	1
Copper	ND		25	4.6	ug/L		07/18/13 15:26	07/19/13 19:01	1
Iron	ND		100	28	ug/L		07/18/13 15:26	07/19/13 19:01	1
Lead	ND		10	1.5	ug/L		07/18/13 15:26	07/19/13 19:01	1
Magnesium	ND		1000	130	ug/L		07/18/13 15:26	07/19/13 19:01	1
Manganese	ND		15	3.3	ug/L		07/18/13 15:26	07/19/13 19:01	1
Nickel	ND		40	13	ug/L		07/18/13 15:26	07/19/13 19:01	1
Potassium	ND		5000	1700	ug/L		07/18/13 15:26	07/19/13 19:01	1
Selenium	ND		15	2.7	ug/L		07/18/13 15:26	07/19/13 19:01	1
Silver	ND		10	6.0	ug/L		07/18/13 15:26	07/19/13 19:01	1
Sodium	ND		1000	320	ug/L		07/18/13 15:26	07/19/13 19:01	1
Thallium	ND		20	4.0	ug/L		07/18/13 15:26	07/19/13 19:01	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:26	07/19/13 19:01	1
Zinc	ND		20	5.2	ug/L		07/18/13 15:26	07/19/13 19:01	1

Lab Sample ID: LCS 160-61452/2-A
Matrix: Water
Analysis Batch: 61766

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61452

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9820		ug/L		98	80 - 120
Antimony	500	516		ug/L		103	80 - 120
Arsenic	1000	1010		ug/L		101	80 - 120
Barium	1000	1040		ug/L		104	80 - 120
Beryllium	1000	997		ug/L		100	80 - 120
Cadmium	1000	1020		ug/L		102	80 - 120
Calcium	10000	10700		ug/L		107	80 - 120
Chromium	1000	1060		ug/L		106	80 - 120
Cobalt	1000	1060		ug/L		106	80 - 120
Copper	1000	1030		ug/L		103	80 - 120
Iron	10000	9860		ug/L		99	80 - 120
Lead	1000	1080		ug/L		108	80 - 120
Magnesium	10000	9830		ug/L		98	80 - 120
Manganese	1000	987		ug/L		99	80 - 120
Nickel	1000	1060		ug/L		106	80 - 120
Potassium	10000	9950		ug/L		99	80 - 120
Selenium	1000	1020		ug/L		102	80 - 120
Silver	100	91.9		ug/L		92	80 - 120
Sodium	10000	10200		ug/L		102	80 - 120
Thallium	200	226		ug/L		113	80 - 120

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QC Sample Results

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

TestAmerica Job ID: 160-3022-1

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

Lab Sample ID: LCS 160-61452/2-A
Matrix: Water
Analysis Batch: 61766

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61452

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	1000	962		ug/L		96	80 - 120
Zinc	1000	1040		ug/L		104	80 - 120

Lab Sample ID: MB 160-61454/1-A
Matrix: Water
Analysis Batch: 62409

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 61454

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/18/13 15:33	07/23/13 14:35	1
Antimony	ND		10	4.0	ug/L		07/18/13 15:33	07/23/13 14:35	1
Arsenic	ND		10	2.0	ug/L		07/18/13 15:33	07/23/13 14:35	1
Barium	ND		50	4.0	ug/L		07/18/13 15:33	07/23/13 14:35	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:33	07/23/13 14:35	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:33	07/23/13 14:35	1
Calcium	ND		1000	110	ug/L		07/18/13 15:33	07/23/13 14:35	1
Chromium	ND		10	3.1	ug/L		07/18/13 15:33	07/23/13 14:35	1
Cobalt	5.90	J	50	4.0	ug/L		07/18/13 15:33	07/23/13 14:35	1
Copper	ND		25	4.6	ug/L		07/18/13 15:33	07/23/13 14:35	1
Iron	ND		100	28	ug/L		07/18/13 15:33	07/23/13 14:35	1
Lead	ND		10	1.5	ug/L		07/18/13 15:33	07/23/13 14:35	1
Magnesium	ND		1000	130	ug/L		07/18/13 15:33	07/23/13 14:35	1
Manganese	ND		15	3.3	ug/L		07/18/13 15:33	07/23/13 14:35	1
Nickel	ND		40	13	ug/L		07/18/13 15:33	07/23/13 14:35	1
Potassium	ND		5000	1700	ug/L		07/18/13 15:33	07/23/13 14:35	1
Selenium	ND		15	2.7	ug/L		07/18/13 15:33	07/23/13 14:35	1
Silver	ND		10	6.0	ug/L		07/18/13 15:33	07/23/13 14:35	1
Sodium	ND		1000	320	ug/L		07/18/13 15:33	07/23/13 14:35	1
Thallium	ND	^	20	4.0	ug/L		07/18/13 15:33	07/23/13 14:35	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:33	07/23/13 14:35	1
Zinc	ND		20	5.2	ug/L		07/18/13 15:33	07/23/13 14:35	1

Lab Sample ID: LCS 160-61454/2-A
Matrix: Water
Analysis Batch: 62409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61454

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9550		ug/L		95	80 - 120
Antimony	500	506		ug/L		101	80 - 120
Arsenic	1000	990		ug/L		99	80 - 120
Barium	1000	999		ug/L		100	80 - 120
Beryllium	1000	994		ug/L		99	80 - 120
Cadmium	1000	999		ug/L		100	80 - 120
Calcium	10000	10200		ug/L		102	80 - 120
Chromium	1000	1030		ug/L		103	80 - 120
Cobalt	1000	1050		ug/L		105	80 - 120
Copper	1000	1010		ug/L		101	80 - 120
Iron	10000	9920		ug/L		99	80 - 120
Lead	1000	1050		ug/L		105	80 - 120
Magnesium	10000	9940		ug/L		99	80 - 120

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QC Sample Results

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

TestAmerica Job ID: 160-3022-1

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

Lab Sample ID: LCS 160-61454/2-A

Matrix: Water

Analysis Batch: 62409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 61454

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Manganese	1000	999		ug/L		100	80 - 120	
Nickel	1000	1040		ug/L		104	80 - 120	
Potassium	10000	9650		ug/L		97	80 - 120	
Selenium	1000	989		ug/L		99	80 - 120	
Silver	100	99.5		ug/L		100	80 - 120	
Sodium	10000	9720		ug/L		97	80 - 120	
Thallium	200	224	^	ug/L		112	80 - 120	
Vanadium	1000	971		ug/L		97	80 - 120	
Zinc	1000	1000		ug/L		100	80 - 120	

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 160-61467/1-A

Matrix: Water

Analysis Batch: 61580

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 61467

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:59	07/18/13 23:51	1

Lab Sample ID: LCS 160-61467/2-A

Matrix: Water

Analysis Batch: 61580

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 61467

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Mercury	5.00	5.40		ug/L		108	80 - 120	

Lab Sample ID: MB 160-61468/1-A

Matrix: Water

Analysis Batch: 61580

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 61468

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.060	ug/L		07/18/13 20:01	07/19/13 00:55	1

Lab Sample ID: LCS 160-61468/2-A

Matrix: Water

Analysis Batch: 61580

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 61468

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Mercury	5.00	5.45		ug/L		109	80 - 120	

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 160-62155/9

Matrix: Water

Analysis Batch: 62155

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Iodide	ND		1.0	0.10	mg/L			07/19/13 16:45	1

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QC Sample Results

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

TestAmerica Job ID: 160-3022-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 160-62155/10
Matrix: Water
Analysis Batch: 62155

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	4.01		mg/L		100	90 - 110

Lab Sample ID: 160-3022-1 MS
Matrix: Water
Analysis Batch: 62155

Client Sample ID: LR-100
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iodide	0.33	J	4.00	3.83	F	mg/L		87	90 - 110

Lab Sample ID: 160-3022-1 DU
Matrix: Water
Analysis Batch: 62155

Client Sample ID: LR-100
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Iodide	0.33	J	0.336	J	mg/L		1	20

Lab Sample ID: MB 160-62889/9
Matrix: Water
Analysis Batch: 62889

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			07/19/13 13:39	1
Chloride	ND		0.20	0.020	mg/L			07/19/13 13:39	1
Bromide	ND		0.25	0.025	mg/L			07/19/13 13:39	1
Sulfate	ND		0.50	0.050	mg/L			07/19/13 13:39	1

Lab Sample ID: LCS 160-62889/10
Matrix: Water
Analysis Batch: 62889

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	0.379		mg/L		95	90 - 110
Chloride	2.00	1.85		mg/L		92	90 - 110
Bromide	2.00	1.90		mg/L		95	90 - 110
Sulfate	8.00	7.53		mg/L		94	90 - 110

Lab Sample ID: MB 160-63933/3
Matrix: Water
Analysis Batch: 63933

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			07/18/13 17:58	1
Chloride	ND		0.20	0.020	mg/L			07/18/13 17:58	1
Bromide	ND		0.25	0.025	mg/L			07/18/13 17:58	1
Sulfate	ND		0.50	0.050	mg/L			07/18/13 17:58	1

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QC Sample Results

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

TestAmerica Job ID: 160-3022-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 160-63933/4
Matrix: Water
Analysis Batch: 63933

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	0.401		mg/L		100	90 - 110
Chloride	2.00	1.84		mg/L		92	90 - 110
Bromide	2.00	2.00		mg/L		100	90 - 110
Sulfate	8.00	7.62		mg/L		95	90 - 110

Lab Sample ID: 160-3022-1 MS
Matrix: Water
Analysis Batch: 63933

Client Sample ID: LR-100
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.0058	J	0.400	0.396		mg/L		98	90 - 110
Bromide	2.1		2.00	4.22		mg/L		105	90 - 110
Sulfate	0.25	J	4.00	4.07		mg/L		96	90 - 110

Lab Sample ID: 160-3022-1 DU
Matrix: Water
Analysis Batch: 63933

Client Sample ID: LR-100
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	0.0058	J	ND		mg/L		NC	20
Bromide	2.1		2.13		mg/L		1	20
Sulfate	0.25	J	0.191	J	mg/L		27	20

Method: 300.0 - Anions, Ion Chromatography - DL2

Lab Sample ID: 160-3022-1 MS
Matrix: Water
Analysis Batch: 63933

Client Sample ID: LR-100
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL2	180		200	382		mg/L		103	90 - 110

Lab Sample ID: 160-3022-1 DU
Matrix: Water
Analysis Batch: 63933

Client Sample ID: LR-100
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL2	180		175		mg/L		0.2	20

Method: 310.1 - Alkalinity

Lab Sample ID: MB 160-63443/1
Matrix: Water
Analysis Batch: 63443

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	ND		1.3	0.14	mg/L			07/29/13 13:43	1

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QC Sample Results

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

TestAmerica Job ID: 160-3022-1

Method: 310.1 - Alkalinity (Continued)

Lab Sample ID: LCS 160-63443/3

Matrix: Water

Analysis Batch: 63443

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	400	388		mg/L		97	90 - 110

Lab Sample ID: LLCS 160-63443/2

Matrix: Water

Analysis Batch: 63443

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

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QC Association Summary

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

TestAmerica Job ID: 160-3022-1

GC/MS VOA

Analysis Batch: 61804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3022-1	LR-100	Total/NA	Water	8260C	
160-3022-1 MS	LR-100	Total/NA	Water	8260C	
160-3022-1 MSD	LR-100	Total/NA	Water	8260C	
160-3022-2	D-81	Total/NA	Water	8260C	
160-3022-3	PZ-204-SS	Total/NA	Water	8260C	
160-3022-4	LR-103	Total/NA	Water	8260C	
160-3022-5	PZ-111-KS	Total/NA	Water	8260C	
160-3022-6	PZ-203-SS	Total/NA	Water	8260C	
160-3022-7	D-87	Total/NA	Water	8260C	
160-3022-8	DUPLICATE 06	Total/NA	Water	8260C	
160-3022-9	TRIP BLANK	Total/NA	Water	8260C	
LCS 160-61804/4-A	Lab Control Sample	Total/NA	Water	8260C	
MB 160-61804/3-A	Method Blank	Total/NA	Water	8260C	

Metals

Prep Batch: 61452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3022-1	LR-100	Dissolved	Water	3010A	
160-3022-2	D-81	Dissolved	Water	3010A	
160-3022-3	PZ-204-SS	Dissolved	Water	3010A	
160-3022-4	LR-103	Dissolved	Water	3010A	
160-3022-5	PZ-111-KS	Dissolved	Water	3010A	
160-3022-6	PZ-203-SS	Dissolved	Water	3010A	
160-3022-7	D-87	Dissolved	Water	3010A	
160-3022-8	DUPLICATE 06	Dissolved	Water	3010A	
LCS 160-61452/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 160-61452/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 61454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3022-1	LR-100	Total/NA	Water	3010A	
160-3022-2	D-81	Total/NA	Water	3010A	
160-3022-3	PZ-204-SS	Total/NA	Water	3010A	
160-3022-4	LR-103	Total/NA	Water	3010A	
160-3022-5	PZ-111-KS	Total/NA	Water	3010A	
160-3022-6	PZ-203-SS	Total/NA	Water	3010A	
160-3022-7	D-87	Total/NA	Water	3010A	
160-3022-8	DUPLICATE 06	Total/NA	Water	3010A	
LCS 160-61454/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 160-61454/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 61467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3022-1	LR-100	Total/NA	Water	7470A	
160-3022-2	D-81	Total/NA	Water	7470A	
160-3022-3	PZ-204-SS	Total/NA	Water	7470A	
160-3022-4	LR-103	Total/NA	Water	7470A	
160-3022-5	PZ-111-KS	Total/NA	Water	7470A	
160-3022-6	PZ-203-SS	Total/NA	Water	7470A	

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QC Association Summary

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

TestAmerica Job ID: 160-3022-1

Metals (Continued)

Prep Batch: 61467 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3022-7	D-87	Total/NA	Water	7470A	
160-3022-8	DUPLICATE 06	Total/NA	Water	7470A	
LCS 160-61467/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 160-61467/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 61468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3022-1	LR-100	Dissolved	Water	7470A	
160-3022-2	D-81	Dissolved	Water	7470A	
160-3022-3	PZ-204-SS	Dissolved	Water	7470A	
160-3022-4	LR-103	Dissolved	Water	7470A	
160-3022-5	PZ-111-KS	Dissolved	Water	7470A	
160-3022-6	PZ-203-SS	Dissolved	Water	7470A	
160-3022-7	D-87	Dissolved	Water	7470A	
160-3022-8	DUPLICATE 06	Dissolved	Water	7470A	
LCS 160-61468/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 160-61468/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 61580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3022-1	LR-100	Dissolved	Water	7470A	61468
160-3022-1	LR-100	Total/NA	Water	7470A	61467
160-3022-2	D-81	Dissolved	Water	7470A	61468
160-3022-2	D-81	Total/NA	Water	7470A	61467
160-3022-3	PZ-204-SS	Dissolved	Water	7470A	61468
160-3022-3	PZ-204-SS	Total/NA	Water	7470A	61467
160-3022-4	LR-103	Dissolved	Water	7470A	61468
160-3022-4	LR-103	Total/NA	Water	7470A	61467
160-3022-5	PZ-111-KS	Dissolved	Water	7470A	61468
160-3022-5	PZ-111-KS	Total/NA	Water	7470A	61467
160-3022-6	PZ-203-SS	Dissolved	Water	7470A	61468
160-3022-6	PZ-203-SS	Total/NA	Water	7470A	61467
160-3022-7	D-87	Dissolved	Water	7470A	61468
160-3022-7	D-87	Total/NA	Water	7470A	61467
160-3022-8	DUPLICATE 06	Dissolved	Water	7470A	61468
160-3022-8	DUPLICATE 06	Total/NA	Water	7470A	61467
LCS 160-61467/2-A	Lab Control Sample	Total/NA	Water	7470A	61467
LCS 160-61468/2-A	Lab Control Sample	Total/NA	Water	7470A	61468
MB 160-61467/1-A	Method Blank	Total/NA	Water	7470A	61467
MB 160-61468/1-A	Method Blank	Total/NA	Water	7470A	61468

Analysis Batch: 61766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3022-1	LR-100	Dissolved	Water	6010C	61452
160-3022-1	LR-100	Dissolved	Water	6010C	61452
160-3022-2	D-81	Dissolved	Water	6010C	61452
160-3022-2	D-81	Dissolved	Water	6010C	61452
160-3022-3	PZ-204-SS	Dissolved	Water	6010C	61452
160-3022-3	PZ-204-SS	Dissolved	Water	6010C	61452
160-3022-4	LR-103	Dissolved	Water	6010C	61452
160-3022-4	LR-103	Dissolved	Water	6010C	61452

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QC Association Summary

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

TestAmerica Job ID: 160-3022-1

Metals (Continued)

Analysis Batch: 61766 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3022-5	PZ-111-KS	Dissolved	Water	6010C	61452
160-3022-5	PZ-111-KS	Dissolved	Water	6010C	61452
160-3022-6	PZ-203-SS	Dissolved	Water	6010C	61452
160-3022-6	PZ-203-SS	Dissolved	Water	6010C	61452
160-3022-7	D-87	Dissolved	Water	6010C	61452
160-3022-7	D-87	Dissolved	Water	6010C	61452
160-3022-8	DUPLICATE 06	Dissolved	Water	6010C	61452
160-3022-8	DUPLICATE 06	Dissolved	Water	6010C	61452
LCS 160-61452/2-A	Lab Control Sample	Total/NA	Water	6010C	61452
MB 160-61452/1-A	Method Blank	Total/NA	Water	6010C	61452

Analysis Batch: 62409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3022-1	LR-100	Total/NA	Water	6010C	61454
160-3022-1	LR-100	Total/NA	Water	6010C	61454
160-3022-2	D-81	Total/NA	Water	6010C	61454
160-3022-2	D-81	Total/NA	Water	6010C	61454
160-3022-3	PZ-204-SS	Total/NA	Water	6010C	61454
160-3022-3	PZ-204-SS	Total/NA	Water	6010C	61454
160-3022-4	LR-103	Total/NA	Water	6010C	61454
160-3022-4	LR-103	Total/NA	Water	6010C	61454
160-3022-5	PZ-111-KS	Total/NA	Water	6010C	61454
160-3022-5	PZ-111-KS	Total/NA	Water	6010C	61454
160-3022-6	PZ-203-SS	Total/NA	Water	6010C	61454
160-3022-6	PZ-203-SS	Total/NA	Water	6010C	61454
160-3022-7	D-87	Total/NA	Water	6010C	61454
160-3022-7	D-87	Total/NA	Water	6010C	61454
160-3022-8	DUPLICATE 06	Total/NA	Water	6010C	61454
160-3022-8	DUPLICATE 06	Total/NA	Water	6010C	61454
LCS 160-61454/2-A	Lab Control Sample	Total/NA	Water	6010C	61454
MB 160-61454/1-A	Method Blank	Total/NA	Water	6010C	61454

General Chemistry

Analysis Batch: 62155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3022-1	LR-100	Total/NA	Water	300.0	
160-3022-1 DU	LR-100	Total/NA	Water	300.0	
160-3022-1 MS	LR-100	Total/NA	Water	300.0	
160-3022-2	D-81	Total/NA	Water	300.0	
160-3022-3	PZ-204-SS	Total/NA	Water	300.0	
160-3022-4	LR-103	Total/NA	Water	300.0	
160-3022-5	PZ-111-KS	Total/NA	Water	300.0	
160-3022-6	PZ-203-SS	Total/NA	Water	300.0	
160-3022-7	D-87	Total/NA	Water	300.0	
160-3022-8	DUPLICATE 06	Total/NA	Water	300.0	
LCS 160-62155/10	Lab Control Sample	Total/NA	Water	300.0	
MB 160-62155/9	Method Blank	Total/NA	Water	300.0	

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QC Association Summary

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

TestAmerica Job ID: 160-3022-1

General Chemistry (Continued)

Analysis Batch: 62889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3022-7 - RADL	D-87	Total/NA	Water	300.0	
LCS 160-62889/10	Lab Control Sample	Total/NA	Water	300.0	
MB 160-62889/9	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 63443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3022-1	LR-100	Total/NA	Water	310.1	
160-3022-2	D-81	Total/NA	Water	310.1	
160-3022-3	PZ-204-SS	Total/NA	Water	310.1	
160-3022-4	LR-103	Total/NA	Water	310.1	
160-3022-5	PZ-111-KS	Total/NA	Water	310.1	
160-3022-6	PZ-203-SS	Total/NA	Water	310.1	
160-3022-7	D-87	Total/NA	Water	310.1	
160-3022-8	DUPLICATE 06	Total/NA	Water	310.1	
LCS 160-63443/3	Lab Control Sample	Total/NA	Water	310.1	
LLCS 160-63443/2	Lab Control Sample	Total/NA	Water	310.1	
MB 160-63443/1	Method Blank	Total/NA	Water	310.1	

Analysis Batch: 63933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3022-1	LR-100	Total/NA	Water	300.0	
160-3022-1 - DL2	LR-100	Total/NA	Water	300.0	
160-3022-1 DU	LR-100	Total/NA	Water	300.0	
160-3022-1 DU - DL2	LR-100	Total/NA	Water	300.0	
160-3022-1 MS	LR-100	Total/NA	Water	300.0	
160-3022-1 MS - DL2	LR-100	Total/NA	Water	300.0	
160-3022-2	D-81	Total/NA	Water	300.0	
160-3022-2 - DL	D-81	Total/NA	Water	300.0	
160-3022-3	PZ-204-SS	Total/NA	Water	300.0	
160-3022-3 - DL	PZ-204-SS	Total/NA	Water	300.0	
160-3022-4	LR-103	Total/NA	Water	300.0	
160-3022-4 - DL2	LR-103	Total/NA	Water	300.0	
160-3022-5	PZ-111-KS	Total/NA	Water	300.0	
160-3022-5 - DL	PZ-111-KS	Total/NA	Water	300.0	
160-3022-5 - DL2	PZ-111-KS	Total/NA	Water	300.0	
160-3022-6	PZ-203-SS	Total/NA	Water	300.0	
160-3022-6 - DL	PZ-203-SS	Total/NA	Water	300.0	
160-3022-7	D-87	Total/NA	Water	300.0	
160-3022-7 - DL2	D-87	Total/NA	Water	300.0	
160-3022-8	DUPLICATE 06	Total/NA	Water	300.0	
160-3022-8 - DL	DUPLICATE 06	Total/NA	Water	300.0	
LCS 160-63933/4	Lab Control Sample	Total/NA	Water	300.0	
MB 160-63933/3	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: 160-3022-1

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	12DCE	TOL	DBFM
		(82-121)	(82-132)	(85-115)	(85-119)
160-3022-1	LR-100	77 X	102	99	103
160-3022-1 MS	LR-100	87	98	103	98
160-3022-1 MSD	LR-100	90	99	99	100
160-3022-2	D-81	87	102	92	101
160-3022-3	PZ-204-SS	85	100	98	108
160-3022-4	LR-103	89	103	97	106
160-3022-5	PZ-111-KS	86	101	100	107
160-3022-6	PZ-203-SS	86	99	93	99
160-3022-7	D-87	86	101	101	107
160-3022-8	DUPLICATE 06	90	96	95	103
160-3022-9	TRIP BLANK	84	99	95	99
LCS 160-61804/4-A	Lab Control Sample	90	100	95	100
MB 160-61804/3-A	Method Blank	84	95	94	95

Surrogate Legend

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

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