

US EPA ARCHIVE DOCUMENT

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 160-3040-1
Client Project/Site: West Lake Landfill

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

Attn: Mr. Paul Rosasco

Rhonda Ridenhower

Authorized for release by:
7/31/2013 5:07:32 PM

Rhonda Ridenhower, Customer Service Manager
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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

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Job ID: 160-3040-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Engineering Management Support, Inc.

Project: West Lake Landfill

Report Number: 160-3040-1

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 07/19/2013; 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 S-53 (160-3040-1), D-14 (160-3040-2), PZ-205-AS (160-3040-3), I-65 (160-3040-4), D-13 (160-3040-5), PZ-104-KS (160-3040-6), PZ-206-SS (160-3040-7), PZ-207-AS (160-3040-8), DUPLICATE 07 (160-3040-9) and TRIP BLANK (160-3040-10) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 07/21/2013, 07/22/2013, 07/23/2013 and 07/24/2013.

Analytical batch 61804

The continuing calibration verification (CCV) for Chloroethane associated with batch 61804 recovered above the upper control limit,

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Case Narrative

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Project/Site: West Lake Landfill

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Laboratory: TestAmerica St. Louis (Continued)

indicating results for this analyte will be biased high.. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

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.

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.

Surrogate (4-BFB) recovery for the following sample was outside control limits: PZ-205-AS (160-3040-3). Re-analysis was performed at a dilution for high levels of the target analyte, Benzene. Surrogate (4-BFB) results in the dilute re-analysis were acceptable; analytes associated with this surrogate will be reported from the re-analysis.

Analytical batch 62292

The continuing calibration verification (CCV) for Chloroethane associated with batch 62292 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 62292 were outside control limits for Chloroethane. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Sample, PZ-205-AS (160-3040-3), , was analyzed at a dilution due to high levels of target analytes. The reporting limit has been adjusted for the analytes reported from the dilution.

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 S-53 (160-3040-1), D-14 (160-3040-2), PZ-205-AS (160-3040-3), I-65 (160-3040-4), D-13 (160-3040-5), PZ-104-KS (160-3040-6), PZ-206-SS (160-3040-7), PZ-207-AS (160-3040-8) and DUPLICATE 07 (160-3040-9) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 07/25/2013 and analyzed on 07/26/2013 and 07/29/2013.

Analytical batch 63280

The following samples were diluted to bring the concentration of target analytes (calcium, magnesium, sodium, and iron) within the calibration range. Magnesium also interferes with iron and iron interferes with arsenic, chromium, selenium, and zinc: D-13 (160-3040-5), D-14 (160-3040-2), DUPLICATE 07 (160-3040-9), I-65 (160-3040-4), PZ-104-KS (160-3040-6), PZ-205-AS (160-3040-3), PZ-206-SS (160-3040-7), PZ-207-AS (160-3040-8), S-53 (160-3040-1). Elevated reporting limits (RLs) are provided.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for prep batch 62880 were outside control limits for silver, manganese, zinc, and barium. The RPD was within method limits indicating a possible matrix interference. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Due to the high concentration of iron, magnesium, and sodium, the matrix spike / matrix spike duplicate (MS/MSD) for prep batch 62880 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Analytical batch 63435

Due to the high concentration of calcium, the matrix spike / matrix spike duplicate (MS/MSD) for prep batch 62880 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Analytical batch 63744

The following samples were diluted to bring the concentration of target analytes within the calibration range: D-13 (160-3040-5), D-14 (160-3040-2), DUPLICATE 07 (160-3040-9), I-65 (160-3040-4), PZ-104-KS (160-3040-6), PZ-205-AS (160-3040-3), PZ-206-SS

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(160-3040-7), PZ-207-AS (160-3040-8), S-53 (160-3040-1). Elevated reporting limits (RLs) are provided.

Due to the high concentration of magnesium, and sodium, the matrix spike / matrix spike duplicate (MS/MSD) for prep batch 62879 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Due to the high concentration of Calcium, the matrix spike / matrix spike duplicate (MS/MSD) for prep batch 62879 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

The initial calibration verification (ICV) for prep batch 62879 was above the upper control limit for thallium indicating a potential high bias. The affected samples are ND for Thallium and the data have been qualified and reported.

Observations:

Analytical batch 63280 and 63744: The sample results for antimony, magnesium, manganese, and sodium and were observed outside the dissolved versus total criteria. All other elements were within QC limits, indicating that this is an anomaly due to matrix interference.

Analytical batch 63435, 63280 and 63744: The sample results for iron and magnesium. and were observed outside the dissolved versus total criteria. All other elements were within QC 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 S-53 (160-3040-1), D-14 (160-3040-2), PZ-205-AS (160-3040-3), I-65 (160-3040-4), D-13 (160-3040-5), PZ-104-KS (160-3040-6), PZ-206-SS (160-3040-7), PZ-207-AS (160-3040-8) and DUPLICATE 07 (160-3040-9) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 07/24/2013.

Due to matrix interference, the matrix spike / matrix spike duplicate (MS/MSD) recoveries were below control limits. The RPD and associated laboratory control sample (LCS) recovery met acceptance criteria.

No other difficulties were encountered during the mercury analysis.

All other quality control parameters were within the acceptance limits.

TOTAL MERCURY

Samples S-53 (160-3040-1), D-14 (160-3040-2), PZ-205-AS (160-3040-3), I-65 (160-3040-4), D-13 (160-3040-5), PZ-104-KS (160-3040-6), PZ-206-SS (160-3040-7), PZ-207-AS (160-3040-8) and DUPLICATE 07 (160-3040-9) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 07/24/2013.

Due to matrix interference, the matrix spike / matrix spike duplicate (MS/MSD) recoveries were below control limits. The RPD and associated laboratory control sample (LCS) recovery met acceptance criteria.

No other difficulties were encountered during the mercury analysis.

All other quality control parameters were within the acceptance limits.

ANIONS

Samples S-53 (160-3040-1), D-14 (160-3040-2), PZ-205-AS (160-3040-3), I-65 (160-3040-4), D-13 (160-3040-5), PZ-104-KS (160-3040-6), PZ-206-SS (160-3040-7), PZ-207-AS (160-3040-8) and DUPLICATE 07 (160-3040-9) were analyzed for anions in accordance with EPA Method 300.0. The samples were analyzed on 07/19/2013, 07/20/2013 and 07/22/2013.

The following samples were diluted to bring the concentrations of Chloride and Sulfate within the calibration range in IC batch 62869: D-13 (160-3040-5). Elevated reporting limits (RLs) are provided.

The matrix spike (MS) recovery for Chloride in batch 62869 was outside control limits. The associated laboratory control sample (LCS)

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Laboratory: TestAmerica St. Louis (Continued)

recovery met acceptance criteria, as did the other reported anion MS recoveries in this batch. (160-3068-1 MS)

The following samples were diluted to bring the concentrations of Chloride, Sulfate, and Bromide within the calibration range in IC batch 62889: D-13 (160-3040-5), D-14 (160-3040-2), DUPLICATE 07 (160-3040-9), I-65 (160-3040-4), PZ-102R-SS (160-3052-4), PZ-104-KS (160-3040-6), PZ-205-AS (160-3040-3), PZ-206-SS (160-3040-7), PZ-207-AS (160-3040-8), S-53 (160-3040-1). Elevated reporting limits (RLs) are provided.

Sample 3040-1 was not spiked for routine anions in IC batch 62889. Thus, all samples for this job in IC batch 62889 were linked to the MS performed on sample 3052-4 in this batch.

No other difficulties were encountered during the anions analysis.

All other quality control parameters were within the acceptance limits.

ALKALINITY

Samples S-53 (160-3040-1), D-14 (160-3040-2), PZ-205-AS (160-3040-3), I-65 (160-3040-4), D-13 (160-3040-5), PZ-104-KS (160-3040-6), PZ-206-SS (160-3040-7), PZ-207-AS (160-3040-8) and DUPLICATE 07 (160-3040-9) were analyzed for alkalinity in accordance with EPA Method 310.1. The samples were analyzed on 07/30/2013.

The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: (160-3052-2 DU), (160-3077-3 DU), (160-3077-3 MS), 03-EV1-3003 (160-3077-3), D-14 (160-3040-2), I-73 (160-3052-2 MS), PZ-207-AS (160-3040-8). 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.

Chain of Custody Record

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

Client Information
 Client Contact: Herst & Associates, Inc.
 Mr. Paul Rosasco
 Engineering Management Support, Inc.
 Address: 7220 W. Jefferson AVE Suite 406
 City: Lakewood
 State, Zip: CO, 80235
 Project Name: West Lake Landfill- July
 Email: paulrosasco@emstidmwr.com
 Project #: 16002280
 SSSOW#: _____

Lab Fax: 636-439-9111
Lab Email: rhonda.nidenhower@testamericainc.com
Lab Phone: 636-439-9111
Lab Address: Herst & Associates, Inc.
Lab City/State/Zip: Earth City, MO 63045

Due Date Requested: _____
TAT Requested (days): _____
PO #: _____
WO #: _____
Purchase Order not required
Project #: 16002280
SSOW#: _____

Center Teaching No(s): _____

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Spill, Other)	Field Filled Sample (Yes or No)	310 - Alkalinity - 310			300 - Arsenic			60100 - TAOA			82000 - VOA			82000 - Standard List			Special Instructions/Note
						N	D	A	N	D	A	N	D	A	N	D	A	N	D	A	
S-53	7/18/13	0730	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	* VOAs offensed; Sent unprocessed
D-14 *	7/18/13	0730	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
P2-205-AS *	7/18/13	0946	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
I-65	7/18/13	1059	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
D-13	7/18/13	1219	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
P2-104-KS	7/18/13	1301	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
P2-206-SS	7/18/13	1335	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
P2-207-AS *	7/18/13	1432	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Duplicate 07	7/18/13	-	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Trip blank	7/18/13	-	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Preservation Codes:
 A - HCl
 B - NaOH
 C - Zn Acetate
 D - Nitric Acid
 E - NH4SO4
 F - NaOH
 G - Ammonia
 H - Ascorbic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - BUA
 Other: _____

Preservation Codes:
 M - H2O2
 N - None
 O - Na2O2
 P - Na2O4S
 Q - Na2SO3
 R - Na2S2O3
 S - H2SO4
 T - 15% Dodecylsulfate
 U - Acetone
 V - MeOH
 W - ph 4.5
 Z - other (specify)

Special Instructions/Note:
 Total Number of containers: 7
 * VOAs offensed;
Sent unprocessed

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

Special Instructions/OC Requirements: _____

Method of Shipment: _____

Time: _____

Possible Hazard Identification
 Non-Hazardous
 Flammable
 Skin Irritant
 Poisonous
 Unknown
 Radioisotopic

Deliverable Requested: I, II, III, IV, Other (specify) _____

Empty Kit Reinquished by: _____

Reinquished by: Matt Stoumb Date: 7/19/13 Time: 0730 Company: _____

Reinquished by: Paul Rosasco Date: 7/19/13 Time: 0810 Company: _____

Reinquished by: _____ Date: _____ Time: _____ Company: _____

Custody Seal No.: _____
 A Yes B No

Custody Seal Intact: _____
 A Yes B No

Cooler Temperature(s) and Other Remarks: _____

Login Sample Receipt Checklist

Client: Engineering Management Support, Inc.

Job Number: 160-3040-1

Login Number: 3040

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.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Definitions/Glossary

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

TestAmerica Job ID: 160-3040-1

Qualifiers

GC/MS VOA

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

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.
B	Compound was found in the blank and sample.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

General Chemistry

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

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: 160-3040-1

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: 160-3040-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-3040-1	S-53	Water	07/18/13 07:30	07/19/13 08:10
160-3040-2	D-14	Water	07/18/13 09:30	07/19/13 08:10
160-3040-3	PZ-205-AS	Water	07/18/13 09:46	07/19/13 08:10
160-3040-4	I-65	Water	07/18/13 10:59	07/19/13 08:10
160-3040-5	D-13	Water	07/18/13 12:19	07/19/13 08:10
160-3040-6	PZ-104-KS	Water	07/18/13 13:01	07/19/13 08:10
160-3040-7	PZ-206-SS	Water	07/18/13 13:35	07/19/13 08:10
160-3040-8	PZ-207-AS	Water	07/18/13 14:32	07/19/13 08:10
160-3040-9	DUPLICATE 07	Water	07/18/13 00:00	07/19/13 08:10
160-3040-10	TRIP BLANK	Water	07/18/13 00:00	07/19/13 08:10

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Detection Summary

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: S-53

Lab Sample ID: 160-3040-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	52000		200	80	ug/L	1		6010C	Total/NA
Antimony	10		10	4.0	ug/L	1		6010C	Total/NA
Arsenic	31		10	2.0	ug/L	1		6010C	Total/NA
Barium	1200		50	4.0	ug/L	1		6010C	Total/NA
Beryllium	2.7	J	5.0	0.61	ug/L	1		6010C	Total/NA
Cadmium	4.4	J	5.0	0.91	ug/L	1		6010C	Total/NA
Calcium	180000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	240000		10000	1100	ug/L	10		6010C	Total/NA
Chromium	59		10	3.1	ug/L	1		6010C	Total/NA
Cobalt	38	J	50	4.0	ug/L	1		6010C	Total/NA
Copper	100		25	4.6	ug/L	1		6010C	Total/NA
Iron	73000		100	28	ug/L	1		6010C	Total/NA
Iron	82000		1000	280	ug/L	10		6010C	Total/NA
Lead	73		10	1.5	ug/L	1		6010C	Total/NA
Magnesium	57000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	64000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	4100		15	3.3	ug/L	1		6010C	Total/NA
Nickel	130		40	13	ug/L	1		6010C	Total/NA
Potassium	14000		5000	1700	ug/L	1		6010C	Total/NA
Selenium	11	J	15	2.7	ug/L	1		6010C	Total/NA
Sodium	57000		1000	320	ug/L	1		6010C	Total/NA
Vanadium	130		50	4.1	ug/L	1		6010C	Total/NA
Zinc	440		20	5.2	ug/L	1		6010C	Total/NA
Antimony	6.3	J	10	4.0	ug/L	1		6010C	Dissolved
Barium	410		50	4.0	ug/L	1		6010C	Dissolved
Calcium	170000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	200000		10000	1100	ug/L	10		6010C	Dissolved
Cobalt	7.0	J	50	4.0	ug/L	1		6010C	Dissolved
Lead	2.7	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	46000		1000	130	ug/L	1		6010C	Dissolved
Manganese	2300	B	15	3.3	ug/L	1		6010C	Dissolved
Potassium	6200		5000	1700	ug/L	1		6010C	Dissolved
Sodium	64000		1000	320	ug/L	1		6010C	Dissolved
Zinc	9.2	J B	20	5.2	ug/L	1		6010C	Dissolved
Mercury	0.13	J	0.20	0.060	ug/L	1		7470A	Total/NA
Nitrate as N	0.014	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	1.0		0.25	0.025	mg/L	1		300.0	Total/NA
Iodide	0.28	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity	560	B	5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL	36		4.0	0.40	mg/L	20		300.0	Total/NA
Sulfate - DL	180		10	1.0	mg/L	20		300.0	Total/NA

Client Sample ID: D-14

Lab Sample ID: 160-3040-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	8.6		5.0	0.25	ug/L	1		8260C	Total/NA
Chlorobenzene	36		5.0	0.38	ug/L	1		8260C	Total/NA
1,4-Dichlorobenzene	8.5		5.0	0.35	ug/L	1		8260C	Total/NA
Ethylbenzene	1.5	J	5.0	0.30	ug/L	1		8260C	Total/NA
Isopropylbenzene	1.4	J	5.0	0.26	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

Detection Summary

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: D-14 (Continued)

Lab Sample ID: 160-3040-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	2.2	J	5.0	1.0	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	2.4	J	5.0	0.57	ug/L	1		8260C	Total/NA
o-Xylene	1.2	J	5.0	0.32	ug/L	1		8260C	Total/NA
Xylenes, Total	3.6	J	10	0.85	ug/L	1		8260C	Total/NA
Aluminum	2300		200	80	ug/L	1		6010C	Total/NA
Antimony	7.1	J	10	4.0	ug/L	1		6010C	Total/NA
Arsenic	10		10	2.0	ug/L	1		6010C	Total/NA
Barium	760		50	4.0	ug/L	1		6010C	Total/NA
Calcium	150000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	180000		10000	1100	ug/L	10		6010C	Total/NA
Chromium	9.3	J	10	3.1	ug/L	1		6010C	Total/NA
Cobalt	4.2	J	50	4.0	ug/L	1		6010C	Total/NA
Iron	11000		100	28	ug/L	1		6010C	Total/NA
Iron	11000		1000	280	ug/L	10		6010C	Total/NA
Lead	9.9	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	75000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	75000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	1400		15	3.3	ug/L	1		6010C	Total/NA
Nickel	25	J	40	13	ug/L	1		6010C	Total/NA
Potassium	71000		5000	1700	ug/L	1		6010C	Total/NA
Selenium	3.1	J	15	2.7	ug/L	1		6010C	Total/NA
Sodium	390000	E	1000	320	ug/L	1		6010C	Total/NA
Sodium	400000		10000	3200	ug/L	10		6010C	Total/NA
Vanadium	6.6	J	50	4.1	ug/L	1		6010C	Total/NA
Zinc	25		20	5.2	ug/L	1		6010C	Total/NA
Antimony	8.2	J	10	4.0	ug/L	1		6010C	Dissolved
Arsenic	7.0	J	10	2.0	ug/L	1		6010C	Dissolved
Barium	600		50	4.0	ug/L	1		6010C	Dissolved
Calcium	140000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	170000		10000	1100	ug/L	10		6010C	Dissolved
Chromium	4.7	J	10	3.1	ug/L	1		6010C	Dissolved
Cobalt	6.1	J	50	4.0	ug/L	1		6010C	Dissolved
Iron	1100		100	28	ug/L	1		6010C	Dissolved
Iron	1100		1000	280	ug/L	10		6010C	Dissolved
Lead	3.6	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	74000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	77000		10000	1300	ug/L	10		6010C	Dissolved
Manganese	1200	B	15	3.3	ug/L	1		6010C	Dissolved
Nickel	22	J	40	13	ug/L	1		6010C	Dissolved
Potassium	71000		5000	1700	ug/L	1		6010C	Dissolved
Sodium	380000	E	1000	320	ug/L	1		6010C	Dissolved
Sodium	380000		10000	3200	ug/L	10		6010C	Dissolved
Zinc	7.3	J B	20	5.2	ug/L	1		6010C	Dissolved
Mercury	0.29		0.20	0.060	ug/L	1		7470A	Total/NA
Nitrate as N	0.13		0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	3.0		0.25	0.025	mg/L	1		300.0	Total/NA
Sulfate	5.7		0.50	0.050	mg/L	1		300.0	Total/NA
Iodide	0.37	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity	1400	B	25	2.7	mg/L	5		310.1	Total/NA
Chloride - DL2	570		40	4.0	mg/L	200		300.0	Total/NA

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This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

Detection Summary

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: PZ-205-AS

Lab Sample ID: 160-3040-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1300		50	2.5	ug/L		1	8260C	Total/NA
Chlorobenzene	41		5.0	0.38	ug/L		1	8260C	Total/NA
Ethylbenzene	41		5.0	0.30	ug/L		1	8260C	Total/NA
Isopropylbenzene	5.0		5.0	0.26	ug/L		1	8260C	Total/NA
Methyl tert-butyl ether	1.3	J	5.0	0.40	ug/L		1	8260C	Total/NA
Toluene	69		5.0	1.0	ug/L		1	8260C	Total/NA
m-Xylene & p-Xylene	60		5.0	0.57	ug/L		1	8260C	Total/NA
o-Xylene	15		5.0	0.32	ug/L		1	8260C	Total/NA
Xylenes, Total	75		10	0.85	ug/L		1	8260C	Total/NA
Aluminum	80000		200	80	ug/L		1	6010C	Total/NA
Antimony	12		10	4.0	ug/L		1	6010C	Total/NA
Arsenic	81		10	2.0	ug/L		1	6010C	Total/NA
Arsenic	95	J	100	20	ug/L		10	6010C	Total/NA
Barium	1800		50	4.0	ug/L		1	6010C	Total/NA
Beryllium	3.4	J	5.0	0.61	ug/L		1	6010C	Total/NA
Cadmium	1.0	J	5.0	0.91	ug/L		1	6010C	Total/NA
Calcium	260000	E	1000	110	ug/L		1	6010C	Total/NA
Calcium	370000		10000	1100	ug/L		10	6010C	Total/NA
Chromium	82		10	3.1	ug/L		1	6010C	Total/NA
Chromium	140		100	31	ug/L		10	6010C	Total/NA
Cobalt	32	J	50	4.0	ug/L		1	6010C	Total/NA
Copper	170		25	4.6	ug/L		1	6010C	Total/NA
Iron	130000	E	100	28	ug/L		1	6010C	Total/NA
Iron	150000		1000	280	ug/L		10	6010C	Total/NA
Lead	94		10	1.5	ug/L		1	6010C	Total/NA
Magnesium	98000	E	1000	130	ug/L		1	6010C	Total/NA
Magnesium	110000		10000	1300	ug/L		10	6010C	Total/NA
Manganese	2500		15	3.3	ug/L		1	6010C	Total/NA
Nickel	150		40	13	ug/L		1	6010C	Total/NA
Potassium	24000		5000	1700	ug/L		1	6010C	Total/NA
Selenium	7.6	J	15	2.7	ug/L		1	6010C	Total/NA
Sodium	120000	E	1000	320	ug/L		1	6010C	Total/NA
Sodium	140000		10000	3200	ug/L		10	6010C	Total/NA
Vanadium	160		50	4.1	ug/L		1	6010C	Total/NA
Zinc	330		20	5.2	ug/L		1	6010C	Total/NA
Zinc	390		200	52	ug/L		10	6010C	Total/NA
Antimony	5.6	J	10	4.0	ug/L		1	6010C	Dissolved
Arsenic	39		10	2.0	ug/L		1	6010C	Dissolved
Barium	1300		50	4.0	ug/L		1	6010C	Dissolved
Calcium	230000	E	1000	110	ug/L		1	6010C	Dissolved
Calcium	290000		10000	1100	ug/L		10	6010C	Dissolved
Cobalt	5.5	J	50	4.0	ug/L		1	6010C	Dissolved
Iron	47000		100	28	ug/L		1	6010C	Dissolved
Iron	50000		1000	280	ug/L		10	6010C	Dissolved
Lead	3.4	J	10	1.5	ug/L		1	6010C	Dissolved
Magnesium	69000	E	1000	130	ug/L		1	6010C	Dissolved
Magnesium	76000		10000	1300	ug/L		10	6010C	Dissolved
Manganese	1600	B	15	3.3	ug/L		1	6010C	Dissolved
Nickel	24	J	40	13	ug/L		1	6010C	Dissolved
Potassium	17000		5000	1700	ug/L		1	6010C	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

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Detection Summary

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: PZ-205-AS (Continued)

Lab Sample ID: 160-3040-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	4.6	J	15	2.7	ug/L	1		6010C	Dissolved
Sodium	140000	E	1000	320	ug/L	1		6010C	Dissolved
Sodium	150000		10000	3200	ug/L	10		6010C	Dissolved
Vanadium	5.8	J	50	4.1	ug/L	1		6010C	Dissolved
Zinc	6.6	J B	20	5.2	ug/L	1		6010C	Dissolved
Mercury	0.22		0.20	0.060	ug/L	1		7470A	Total/NA
Nitrate as N	0.0070	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	4.0		0.25	0.025	mg/L	1		300.0	Total/NA
Sulfate	4.6		0.50	0.050	mg/L	1		300.0	Total/NA
Iodide	0.55	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity	810	B	5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL2	350		20	2.0	mg/L	100		300.0	Total/NA

Client Sample ID: I-65

Lab Sample ID: 160-3040-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	410		200	80	ug/L	1		6010C	Total/NA
Barium	190		50	4.0	ug/L	1		6010C	Total/NA
Calcium	110000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	130000		10000	1100	ug/L	10		6010C	Total/NA
Chromium	3.9	J	10	3.1	ug/L	1		6010C	Total/NA
Iron	620		100	28	ug/L	1		6010C	Total/NA
Lead	3.9	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	17000		1000	130	ug/L	1		6010C	Total/NA
Manganese	250		15	3.3	ug/L	1		6010C	Total/NA
Potassium	4800	J	5000	1700	ug/L	1		6010C	Total/NA
Sodium	58000		1000	320	ug/L	1		6010C	Total/NA
Zinc	10	J	20	5.2	ug/L	1		6010C	Total/NA
Antimony	4.1	J	10	4.0	ug/L	1		6010C	Dissolved
Barium	180		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
Lead	2.2	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	16000		1000	130	ug/L	1		6010C	Dissolved
Manganese	34	B	15	3.3	ug/L	1		6010C	Dissolved
Potassium	4900	J	5000	1700	ug/L	1		6010C	Dissolved
Sodium	58000		1000	320	ug/L	1		6010C	Dissolved
Nitrate as N	0.0060	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	0.043	J	0.25	0.025	mg/L	1		300.0	Total/NA
Alkalinity	340	B	5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL	52		4.0	0.40	mg/L	20		300.0	Total/NA
Sulfate - DL	83		10	1.0	mg/L	20		300.0	Total/NA

Client Sample ID: D-13

Lab Sample ID: 160-3040-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	8.4		5.0	0.40	ug/L	1		8260C	Total/NA
Aluminum	190	J	200	80	ug/L	1		6010C	Total/NA
Antimony	5.2	J	10	4.0	ug/L	1		6010C	Total/NA
Barium	650		50	4.0	ug/L	1		6010C	Total/NA

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: 160-3040-1

Client Sample ID: D-13 (Continued)

Lab Sample ID: 160-3040-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	130000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	160000		10000	1100	ug/L	10		6010C	Total/NA
Iron	14000		100	28	ug/L	1		6010C	Total/NA
Lead	3.4	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	34000		1000	130	ug/L	1		6010C	Total/NA
Manganese	400		15	3.3	ug/L	1		6010C	Total/NA
Potassium	5500		5000	1700	ug/L	1		6010C	Total/NA
Sodium	36000		1000	320	ug/L	1		6010C	Total/NA
Zinc	6.5	J	20	5.2	ug/L	1		6010C	Total/NA
Antimony	4.4	J	10	4.0	ug/L	1		6010C	Dissolved
Barium	660		50	4.0	ug/L	1		6010C	Dissolved
Calcium	130000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	160000		10000	1100	ug/L	10		6010C	Dissolved
Iron	14000		100	28	ug/L	1		6010C	Dissolved
Lead	3.1	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	33000		1000	130	ug/L	1		6010C	Dissolved
Manganese	390	B	15	3.3	ug/L	1		6010C	Dissolved
Potassium	5500		5000	1700	ug/L	1		6010C	Dissolved
Sodium	35000		1000	320	ug/L	1		6010C	Dissolved
Bromide	0.091	J	0.25	0.025	mg/L	1		300.0	Total/NA
Alkalinity	390	B	5.0	0.54	mg/L	1		310.1	Total/NA
Sulfate - DL	35		10	1.0	mg/L	20		300.0	Total/NA
Chloride - RADL	100		20	2.0	mg/L	100		300.0	Total/NA

Client Sample ID: PZ-104-KS

Lab Sample ID: 160-3040-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	300		200	80	ug/L	1		6010C	Total/NA
Barium	50		50	4.0	ug/L	1		6010C	Total/NA
Calcium	71000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	79000		10000	1100	ug/L	10		6010C	Total/NA
Chromium	4.6	J	10	3.1	ug/L	1		6010C	Total/NA
Iron	590		100	28	ug/L	1		6010C	Total/NA
Lead	2.0	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	35000		1000	130	ug/L	1		6010C	Total/NA
Manganese	14	J	15	3.3	ug/L	1		6010C	Total/NA
Potassium	1800	J	5000	1700	ug/L	1		6010C	Total/NA
Sodium	36000		1000	320	ug/L	1		6010C	Total/NA
Barium	50		50	4.0	ug/L	1		6010C	Dissolved
Calcium	70000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	74000		10000	1100	ug/L	10		6010C	Dissolved
Iron	430		100	28	ug/L	1		6010C	Dissolved
Lead	2.0	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	35000		1000	130	ug/L	1		6010C	Dissolved
Manganese	11	J B	15	3.3	ug/L	1		6010C	Dissolved
Potassium	1800	J	5000	1700	ug/L	1		6010C	Dissolved
Sodium	35000		1000	320	ug/L	1		6010C	Dissolved
Nitrate as N	0.012	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	0.063	J	0.25	0.025	mg/L	1		300.0	Total/NA
Sulfate	16		0.50	0.050	mg/L	1		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: 160-3040-1

Client Sample ID: PZ-104-KS (Continued)

Lab Sample ID: 160-3040-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	350	B	5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL	25		4.0	0.40	mg/L	20		300.0	Total/NA

Client Sample ID: PZ-206-SS

Lab Sample ID: 160-3040-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	980		200	80	ug/L	1		6010C	Total/NA
Barium	73		50	4.0	ug/L	1		6010C	Total/NA
Calcium	110000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	130000		10000	1100	ug/L	10		6010C	Total/NA
Chromium	7.4	J	10	3.1	ug/L	1		6010C	Total/NA
Iron	2100		100	28	ug/L	1		6010C	Total/NA
Iron	2200		1000	280	ug/L	10		6010C	Total/NA
Lead	3.6	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	70000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	72000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	45		15	3.3	ug/L	1		6010C	Total/NA
Potassium	3500	J	5000	1700	ug/L	1		6010C	Total/NA
Sodium	13000		1000	320	ug/L	1		6010C	Total/NA
Zinc	12	J	20	5.2	ug/L	1		6010C	Total/NA
Barium	55		50	4.0	ug/L	1		6010C	Dissolved
Calcium	98000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	110000		10000	1100	ug/L	10		6010C	Dissolved
Lead	1.7	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	66000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	69000		10000	1300	ug/L	10		6010C	Dissolved
Manganese	19	B	15	3.3	ug/L	1		6010C	Dissolved
Potassium	3200	J	5000	1700	ug/L	1		6010C	Dissolved
Sodium	13000		1000	320	ug/L	1		6010C	Dissolved
Nitrate as N	0.0082	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	0.28		0.25	0.025	mg/L	1		300.0	Total/NA
Alkalinity	470	B	5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL	25		4.0	0.40	mg/L	20		300.0	Total/NA
Sulfate - DL	76		10	1.0	mg/L	20		300.0	Total/NA

Client Sample ID: PZ-207-AS

Lab Sample ID: 160-3040-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.8	J	5.0	0.25	ug/L	1		8260C	Total/NA
Chlorobenzene	20		5.0	0.38	ug/L	1		8260C	Total/NA
1,4-Dichlorobenzene	3.5	J	5.0	0.35	ug/L	1		8260C	Total/NA
Isopropylbenzene	2.8	J	5.0	0.26	ug/L	1		8260C	Total/NA
Antimony	5.1	J	10	4.0	ug/L	1		6010C	Total/NA
Arsenic	21		10	2.0	ug/L	1		6010C	Total/NA
Barium	770		50	4.0	ug/L	1		6010C	Total/NA
Calcium	120000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	120000		10000	1100	ug/L	10		6010C	Total/NA
Chromium	8.0	J	10	3.1	ug/L	1		6010C	Total/NA
Cobalt	5.5	J	50	4.0	ug/L	1		6010C	Total/NA
Copper	11	J	25	4.6	ug/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

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Detection Summary

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: PZ-207-AS (Continued)

Lab Sample ID: 160-3040-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	20000		100	28	ug/L	1		6010C	Total/NA
Iron	16000		1000	280	ug/L	10		6010C	Total/NA
Lead	5.1	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	77000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	63000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	65		15	3.3	ug/L	1		6010C	Total/NA
Nickel	21	J	40	13	ug/L	1		6010C	Total/NA
Potassium	63000		5000	1700	ug/L	1		6010C	Total/NA
Sodium	240000	E	1000	320	ug/L	1		6010C	Total/NA
Sodium	200000		10000	3200	ug/L	10		6010C	Total/NA
Vanadium	4.2	J	50	4.1	ug/L	1		6010C	Total/NA
Zinc	16	J	20	5.2	ug/L	1		6010C	Total/NA
Antimony	5.9	J	10	4.0	ug/L	1		6010C	Dissolved
Arsenic	22		10	2.0	ug/L	1		6010C	Dissolved
Barium	780		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
Cobalt	6.5	J	50	4.0	ug/L	1		6010C	Dissolved
Iron	20000		100	28	ug/L	1		6010C	Dissolved
Iron	20000		1000	280	ug/L	10		6010C	Dissolved
Lead	3.5	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	76000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	78000		10000	1300	ug/L	10		6010C	Dissolved
Manganese	66	B	15	3.3	ug/L	1		6010C	Dissolved
Nickel	18	J	40	13	ug/L	1		6010C	Dissolved
Potassium	63000		5000	1700	ug/L	1		6010C	Dissolved
Sodium	240000	E	1000	320	ug/L	1		6010C	Dissolved
Sodium	240000		10000	3200	ug/L	10		6010C	Dissolved
Nitrate as N	0.0050	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	2.7		0.25	0.025	mg/L	1		300.0	Total/NA
Sulfate	0.16	J	0.50	0.050	mg/L	1		300.0	Total/NA
Iodide	0.21	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity	1300	B	25	2.7	mg/L	5		310.1	Total/NA
Chloride - DL2	210		20	2.0	mg/L	100		300.0	Total/NA

Client Sample ID: DUPLICATE 07

Lab Sample ID: 160-3040-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	480		200	80	ug/L	1		6010C	Total/NA
Barium	200		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	3.8	J	10	3.1	ug/L	1		6010C	Total/NA
Cobalt	6.5	J	50	4.0	ug/L	1		6010C	Total/NA
Iron	710		100	28	ug/L	1		6010C	Total/NA
Lead	2.8	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	17000		1000	130	ug/L	1		6010C	Total/NA
Manganese	270		15	3.3	ug/L	1		6010C	Total/NA
Potassium	5000		5000	1700	ug/L	1		6010C	Total/NA
Sodium	59000		1000	320	ug/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

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Detection Summary

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: DUPLICATE 07 (Continued)

Lab Sample ID: 160-3040-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	5.0	J	50	4.1	ug/L	1		6010C	Total/NA
Zinc	5.3	J	20	5.2	ug/L	1		6010C	Total/NA
Antimony	4.8	J	10	4.0	ug/L	1		6010C	Dissolved
Barium	190		50	4.0	ug/L	1		6010C	Dissolved
Calcium	110000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	120000		10000	1100	ug/L	10		6010C	Dissolved
Lead	2.1	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	17000		1000	130	ug/L	1		6010C	Dissolved
Manganese	35	B	15	3.3	ug/L	1		6010C	Dissolved
Potassium	5000		5000	1700	ug/L	1		6010C	Dissolved
Sodium	60000		1000	320	ug/L	1		6010C	Dissolved
Nitrate as N	0.0050	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	0.050	J	0.25	0.025	mg/L	1		300.0	Total/NA
Alkalinity	320	B	5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL	53		4.0	0.40	mg/L	20		300.0	Total/NA
Sulfate - DL	84		10	1.0	mg/L	20		300.0	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-3040-10

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: 160-3040-1

Client Sample ID: S-53

Lab Sample ID: 160-3040-1

Date Collected: 07/18/13 07:30

Matrix: Water

Date Received: 07/19/13 08:10

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 01:29	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/22/13 01:29	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/22/13 01:29	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/22/13 01:29	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/22/13 01:29	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/22/13 01:29	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/22/13 01:29	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/22/13 01:29	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/22/13 01:29	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/22/13 01:29	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/22/13 01:29	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/22/13 01:29	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/22/13 01:29	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/22/13 01:29	1
2-Hexanone	ND		20	0.59	ug/L			07/22/13 01:29	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/22/13 01:29	1
Acetone	ND		20	6.7	ug/L			07/22/13 01:29	1
Benzene	ND		5.0	0.25	ug/L			07/22/13 01:29	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/22/13 01:29	1
Bromoform	ND		5.0	0.37	ug/L			07/22/13 01:29	1
Bromomethane	ND		10	0.40	ug/L			07/22/13 01:29	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/22/13 01:29	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/22/13 01:29	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/22/13 01:29	1
Chloroethane	ND	*	10	0.38	ug/L			07/22/13 01:29	1
Chloroform	ND		5.0	0.15	ug/L			07/22/13 01:29	1
Chloromethane	ND		10	0.55	ug/L			07/22/13 01:29	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/22/13 01:29	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/22/13 01:29	1
Cyclohexane	ND		10	0.36	ug/L			07/22/13 01:29	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/22/13 01:29	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/22/13 01:29	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/22/13 01:29	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/22/13 01:29	1
Methyl acetate	ND		25	2.3	ug/L			07/22/13 01:29	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/22/13 01:29	1
Methylcyclohexane	ND		10	0.26	ug/L			07/22/13 01:29	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/22/13 01:29	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/22/13 01:29	1
o-Xylene	ND		5.0	0.32	ug/L			07/22/13 01:29	1
Styrene	ND		5.0	0.35	ug/L			07/22/13 01:29	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/22/13 01:29	1
Toluene	ND		5.0	1.0	ug/L			07/22/13 01:29	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/22/13 01:29	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/22/13 01:29	1
Trichloroethene	ND		5.0	0.29	ug/L			07/22/13 01:29	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/22/13 01:29	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/22/13 01:29	1
Xylenes, Total	ND		10	0.85	ug/L			07/22/13 01:29	1

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TestAmerica St. Louis

Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: S-53

Lab Sample ID: 160-3040-1

Date Collected: 07/18/13 07:30

Matrix: Water

Date Received: 07/19/13 08:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		82 - 132		07/22/13 01:29	1
4-Bromofluorobenzene (Surr)	86		82 - 121		07/22/13 01:29	1
Dibromofluoromethane (Surr)	100		85 - 119		07/22/13 01:29	1
Toluene-d8 (Surr)	96		85 - 115		07/22/13 01:29	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	52000		200	80	ug/L		07/25/13 11:42	07/26/13 17:09	1
Antimony	10		10	4.0	ug/L		07/25/13 11:42	07/26/13 17:09	1
Arsenic	31		10	2.0	ug/L		07/25/13 11:42	07/26/13 17:09	1
Barium	1200		50	4.0	ug/L		07/25/13 11:42	07/26/13 17:09	1
Beryllium	2.7	J	5.0	0.61	ug/L		07/25/13 11:42	07/26/13 17:09	1
Cadmium	4.4	J	5.0	0.91	ug/L		07/25/13 11:42	07/26/13 17:09	1
Calcium	180000	E	1000	110	ug/L		07/25/13 11:42	07/26/13 17:09	1
Calcium	240000		10000	1100	ug/L		07/25/13 11:42	07/26/13 18:56	10
Chromium	59		10	3.1	ug/L		07/25/13 11:42	07/26/13 17:09	1
Cobalt	38	J	50	4.0	ug/L		07/25/13 11:42	07/26/13 17:09	1
Copper	100		25	4.6	ug/L		07/25/13 11:42	07/26/13 17:09	1
Iron	73000		100	28	ug/L		07/25/13 11:42	07/26/13 17:09	1
Iron	82000		1000	280	ug/L		07/25/13 11:42	07/26/13 18:56	10
Lead	73		10	1.5	ug/L		07/25/13 11:42	07/26/13 17:09	1
Magnesium	57000	E	1000	130	ug/L		07/25/13 11:42	07/26/13 17:09	1
Magnesium	64000		10000	1300	ug/L		07/25/13 11:42	07/26/13 18:56	10
Manganese	4100		15	3.3	ug/L		07/25/13 11:42	07/26/13 17:09	1
Nickel	130		40	13	ug/L		07/25/13 11:42	07/26/13 17:09	1
Potassium	14000		5000	1700	ug/L		07/25/13 11:42	07/26/13 17:09	1
Selenium	11	J	15	2.7	ug/L		07/25/13 11:42	07/26/13 17:09	1
Silver	ND		10	6.0	ug/L		07/25/13 11:42	07/26/13 17:09	1
Sodium	57000		1000	320	ug/L		07/25/13 11:42	07/26/13 17:09	1
Thallium	ND		20	4.0	ug/L		07/25/13 11:42	07/26/13 17:09	1
Vanadium	130		50	4.1	ug/L		07/25/13 11:42	07/26/13 17:09	1
Zinc	440		20	5.2	ug/L		07/25/13 11:42	07/26/13 17:09	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/25/13 11:37	07/29/13 20:39	1
Antimony	6.3	J	10	4.0	ug/L		07/25/13 11:37	07/29/13 20:39	1
Arsenic	ND		10	2.0	ug/L		07/25/13 11:37	07/29/13 20:39	1
Barium	410		50	4.0	ug/L		07/25/13 11:37	07/29/13 20:39	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:37	07/29/13 20:39	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:37	07/29/13 20:39	1
Calcium	170000	E	1000	110	ug/L		07/25/13 11:37	07/29/13 20:39	1
Calcium	200000		10000	1100	ug/L		07/25/13 11:37	07/29/13 22:19	10
Chromium	ND		10	3.1	ug/L		07/25/13 11:37	07/29/13 20:39	1
Cobalt	7.0	J	50	4.0	ug/L		07/25/13 11:37	07/29/13 20:39	1
Copper	ND		25	4.6	ug/L		07/25/13 11:37	07/29/13 20:39	1
Iron	ND		100	28	ug/L		07/25/13 11:37	07/29/13 20:39	1
Lead	2.7	J	10	1.5	ug/L		07/25/13 11:37	07/29/13 20:39	1
Magnesium	46000		1000	130	ug/L		07/25/13 11:37	07/29/13 20:39	1
Manganese	2300	B	15	3.3	ug/L		07/25/13 11:37	07/29/13 20:39	1

TestAmerica St. Louis

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Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: S-53

Lab Sample ID: 160-3040-1

Date Collected: 07/18/13 07:30

Matrix: Water

Date Received: 07/19/13 08:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	ND		40	13	ug/L		07/25/13 11:37	07/29/13 20:39	1
Potassium	6200		5000	1700	ug/L		07/25/13 11:37	07/29/13 20:39	1
Selenium	ND		15	2.7	ug/L		07/25/13 11:37	07/29/13 20:39	1
Silver	ND		10	6.0	ug/L		07/25/13 11:37	07/29/13 20:39	1
Sodium	64000		1000	320	ug/L		07/25/13 11:37	07/29/13 20:39	1
Thallium	ND ^		20	4.0	ug/L		07/25/13 11:37	07/29/13 20:39	1
Vanadium	ND		50	4.1	ug/L		07/25/13 11:37	07/29/13 20:39	1
Zinc	9.2	J B	20	5.2	ug/L		07/25/13 11:37	07/29/13 20:39	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13	J	0.20	0.060	ug/L		07/24/13 10:11	07/24/13 15:56	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		07/24/13 10:13	07/24/13 16:44	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 15:04	1
Bromide	1.0		0.25	0.025	mg/L			07/19/13 15:04	1
Iodide	0.28	J	1.0	0.10	mg/L			07/19/13 22:13	1
Alkalinity	560	B	5.0	0.54	mg/L			07/30/13 09:42	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36		4.0	0.40	mg/L			07/19/13 15:21	20
Sulfate	180		10	1.0	mg/L			07/19/13 15:21	20

Client Sample ID: D-14

Lab Sample ID: 160-3040-2

Date Collected: 07/18/13 09:30

Matrix: Water

Date Received: 07/19/13 08:10

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			07/22/13 01:54	1
Benzene	8.6		5.0	0.25	ug/L			07/22/13 01:54	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/22/13 01:54	1
Bromoform	ND		5.0	0.37	ug/L			07/22/13 01:54	1
Bromomethane	ND		10	0.40	ug/L			07/22/13 01:54	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/22/13 01:54	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/22/13 01:54	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/22/13 01:54	1
Chlorobenzene	36		5.0	0.38	ug/L			07/22/13 01:54	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/22/13 01:54	1
Chloroethane	ND *		10	0.38	ug/L			07/22/13 01:54	1
Chloroform	ND		5.0	0.15	ug/L			07/22/13 01:54	1
Chloromethane	ND		10	0.55	ug/L			07/22/13 01:54	1
Cyclohexane	ND		10	0.36	ug/L			07/22/13 01:54	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/22/13 01:54	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/22/13 01:54	1

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Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: D-14

Lab Sample ID: 160-3040-2

Date Collected: 07/18/13 09:30

Matrix: Water

Date Received: 07/19/13 08:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/22/13 01:54	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/22/13 01:54	1
1,4-Dichlorobenzene	8.5		5.0	0.35	ug/L			07/22/13 01:54	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/22/13 01:54	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/22/13 01:54	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/22/13 01:54	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/22/13 01:54	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/22/13 01:54	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/22/13 01:54	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/22/13 01:54	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/22/13 01:54	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/22/13 01:54	1
Ethylbenzene	1.5 J		5.0	0.30	ug/L			07/22/13 01:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.25	ug/L			07/22/13 01:54	1
2-Hexanone	ND		20	0.59	ug/L			07/22/13 01:54	1
Isopropylbenzene	1.4 J		5.0	0.26	ug/L			07/22/13 01:54	1
Methyl acetate	ND		25	2.3	ug/L			07/22/13 01:54	1
Methylcyclohexane	ND		10	0.26	ug/L			07/22/13 01:54	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/22/13 01:54	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/22/13 01:54	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/22/13 01:54	1
Styrene	ND		5.0	0.35	ug/L			07/22/13 01:54	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/22/13 01:54	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/22/13 01:54	1
Toluene	2.2 J		5.0	1.0	ug/L			07/22/13 01:54	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/22/13 01:54	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/22/13 01:54	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/22/13 01:54	1
Trichloroethene	ND		5.0	0.29	ug/L			07/22/13 01:54	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/22/13 01:54	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/22/13 01:54	1
m-Xylene & p-Xylene	2.4 J		5.0	0.57	ug/L			07/22/13 01:54	1
o-Xylene	1.2 J		5.0	0.32	ug/L			07/22/13 01:54	1
Xylenes, Total	3.6 J		10	0.85	ug/L			07/22/13 01:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		82 - 121		07/22/13 01:54	1
1,2-Dichloroethane-d4 (Surr)	101		82 - 132		07/22/13 01:54	1
Toluene-d8 (Surr)	95		85 - 115		07/22/13 01:54	1
Dibromofluoromethane (Surr)	107		85 - 119		07/22/13 01:54	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	2300		200	80	ug/L		07/25/13 11:42	07/26/13 17:13	1
Antimony	7.1 J		10	4.0	ug/L		07/25/13 11:42	07/26/13 17:13	1
Arsenic	10		10	2.0	ug/L		07/25/13 11:42	07/26/13 17:13	1
Barium	760		50	4.0	ug/L		07/25/13 11:42	07/26/13 17:13	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:42	07/26/13 17:13	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:42	07/26/13 17:13	1
Calcium	150000 E		1000	110	ug/L		07/25/13 11:42	07/26/13 17:13	1

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Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: D-14

Lab Sample ID: 160-3040-2

Date Collected: 07/18/13 09:30

Matrix: Water

Date Received: 07/19/13 08:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	180000		10000	1100	ug/L		07/25/13 11:42	07/26/13 19:00	10
Chromium	9.3	J	10	3.1	ug/L		07/25/13 11:42	07/26/13 17:13	1
Cobalt	4.2	J	50	4.0	ug/L		07/25/13 11:42	07/26/13 17:13	1
Copper	ND		25	4.6	ug/L		07/25/13 11:42	07/26/13 17:13	1
Iron	11000		100	28	ug/L		07/25/13 11:42	07/26/13 17:13	1
Iron	11000		1000	280	ug/L		07/25/13 11:42	07/26/13 19:00	10
Lead	9.9	J	10	1.5	ug/L		07/25/13 11:42	07/26/13 17:13	1
Magnesium	75000	E	1000	130	ug/L		07/25/13 11:42	07/26/13 17:13	1
Magnesium	75000		10000	1300	ug/L		07/25/13 11:42	07/26/13 19:00	10
Manganese	1400		15	3.3	ug/L		07/25/13 11:42	07/26/13 17:13	1
Nickel	25	J	40	13	ug/L		07/25/13 11:42	07/26/13 17:13	1
Potassium	71000		5000	1700	ug/L		07/25/13 11:42	07/26/13 17:13	1
Selenium	3.1	J	15	2.7	ug/L		07/25/13 11:42	07/26/13 17:13	1
Silver	ND		10	6.0	ug/L		07/25/13 11:42	07/26/13 17:13	1
Sodium	390000	E	1000	320	ug/L		07/25/13 11:42	07/26/13 17:13	1
Sodium	400000		10000	3200	ug/L		07/25/13 11:42	07/26/13 19:00	10
Thallium	ND		20	4.0	ug/L		07/25/13 11:42	07/26/13 17:13	1
Vanadium	6.6	J	50	4.1	ug/L		07/25/13 11:42	07/26/13 17:13	1
Zinc	25		20	5.2	ug/L		07/25/13 11:42	07/26/13 17:13	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/25/13 11:37	07/29/13 20:43	1
Antimony	8.2	J	10	4.0	ug/L		07/25/13 11:37	07/29/13 20:43	1
Arsenic	7.0	J	10	2.0	ug/L		07/25/13 11:37	07/29/13 20:43	1
Barium	600		50	4.0	ug/L		07/25/13 11:37	07/29/13 20:43	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:37	07/29/13 20:43	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:37	07/29/13 20:43	1
Calcium	140000	E	1000	110	ug/L		07/25/13 11:37	07/29/13 20:43	1
Calcium	170000		10000	1100	ug/L		07/25/13 11:37	07/29/13 22:23	10
Chromium	4.7	J	10	3.1	ug/L		07/25/13 11:37	07/29/13 20:43	1
Cobalt	6.1	J	50	4.0	ug/L		07/25/13 11:37	07/29/13 20:43	1
Copper	ND		25	4.6	ug/L		07/25/13 11:37	07/29/13 20:43	1
Iron	1100		100	28	ug/L		07/25/13 11:37	07/29/13 20:43	1
Iron	1100		1000	280	ug/L		07/25/13 11:37	07/29/13 22:23	10
Lead	3.6	J	10	1.5	ug/L		07/25/13 11:37	07/29/13 20:43	1
Magnesium	74000	E	1000	130	ug/L		07/25/13 11:37	07/29/13 20:43	1
Magnesium	77000		10000	1300	ug/L		07/25/13 11:37	07/29/13 22:23	10
Manganese	1200	B	15	3.3	ug/L		07/25/13 11:37	07/29/13 20:43	1
Nickel	22	J	40	13	ug/L		07/25/13 11:37	07/29/13 20:43	1
Potassium	71000		5000	1700	ug/L		07/25/13 11:37	07/29/13 20:43	1
Selenium	ND		15	2.7	ug/L		07/25/13 11:37	07/29/13 20:43	1
Silver	ND		10	6.0	ug/L		07/25/13 11:37	07/29/13 20:43	1
Sodium	380000	E	1000	320	ug/L		07/25/13 11:37	07/29/13 20:43	1
Sodium	380000		10000	3200	ug/L		07/25/13 11:37	07/29/13 22:23	10
Thallium	ND	^	20	4.0	ug/L		07/25/13 11:37	07/29/13 20:43	1
Vanadium	ND		50	4.1	ug/L		07/25/13 11:37	07/29/13 20:43	1
Zinc	7.3	J B	20	5.2	ug/L		07/25/13 11:37	07/29/13 20:43	1

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TestAmerica St. Louis

Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: D-14

Lab Sample ID: 160-3040-2

Date Collected: 07/18/13 09:30

Matrix: Water

Date Received: 07/19/13 08:10

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.29		0.20	0.060	ug/L		07/24/13 10:11	07/24/13 15:58	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		07/24/13 10:13	07/24/13 16:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.13		0.020	0.0040	mg/L			07/19/13 18:10	1
Bromide	3.0		0.25	0.025	mg/L			07/19/13 18:10	1
Sulfate	5.7		0.50	0.050	mg/L			07/19/13 18:10	1
Iodide	0.37	J	1.0	0.10	mg/L			07/19/13 22:57	1
Alkalinity	1400	B	25	2.7	mg/L			07/30/13 09:42	5

General Chemistry - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	570		40	4.0	mg/L			07/19/13 18:44	200

Client Sample ID: PZ-205-AS

Lab Sample ID: 160-3040-3

Date Collected: 07/18/13 09:46

Matrix: Water

Date Received: 07/19/13 08:10

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			07/22/13 02:19	1
Benzene	1300		50	2.5	ug/L			07/24/13 03:30	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/22/13 02:19	1
Bromoform	ND		5.0	0.37	ug/L			07/22/13 02:19	1
Bromomethane	ND		10	0.40	ug/L			07/22/13 02:19	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/22/13 02:19	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/22/13 02:19	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/22/13 02:19	1
Chlorobenzene	41		5.0	0.38	ug/L			07/22/13 02:19	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/22/13 02:19	1
Chloroethane	ND	*	10	0.38	ug/L			07/22/13 02:19	1
Chloroform	ND		5.0	0.15	ug/L			07/22/13 02:19	1
Chloromethane	ND		10	0.55	ug/L			07/22/13 02:19	1
Cyclohexane	ND		10	0.36	ug/L			07/22/13 02:19	1
1,2-Dibromo-3-Chloropropane	ND		100	12	ug/L			07/24/13 03:30	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/22/13 02:19	1
1,2-Dichlorobenzene	ND		50	2.8	ug/L			07/24/13 03:30	1
1,3-Dichlorobenzene	ND		50	2.3	ug/L			07/24/13 03:30	1
1,4-Dichlorobenzene	ND		50	3.5	ug/L			07/24/13 03:30	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/22/13 02:19	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/22/13 02:19	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/22/13 02:19	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/22/13 02:19	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/22/13 02:19	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/22/13 02:19	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/22/13 02:19	1

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Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: PZ-205-AS

Lab Sample ID: 160-3040-3

Date Collected: 07/18/13 09:46

Matrix: Water

Date Received: 07/19/13 08:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/22/13 02:19	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/22/13 02:19	1
Ethylbenzene	41		5.0	0.30	ug/L			07/22/13 02:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.25	ug/L			07/22/13 02:19	1
2-Hexanone	ND		20	0.59	ug/L			07/22/13 02:19	1
Isopropylbenzene	5.0		5.0	0.26	ug/L			07/22/13 02:19	1
Methyl acetate	ND		25	2.3	ug/L			07/22/13 02:19	1
Methylcyclohexane	ND		10	0.26	ug/L			07/22/13 02:19	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/22/13 02:19	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/22/13 02:19	1
Methyl tert-butyl ether	1.3	J	5.0	0.40	ug/L			07/22/13 02:19	1
Styrene	ND		5.0	0.35	ug/L			07/22/13 02:19	1
1,1,2,2-Tetrachloroethane	ND		50	4.3	ug/L			07/24/13 03:30	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/22/13 02:19	1
Toluene	69		5.0	1.0	ug/L			07/22/13 02:19	1
1,2,4-Trichlorobenzene	ND		50	5.5	ug/L			07/24/13 03:30	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/22/13 02:19	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/22/13 02:19	1
Trichloroethene	ND		5.0	0.29	ug/L			07/22/13 02:19	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/22/13 02:19	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/22/13 02:19	1
m-Xylene & p-Xylene	60		5.0	0.57	ug/L			07/22/13 02:19	1
o-Xylene	15		5.0	0.32	ug/L			07/22/13 02:19	1
Xylenes, Total	75		10	0.85	ug/L			07/22/13 02:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80	X	82 - 121		07/22/13 02:19	1
4-Bromofluorobenzene (Surr)	89		82 - 121		07/24/13 03:30	1
1,2-Dichloroethane-d4 (Surr)	101		82 - 132		07/22/13 02:19	1
1,2-Dichloroethane-d4 (Surr)	99		82 - 132		07/24/13 03:30	1
Toluene-d8 (Surr)	101		85 - 115		07/22/13 02:19	1
Toluene-d8 (Surr)	101		85 - 115		07/24/13 03:30	1
Dibromofluoromethane (Surr)	102		85 - 119		07/22/13 02:19	1
Dibromofluoromethane (Surr)	101		85 - 119		07/24/13 03:30	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	80000		200	80	ug/L		07/25/13 11:42	07/26/13 17:24	1
Antimony	12		10	4.0	ug/L		07/25/13 11:42	07/26/13 17:24	1
Arsenic	81		10	2.0	ug/L		07/25/13 11:42	07/26/13 17:24	1
Arsenic	95	J	100	20	ug/L		07/25/13 11:42	07/26/13 19:04	10
Barium	1800		50	4.0	ug/L		07/25/13 11:42	07/26/13 17:24	1
Beryllium	3.4	J	5.0	0.61	ug/L		07/25/13 11:42	07/26/13 17:24	1
Cadmium	1.0	J	5.0	0.91	ug/L		07/25/13 11:42	07/26/13 17:24	1
Calcium	260000	E	1000	110	ug/L		07/25/13 11:42	07/26/13 17:24	1
Calcium	370000		10000	1100	ug/L		07/25/13 11:42	07/26/13 19:04	10
Chromium	82		10	3.1	ug/L		07/25/13 11:42	07/26/13 17:24	1
Chromium	140		100	31	ug/L		07/25/13 11:42	07/26/13 19:04	10
Cobalt	32	J	50	4.0	ug/L		07/25/13 11:42	07/26/13 17:24	1
Copper	170		25	4.6	ug/L		07/25/13 11:42	07/26/13 17:24	1

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Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: PZ-205-AS

Lab Sample ID: 160-3040-3

Date Collected: 07/18/13 09:46

Matrix: Water

Date Received: 07/19/13 08:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	130000	E	100	28	ug/L		07/25/13 11:42	07/26/13 17:24	1
Iron	150000		1000	280	ug/L		07/25/13 11:42	07/26/13 19:04	10
Lead	94		10	1.5	ug/L		07/25/13 11:42	07/26/13 17:24	1
Magnesium	98000	E	1000	130	ug/L		07/25/13 11:42	07/26/13 17:24	1
Magnesium	110000		10000	1300	ug/L		07/25/13 11:42	07/26/13 19:04	10
Manganese	2500		15	3.3	ug/L		07/25/13 11:42	07/26/13 17:24	1
Nickel	150		40	13	ug/L		07/25/13 11:42	07/26/13 17:24	1
Potassium	24000		5000	1700	ug/L		07/25/13 11:42	07/26/13 17:24	1
Selenium	7.6	J	15	2.7	ug/L		07/25/13 11:42	07/26/13 17:24	1
Selenium	ND		150	27	ug/L		07/25/13 11:42	07/26/13 19:04	10
Silver	ND		10	6.0	ug/L		07/25/13 11:42	07/26/13 17:24	1
Sodium	120000	E	1000	320	ug/L		07/25/13 11:42	07/26/13 17:24	1
Sodium	140000		10000	3200	ug/L		07/25/13 11:42	07/26/13 19:04	10
Thallium	ND		20	4.0	ug/L		07/25/13 11:42	07/26/13 17:24	1
Vanadium	160		50	4.1	ug/L		07/25/13 11:42	07/26/13 17:24	1
Zinc	330		20	5.2	ug/L		07/25/13 11:42	07/26/13 17:24	1
Zinc	390		200	52	ug/L		07/25/13 11:42	07/26/13 19:04	10

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/25/13 11:37	07/29/13 20:47	1
Antimony	5.6	J	10	4.0	ug/L		07/25/13 11:37	07/29/13 20:47	1
Arsenic	39		10	2.0	ug/L		07/25/13 11:37	07/29/13 20:47	1
Barium	1300		50	4.0	ug/L		07/25/13 11:37	07/29/13 20:47	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:37	07/29/13 20:47	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:37	07/29/13 20:47	1
Calcium	230000	E	1000	110	ug/L		07/25/13 11:37	07/29/13 20:47	1
Calcium	290000		10000	1100	ug/L		07/25/13 11:37	07/29/13 22:27	10
Chromium	ND		10	3.1	ug/L		07/25/13 11:37	07/29/13 20:47	1
Cobalt	5.5	J	50	4.0	ug/L		07/25/13 11:37	07/29/13 20:47	1
Copper	ND		25	4.6	ug/L		07/25/13 11:37	07/29/13 20:47	1
Iron	47000		100	28	ug/L		07/25/13 11:37	07/29/13 20:47	1
Iron	50000		1000	280	ug/L		07/25/13 11:37	07/29/13 22:27	10
Lead	3.4	J	10	1.5	ug/L		07/25/13 11:37	07/29/13 20:47	1
Magnesium	69000	E	1000	130	ug/L		07/25/13 11:37	07/29/13 20:47	1
Magnesium	76000		10000	1300	ug/L		07/25/13 11:37	07/29/13 22:27	10
Manganese	1600	B	15	3.3	ug/L		07/25/13 11:37	07/29/13 20:47	1
Nickel	24	J	40	13	ug/L		07/25/13 11:37	07/29/13 20:47	1
Potassium	17000		5000	1700	ug/L		07/25/13 11:37	07/29/13 20:47	1
Selenium	4.6	J	15	2.7	ug/L		07/25/13 11:37	07/29/13 20:47	1
Silver	ND		10	6.0	ug/L		07/25/13 11:37	07/29/13 20:47	1
Sodium	140000	E	1000	320	ug/L		07/25/13 11:37	07/29/13 20:47	1
Sodium	150000		10000	3200	ug/L		07/25/13 11:37	07/29/13 22:27	10
Thallium	ND	^	20	4.0	ug/L		07/25/13 11:37	07/29/13 20:47	1
Vanadium	5.8	J	50	4.1	ug/L		07/25/13 11:37	07/29/13 20:47	1
Zinc	6.6	J B	20	5.2	ug/L		07/25/13 11:37	07/29/13 20:47	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.22		0.20	0.060	ug/L		07/24/13 10:11	07/24/13 16:00	1

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Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: PZ-205-AS

Lab Sample ID: 160-3040-3

Date Collected: 07/18/13 09:46

Matrix: Water

Date Received: 07/19/13 08:10

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/24/13 10:13	07/24/13 16:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0070	J	0.020	0.0040	mg/L			07/19/13 19:35	1
Bromide	4.0		0.25	0.025	mg/L			07/19/13 19:35	1
Sulfate	4.6		0.50	0.050	mg/L			07/19/13 19:35	1
Iodide	0.55	J	1.0	0.10	mg/L			07/19/13 23:27	1
Alkalinity	810	B	5.0	0.54	mg/L			07/30/13 09:42	1

General Chemistry - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	350		20	2.0	mg/L			07/19/13 20:08	100

Client Sample ID: I-65

Lab Sample ID: 160-3040-4

Date Collected: 07/18/13 10:59

Matrix: Water

Date Received: 07/19/13 08:10

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			07/23/13 20:07	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/23/13 20:07	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/23/13 20:07	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/23/13 20:07	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/23/13 20:07	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/23/13 20:07	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/23/13 20:07	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/23/13 20:07	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/23/13 20:07	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/23/13 20:07	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/23/13 20:07	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/23/13 20:07	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/23/13 20:07	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/23/13 20:07	1
2-Hexanone	ND		20	0.59	ug/L			07/23/13 20:07	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/23/13 20:07	1
Acetone	ND		20	6.7	ug/L			07/23/13 20:07	1
Benzene	ND		5.0	0.25	ug/L			07/23/13 20:07	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/23/13 20:07	1
Bromoform	ND		5.0	0.37	ug/L			07/23/13 20:07	1
Bromomethane	ND		10	0.40	ug/L			07/23/13 20:07	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/23/13 20:07	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/23/13 20:07	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/23/13 20:07	1
Chloroethane	ND		10	0.38	ug/L			07/23/13 20:07	1
Chloroform	ND		5.0	0.15	ug/L			07/23/13 20:07	1
Chloromethane	ND		10	0.55	ug/L			07/23/13 20:07	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/23/13 20:07	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/23/13 20:07	1
Cyclohexane	ND		10	0.36	ug/L			07/23/13 20:07	1

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Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: I-65

Lab Sample ID: 160-3040-4

Date Collected: 07/18/13 10:59

Matrix: Water

Date Received: 07/19/13 08:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		5.0	0.33	ug/L			07/23/13 20:07	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/23/13 20:07	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/23/13 20:07	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/23/13 20:07	1
Methyl acetate	ND		25	2.3	ug/L			07/23/13 20:07	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/23/13 20:07	1
Methylcyclohexane	ND		10	0.26	ug/L			07/23/13 20:07	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/23/13 20:07	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/23/13 20:07	1
o-Xylene	ND		5.0	0.32	ug/L			07/23/13 20:07	1
Styrene	ND		5.0	0.35	ug/L			07/23/13 20:07	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/23/13 20:07	1
Toluene	ND		5.0	1.0	ug/L			07/23/13 20:07	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/23/13 20:07	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/23/13 20:07	1
Trichloroethene	ND		5.0	0.29	ug/L			07/23/13 20:07	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/23/13 20:07	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/23/13 20:07	1
Xylenes, Total	ND		10	0.85	ug/L			07/23/13 20:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		82 - 132		07/23/13 20:07	1
4-Bromofluorobenzene (Surr)	90		82 - 121		07/23/13 20:07	1
Dibromofluoromethane (Surr)	99		85 - 119		07/23/13 20:07	1
Toluene-d8 (Surr)	102		85 - 115		07/23/13 20:07	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	410		200	80	ug/L		07/25/13 11:42	07/26/13 17:28	1
Antimony	ND		10	4.0	ug/L		07/25/13 11:42	07/26/13 17:28	1
Arsenic	ND		10	2.0	ug/L		07/25/13 11:42	07/26/13 17:28	1
Barium	190		50	4.0	ug/L		07/25/13 11:42	07/26/13 17:28	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:42	07/26/13 17:28	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:42	07/26/13 17:28	1
Calcium	110000	E	1000	110	ug/L		07/25/13 11:42	07/26/13 17:28	1
Calcium	130000		10000	1100	ug/L		07/25/13 11:42	07/26/13 19:07	10
Chromium	3.9	J	10	3.1	ug/L		07/25/13 11:42	07/26/13 17:28	1
Cobalt	ND		50	4.0	ug/L		07/25/13 11:42	07/26/13 17:28	1
Copper	ND		25	4.6	ug/L		07/25/13 11:42	07/26/13 17:28	1
Iron	620		100	28	ug/L		07/25/13 11:42	07/26/13 17:28	1
Lead	3.9	J	10	1.5	ug/L		07/25/13 11:42	07/26/13 17:28	1
Magnesium	17000		1000	130	ug/L		07/25/13 11:42	07/26/13 17:28	1
Manganese	250		15	3.3	ug/L		07/25/13 11:42	07/26/13 17:28	1
Nickel	ND		40	13	ug/L		07/25/13 11:42	07/26/13 17:28	1
Potassium	4800	J	5000	1700	ug/L		07/25/13 11:42	07/26/13 17:28	1
Selenium	ND		15	2.7	ug/L		07/25/13 11:42	07/26/13 17:28	1
Silver	ND		10	6.0	ug/L		07/25/13 11:42	07/26/13 17:28	1
Sodium	58000		1000	320	ug/L		07/25/13 11:42	07/26/13 17:28	1
Thallium	ND		20	4.0	ug/L		07/25/13 11:42	07/26/13 17:28	1
Vanadium	ND		50	4.1	ug/L		07/25/13 11:42	07/26/13 17:28	1

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Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: I-65

Lab Sample ID: 160-3040-4

Date Collected: 07/18/13 10:59

Matrix: Water

Date Received: 07/19/13 08:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	10	J	20	5.2	ug/L		07/25/13 11:42	07/26/13 17:28	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/25/13 11:37	07/29/13 20:51	1
Antimony	4.1	J	10	4.0	ug/L		07/25/13 11:37	07/29/13 20:51	1
Arsenic	ND		10	2.0	ug/L		07/25/13 11:37	07/29/13 20:51	1
Barium	180		50	4.0	ug/L		07/25/13 11:37	07/29/13 20:51	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:37	07/29/13 20:51	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:37	07/29/13 20:51	1
Calcium	110000	E	1000	110	ug/L		07/25/13 11:37	07/29/13 20:51	1
Calcium	130000		10000	1100	ug/L		07/25/13 11:37	07/29/13 22:31	10
Chromium	ND		10	3.1	ug/L		07/25/13 11:37	07/29/13 20:51	1
Cobalt	ND		50	4.0	ug/L		07/25/13 11:37	07/29/13 20:51	1
Copper	ND		25	4.6	ug/L		07/25/13 11:37	07/29/13 20:51	1
Iron	ND		100	28	ug/L		07/25/13 11:37	07/29/13 20:51	1
Lead	2.2	J	10	1.5	ug/L		07/25/13 11:37	07/29/13 20:51	1
Magnesium	16000		1000	130	ug/L		07/25/13 11:37	07/29/13 20:51	1
Manganese	34	B	15	3.3	ug/L		07/25/13 11:37	07/29/13 20:51	1
Nickel	ND		40	13	ug/L		07/25/13 11:37	07/29/13 20:51	1
Potassium	4900	J	5000	1700	ug/L		07/25/13 11:37	07/29/13 20:51	1
Selenium	ND		15	2.7	ug/L		07/25/13 11:37	07/29/13 20:51	1
Silver	ND		10	6.0	ug/L		07/25/13 11:37	07/29/13 20:51	1
Sodium	58000		1000	320	ug/L		07/25/13 11:37	07/29/13 20:51	1
Thallium	ND	^	20	4.0	ug/L		07/25/13 11:37	07/29/13 20:51	1
Vanadium	ND		50	4.1	ug/L		07/25/13 11:37	07/29/13 20:51	1
Zinc	ND		20	5.2	ug/L		07/25/13 11:37	07/29/13 20:51	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/24/13 10:11	07/24/13 16:01	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		07/24/13 10:13	07/24/13 16:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0060	J	0.020	0.0040	mg/L			07/19/13 20:25	1
Bromide	0.043	J	0.25	0.025	mg/L			07/19/13 20:25	1
Iodide	ND		1.0	0.10	mg/L			07/19/13 23:57	1
Alkalinity	340	B	5.0	0.54	mg/L			07/30/13 09:42	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	52		4.0	0.40	mg/L			07/19/13 20:42	20
Sulfate	83		10	1.0	mg/L			07/19/13 20:42	20

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Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: D-13

Lab Sample ID: 160-3040-5

Date Collected: 07/18/13 12:19

Matrix: Water

Date Received: 07/19/13 08:10

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 03:08	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/22/13 03:08	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/22/13 03:08	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/22/13 03:08	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/22/13 03:08	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/22/13 03:08	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/22/13 03:08	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/22/13 03:08	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/22/13 03:08	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/22/13 03:08	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/22/13 03:08	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/22/13 03:08	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/22/13 03:08	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/22/13 03:08	1
2-Hexanone	ND		20	0.59	ug/L			07/22/13 03:08	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/22/13 03:08	1
Acetone	ND		20	6.7	ug/L			07/22/13 03:08	1
Benzene	ND		5.0	0.25	ug/L			07/22/13 03:08	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/22/13 03:08	1
Bromoform	ND		5.0	0.37	ug/L			07/22/13 03:08	1
Bromomethane	ND		10	0.40	ug/L			07/22/13 03:08	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/22/13 03:08	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/22/13 03:08	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/22/13 03:08	1
Chloroethane	ND	*	10	0.38	ug/L			07/22/13 03:08	1
Chloroform	ND		5.0	0.15	ug/L			07/22/13 03:08	1
Chloromethane	ND		10	0.55	ug/L			07/22/13 03:08	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/22/13 03:08	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/22/13 03:08	1
Cyclohexane	ND		10	0.36	ug/L			07/22/13 03:08	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/22/13 03:08	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/22/13 03:08	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/22/13 03:08	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/22/13 03:08	1
Methyl acetate	ND		25	2.3	ug/L			07/22/13 03:08	1
Methyl tert-butyl ether	8.4		5.0	0.40	ug/L			07/22/13 03:08	1
Methylcyclohexane	ND		10	0.26	ug/L			07/22/13 03:08	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/22/13 03:08	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/22/13 03:08	1
o-Xylene	ND		5.0	0.32	ug/L			07/22/13 03:08	1
Styrene	ND		5.0	0.35	ug/L			07/22/13 03:08	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/22/13 03:08	1
Toluene	ND		5.0	1.0	ug/L			07/22/13 03:08	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/22/13 03:08	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/22/13 03:08	1
Trichloroethene	ND		5.0	0.29	ug/L			07/22/13 03:08	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/22/13 03:08	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/22/13 03:08	1
Xylenes, Total	ND		10	0.85	ug/L			07/22/13 03:08	1

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TestAmerica St. Louis

Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: D-13

Lab Sample ID: 160-3040-5

Date Collected: 07/18/13 12:19

Matrix: Water

Date Received: 07/19/13 08:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		82 - 132		07/22/13 03:08	1
4-Bromofluorobenzene (Surr)	85		82 - 121		07/22/13 03:08	1
Dibromofluoromethane (Surr)	108		85 - 119		07/22/13 03:08	1
Toluene-d8 (Surr)	100		85 - 115		07/22/13 03:08	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	190	J	200	80	ug/L		07/25/13 11:42	07/26/13 17:32	1
Antimony	5.2	J	10	4.0	ug/L		07/25/13 11:42	07/26/13 17:32	1
Arsenic	ND		10	2.0	ug/L		07/25/13 11:42	07/26/13 17:32	1
Barium	650		50	4.0	ug/L		07/25/13 11:42	07/26/13 17:32	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:42	07/26/13 17:32	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:42	07/26/13 17:32	1
Calcium	130000	E	1000	110	ug/L		07/25/13 11:42	07/26/13 17:32	1
Calcium	160000		10000	1100	ug/L		07/25/13 11:42	07/26/13 19:11	10
Chromium	ND		10	3.1	ug/L		07/25/13 11:42	07/26/13 17:32	1
Cobalt	ND		50	4.0	ug/L		07/25/13 11:42	07/26/13 17:32	1
Copper	ND		25	4.6	ug/L		07/25/13 11:42	07/26/13 17:32	1
Iron	14000		100	28	ug/L		07/25/13 11:42	07/26/13 17:32	1
Lead	3.4	J	10	1.5	ug/L		07/25/13 11:42	07/26/13 17:32	1
Magnesium	34000		1000	130	ug/L		07/25/13 11:42	07/26/13 17:32	1
Manganese	400		15	3.3	ug/L		07/25/13 11:42	07/26/13 17:32	1
Nickel	ND		40	13	ug/L		07/25/13 11:42	07/26/13 17:32	1
Potassium	5500		5000	1700	ug/L		07/25/13 11:42	07/26/13 17:32	1
Selenium	ND		15	2.7	ug/L		07/25/13 11:42	07/26/13 17:32	1
Silver	ND		10	6.0	ug/L		07/25/13 11:42	07/26/13 17:32	1
Sodium	36000		1000	320	ug/L		07/25/13 11:42	07/26/13 17:32	1
Thallium	ND		20	4.0	ug/L		07/25/13 11:42	07/26/13 17:32	1
Vanadium	ND		50	4.1	ug/L		07/25/13 11:42	07/26/13 17:32	1
Zinc	6.5	J	20	5.2	ug/L		07/25/13 11:42	07/26/13 17:32	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/25/13 11:37	07/29/13 20:55	1
Antimony	4.4	J	10	4.0	ug/L		07/25/13 11:37	07/29/13 20:55	1
Arsenic	ND		10	2.0	ug/L		07/25/13 11:37	07/29/13 20:55	1
Barium	660		50	4.0	ug/L		07/25/13 11:37	07/29/13 20:55	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:37	07/29/13 20:55	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:37	07/29/13 20:55	1
Calcium	130000	E	1000	110	ug/L		07/25/13 11:37	07/29/13 20:55	1
Calcium	160000		10000	1100	ug/L		07/25/13 11:37	07/29/13 22:42	10
Chromium	ND		10	3.1	ug/L		07/25/13 11:37	07/29/13 20:55	1
Cobalt	ND		50	4.0	ug/L		07/25/13 11:37	07/29/13 20:55	1
Copper	ND		25	4.6	ug/L		07/25/13 11:37	07/29/13 20:55	1
Iron	14000		100	28	ug/L		07/25/13 11:37	07/29/13 20:55	1
Lead	3.1	J	10	1.5	ug/L		07/25/13 11:37	07/29/13 20:55	1
Magnesium	33000		1000	130	ug/L		07/25/13 11:37	07/29/13 20:55	1
Manganese	390	B	15	3.3	ug/L		07/25/13 11:37	07/29/13 20:55	1
Nickel	ND		40	13	ug/L		07/25/13 11:37	07/29/13 20:55	1
Potassium	5500		5000	1700	ug/L		07/25/13 11:37	07/29/13 20:55	1

TestAmerica St. Louis

Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: D-13

Lab Sample ID: 160-3040-5

Date Collected: 07/18/13 12:19

Matrix: Water

Date Received: 07/19/13 08:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		15	2.7	ug/L		07/25/13 11:37	07/29/13 20:55	1
Silver	ND		10	6.0	ug/L		07/25/13 11:37	07/29/13 20:55	1
Sodium	35000		1000	320	ug/L		07/25/13 11:37	07/29/13 20:55	1
Thallium	ND	^	20	4.0	ug/L		07/25/13 11:37	07/29/13 20:55	1
Vanadium	ND		50	4.1	ug/L		07/25/13 11:37	07/29/13 20:55	1
Zinc	ND		20	5.2	ug/L		07/25/13 11:37	07/29/13 20:55	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/24/13 10:11	07/24/13 16:03	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		07/24/13 10:13	07/24/13 16:54	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 20:59	1
Bromide	0.091	J	0.25	0.025	mg/L			07/19/13 20:59	1
Iodide	ND		1.0	0.10	mg/L			07/20/13 00:12	1
Alkalinity	390	B	5.0	0.54	mg/L			07/30/13 09:42	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	35		10	1.0	mg/L			07/19/13 21:16	20

General Chemistry - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		20	2.0	mg/L			07/22/13 21:19	100

Client Sample ID: PZ-104-KS

Lab Sample ID: 160-3040-6

Date Collected: 07/18/13 13:01

Matrix: Water

Date Received: 07/19/13 08:10

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 03:32	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/22/13 03:32	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/22/13 03:32	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/22/13 03:32	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/22/13 03:32	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/22/13 03:32	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/22/13 03:32	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/22/13 03:32	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/22/13 03:32	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/22/13 03:32	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/22/13 03:32	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/22/13 03:32	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/22/13 03:32	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/22/13 03:32	1
2-Hexanone	ND		20	0.59	ug/L			07/22/13 03:32	1

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Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: PZ-104-KS

Lab Sample ID: 160-3040-6

Date Collected: 07/18/13 13:01

Matrix: Water

Date Received: 07/19/13 08:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/22/13 03:32	1
Acetone	ND		20	6.7	ug/L			07/22/13 03:32	1
Benzene	ND		5.0	0.25	ug/L			07/22/13 03:32	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/22/13 03:32	1
Bromoform	ND		5.0	0.37	ug/L			07/22/13 03:32	1
Bromomethane	ND		10	0.40	ug/L			07/22/13 03:32	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/22/13 03:32	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/22/13 03:32	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/22/13 03:32	1
Chloroethane	ND	*	10	0.38	ug/L			07/22/13 03:32	1
Chloroform	ND		5.0	0.15	ug/L			07/22/13 03:32	1
Chloromethane	ND		10	0.55	ug/L			07/22/13 03:32	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/22/13 03:32	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/22/13 03:32	1
Cyclohexane	ND		10	0.36	ug/L			07/22/13 03:32	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/22/13 03:32	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/22/13 03:32	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/22/13 03:32	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/22/13 03:32	1
Methyl acetate	ND		25	2.3	ug/L			07/22/13 03:32	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/22/13 03:32	1
Methylcyclohexane	ND		10	0.26	ug/L			07/22/13 03:32	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/22/13 03:32	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/22/13 03:32	1
o-Xylene	ND		5.0	0.32	ug/L			07/22/13 03:32	1
Styrene	ND		5.0	0.35	ug/L			07/22/13 03:32	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/22/13 03:32	1
Toluene	ND		5.0	1.0	ug/L			07/22/13 03:32	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/22/13 03:32	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/22/13 03:32	1
Trichloroethene	ND		5.0	0.29	ug/L			07/22/13 03:32	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/22/13 03:32	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/22/13 03:32	1
Xylenes, Total	ND		10	0.85	ug/L			07/22/13 03:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		82 - 132		07/22/13 03:32	1
4-Bromofluorobenzene (Surr)	83		82 - 121		07/22/13 03:32	1
Dibromofluoromethane (Surr)	107		85 - 119		07/22/13 03:32	1
Toluene-d8 (Surr)	104		85 - 115		07/22/13 03:32	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	300		200	80	ug/L		07/25/13 11:42	07/26/13 17:36	1
Antimony	ND		10	4.0	ug/L		07/25/13 11:42	07/26/13 17:36	1
Arsenic	ND		10	2.0	ug/L		07/25/13 11:42	07/26/13 17:36	1
Barium	50		50	4.0	ug/L		07/25/13 11:42	07/26/13 17:36	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:42	07/26/13 17:36	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:42	07/26/13 17:36	1
Calcium	71000	E	1000	110	ug/L		07/25/13 11:42	07/26/13 17:36	1

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Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: PZ-104-KS

Lab Sample ID: 160-3040-6

Date Collected: 07/18/13 13:01

Matrix: Water

Date Received: 07/19/13 08:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	79000		10000	1100	ug/L		07/25/13 11:42	07/26/13 19:15	10
Chromium	4.6	J	10	3.1	ug/L		07/25/13 11:42	07/26/13 17:36	1
Cobalt	ND		50	4.0	ug/L		07/25/13 11:42	07/26/13 17:36	1
Copper	ND		25	4.6	ug/L		07/25/13 11:42	07/26/13 17:36	1
Iron	590		100	28	ug/L		07/25/13 11:42	07/26/13 17:36	1
Lead	2.0	J	10	1.5	ug/L		07/25/13 11:42	07/26/13 17:36	1
Magnesium	35000		1000	130	ug/L		07/25/13 11:42	07/26/13 17:36	1
Manganese	14	J	15	3.3	ug/L		07/25/13 11:42	07/26/13 17:36	1
Nickel	ND		40	13	ug/L		07/25/13 11:42	07/26/13 17:36	1
Potassium	1800	J	5000	1700	ug/L		07/25/13 11:42	07/26/13 17:36	1
Selenium	ND		15	2.7	ug/L		07/25/13 11:42	07/26/13 17:36	1
Silver	ND		10	6.0	ug/L		07/25/13 11:42	07/26/13 17:36	1
Sodium	36000		1000	320	ug/L		07/25/13 11:42	07/26/13 17:36	1
Thallium	ND		20	4.0	ug/L		07/25/13 11:42	07/26/13 17:36	1
Vanadium	ND		50	4.1	ug/L		07/25/13 11:42	07/26/13 17:36	1
Zinc	ND		20	5.2	ug/L		07/25/13 11:42	07/26/13 17:36	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/25/13 11:37	07/29/13 20:58	1
Antimony	ND		10	4.0	ug/L		07/25/13 11:37	07/29/13 20:58	1
Arsenic	ND		10	2.0	ug/L		07/25/13 11:37	07/29/13 20:58	1
Barium	50		50	4.0	ug/L		07/25/13 11:37	07/29/13 20:58	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:37	07/29/13 20:58	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:37	07/29/13 20:58	1
Calcium	70000	E	1000	110	ug/L		07/25/13 11:37	07/29/13 20:58	1
Calcium	74000		10000	1100	ug/L		07/25/13 11:37	07/29/13 22:46	10
Chromium	ND		10	3.1	ug/L		07/25/13 11:37	07/29/13 20:58	1
Cobalt	ND		50	4.0	ug/L		07/25/13 11:37	07/29/13 20:58	1
Copper	ND		25	4.6	ug/L		07/25/13 11:37	07/29/13 20:58	1
Iron	430		100	28	ug/L		07/25/13 11:37	07/29/13 20:58	1
Lead	2.0	J	10	1.5	ug/L		07/25/13 11:37	07/29/13 20:58	1
Magnesium	35000		1000	130	ug/L		07/25/13 11:37	07/29/13 20:58	1
Manganese	11	J B	15	3.3	ug/L		07/25/13 11:37	07/29/13 20:58	1
Nickel	ND		40	13	ug/L		07/25/13 11:37	07/29/13 20:58	1
Potassium	1800	J	5000	1700	ug/L		07/25/13 11:37	07/29/13 20:58	1
Selenium	ND		15	2.7	ug/L		07/25/13 11:37	07/29/13 20:58	1
Silver	ND		10	6.0	ug/L		07/25/13 11:37	07/29/13 20:58	1
Sodium	35000		1000	320	ug/L		07/25/13 11:37	07/29/13 20:58	1
Thallium	ND	^	20	4.0	ug/L		07/25/13 11:37	07/29/13 20:58	1
Vanadium	ND		50	4.1	ug/L		07/25/13 11:37	07/29/13 20:58	1
Zinc	ND		20	5.2	ug/L		07/25/13 11:37	07/29/13 20:58	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/24/13 10:11	07/24/13 16:05	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		07/24/13 10:13	07/24/13 16:55	1

TestAmerica St. Louis

Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: PZ-104-KS

Lab Sample ID: 160-3040-6

Date Collected: 07/18/13 13:01

Matrix: Water

Date Received: 07/19/13 08:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.012	J	0.020	0.0040	mg/L			07/19/13 21:33	1
Bromide	0.063	J	0.25	0.025	mg/L			07/19/13 21:33	1
Sulfate	16		0.50	0.050	mg/L			07/19/13 21:33	1
Iodide	ND		1.0	0.10	mg/L			07/20/13 00:27	1
Alkalinity	350	B	5.0	0.54	mg/L			07/30/13 09:42	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25		4.0	0.40	mg/L			07/19/13 21:50	20

Client Sample ID: PZ-206-SS

Lab Sample ID: 160-3040-7

Date Collected: 07/18/13 13:35

Matrix: Water

Date Received: 07/19/13 08:10

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 03:57	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/22/13 03:57	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/22/13 03:57	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/22/13 03:57	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/22/13 03:57	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/22/13 03:57	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/22/13 03:57	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/22/13 03:57	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/22/13 03:57	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/22/13 03:57	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/22/13 03:57	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/22/13 03:57	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/22/13 03:57	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/22/13 03:57	1
2-Hexanone	ND		20	0.59	ug/L			07/22/13 03:57	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/22/13 03:57	1
Acetone	ND		20	6.7	ug/L			07/22/13 03:57	1
Benzene	ND		5.0	0.25	ug/L			07/22/13 03:57	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/22/13 03:57	1
Bromoform	ND		5.0	0.37	ug/L			07/22/13 03:57	1
Bromomethane	ND		10	0.40	ug/L			07/22/13 03:57	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/22/13 03:57	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/22/13 03:57	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/22/13 03:57	1
Chloroethane	ND	*	10	0.38	ug/L			07/22/13 03:57	1
Chloroform	ND		5.0	0.15	ug/L			07/22/13 03:57	1
Chloromethane	ND		10	0.55	ug/L			07/22/13 03:57	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/22/13 03:57	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/22/13 03:57	1
Cyclohexane	ND		10	0.36	ug/L			07/22/13 03:57	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/22/13 03:57	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/22/13 03:57	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/22/13 03:57	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/22/13 03:57	1

TestAmerica St. Louis

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Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: PZ-206-SS

Lab Sample ID: 160-3040-7

Date Collected: 07/18/13 13:35

Matrix: Water

Date Received: 07/19/13 08:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl acetate	ND		25	2.3	ug/L			07/22/13 03:57	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/22/13 03:57	1
Methylcyclohexane	ND		10	0.26	ug/L			07/22/13 03:57	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/22/13 03:57	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/22/13 03:57	1
o-Xylene	ND		5.0	0.32	ug/L			07/22/13 03:57	1
Styrene	ND		5.0	0.35	ug/L			07/22/13 03:57	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/22/13 03:57	1
Toluene	ND		5.0	1.0	ug/L			07/22/13 03:57	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/22/13 03:57	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/22/13 03:57	1
Trichloroethene	ND		5.0	0.29	ug/L			07/22/13 03:57	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/22/13 03:57	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/22/13 03:57	1
Xylenes, Total	ND		10	0.85	ug/L			07/22/13 03:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		82 - 132		07/22/13 03:57	1
4-Bromofluorobenzene (Surr)	89		82 - 121		07/22/13 03:57	1
Dibromofluoromethane (Surr)	97		85 - 119		07/22/13 03:57	1
Toluene-d8 (Surr)	102		85 - 115		07/22/13 03:57	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	980		200	80	ug/L		07/25/13 11:42	07/26/13 17:39	1
Antimony	ND		10	4.0	ug/L		07/25/13 11:42	07/26/13 17:39	1
Arsenic	ND		10	2.0	ug/L		07/25/13 11:42	07/26/13 17:39	1
Barium	73		50	4.0	ug/L		07/25/13 11:42	07/26/13 17:39	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:42	07/26/13 17:39	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:42	07/26/13 17:39	1
Calcium	110000	E	1000	110	ug/L		07/25/13 11:42	07/26/13 17:39	1
Calcium	130000		10000	1100	ug/L		07/25/13 11:42	07/26/13 19:19	10
Chromium	7.4	J	10	3.1	ug/L		07/25/13 11:42	07/26/13 17:39	1
Cobalt	ND		50	4.0	ug/L		07/25/13 11:42	07/26/13 17:39	1
Copper	ND		25	4.6	ug/L		07/25/13 11:42	07/26/13 17:39	1
Iron	2100		100	28	ug/L		07/25/13 11:42	07/26/13 17:39	1
Iron	2200		1000	280	ug/L		07/25/13 11:42	07/26/13 19:19	10
Lead	3.6	J	10	1.5	ug/L		07/25/13 11:42	07/26/13 17:39	1
Magnesium	70000	E	1000	130	ug/L		07/25/13 11:42	07/26/13 17:39	1
Magnesium	72000		10000	1300	ug/L		07/25/13 11:42	07/26/13 19:19	10
Manganese	45		15	3.3	ug/L		07/25/13 11:42	07/26/13 17:39	1
Nickel	ND		40	13	ug/L		07/25/13 11:42	07/26/13 17:39	1
Potassium	3500	J	5000	1700	ug/L		07/25/13 11:42	07/26/13 17:39	1
Selenium	ND		15	2.7	ug/L		07/25/13 11:42	07/26/13 17:39	1
Silver	ND		10	6.0	ug/L		07/25/13 11:42	07/26/13 17:39	1
Sodium	13000		1000	320	ug/L		07/25/13 11:42	07/26/13 17:39	1
Thallium	ND		20	4.0	ug/L		07/25/13 11:42	07/26/13 17:39	1
Vanadium	ND		50	4.1	ug/L		07/25/13 11:42	07/26/13 17:39	1
Zinc	12	J	20	5.2	ug/L		07/25/13 11:42	07/26/13 17:39	1

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TestAmerica St. Louis

Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: PZ-206-SS

Lab Sample ID: 160-3040-7

Date Collected: 07/18/13 13:35

Matrix: Water

Date Received: 07/19/13 08:10

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/25/13 11:37	07/29/13 21:10	1
Antimony	ND		10	4.0	ug/L		07/25/13 11:37	07/29/13 21:10	1
Arsenic	ND		10	2.0	ug/L		07/25/13 11:37	07/29/13 21:10	1
Barium	55		50	4.0	ug/L		07/25/13 11:37	07/29/13 21:10	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:37	07/29/13 21:10	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:37	07/29/13 21:10	1
Calcium	98000	E	1000	110	ug/L		07/25/13 11:37	07/29/13 21:10	1
Calcium	110000		10000	1100	ug/L		07/25/13 11:37	07/29/13 22:50	10
Chromium	ND		10	3.1	ug/L		07/25/13 11:37	07/29/13 21:10	1
Cobalt	ND		50	4.0	ug/L		07/25/13 11:37	07/29/13 21:10	1
Copper	ND		25	4.6	ug/L		07/25/13 11:37	07/29/13 21:10	1
Iron	ND		100	28	ug/L		07/25/13 11:37	07/29/13 21:10	1
Iron	ND		1000	280	ug/L		07/25/13 11:37	07/29/13 22:50	10
Lead	1.7	J	10	1.5	ug/L		07/25/13 11:37	07/29/13 21:10	1
Magnesium	66000	E	1000	130	ug/L		07/25/13 11:37	07/29/13 21:10	1
Magnesium	69000		10000	1300	ug/L		07/25/13 11:37	07/29/13 22:50	10
Manganese	19	B	15	3.3	ug/L		07/25/13 11:37	07/29/13 21:10	1
Nickel	ND		40	13	ug/L		07/25/13 11:37	07/29/13 21:10	1
Potassium	3200	J	5000	1700	ug/L		07/25/13 11:37	07/29/13 21:10	1
Selenium	ND		15	2.7	ug/L		07/25/13 11:37	07/29/13 21:10	1
Silver	ND		10	6.0	ug/L		07/25/13 11:37	07/29/13 21:10	1
Sodium	13000		1000	320	ug/L		07/25/13 11:37	07/29/13 21:10	1
Thallium	ND	^	20	4.0	ug/L		07/25/13 11:37	07/29/13 21:10	1
Vanadium	ND		50	4.1	ug/L		07/25/13 11:37	07/29/13 21:10	1
Zinc	ND		20	5.2	ug/L		07/25/13 11:37	07/29/13 21:10	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/24/13 10:11	07/24/13 16:06	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		07/24/13 10:13	07/24/13 16:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0082	J	0.020	0.0040	mg/L			07/19/13 22:41	1
Bromide	0.28		0.25	0.025	mg/L			07/19/13 22:41	1
Iodide	ND		1.0	0.10	mg/L			07/20/13 01:12	1
Alkalinity	470	B	5.0	0.54	mg/L			07/30/13 09:42	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25		4.0	0.40	mg/L			07/19/13 22:58	20
Sulfate	76		10	1.0	mg/L			07/19/13 22:58	20

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Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: PZ-207-AS

Lab Sample ID: 160-3040-8

Date Collected: 07/18/13 14:32

Matrix: Water

Date Received: 07/19/13 08:10

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			07/22/13 04:22	1
Benzene	1.8	J	5.0	0.25	ug/L			07/22/13 04:22	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/22/13 04:22	1
Bromoform	ND		5.0	0.37	ug/L			07/22/13 04:22	1
Bromomethane	ND		10	0.40	ug/L			07/22/13 04:22	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/22/13 04:22	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/22/13 04:22	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/22/13 04:22	1
Chlorobenzene	20		5.0	0.38	ug/L			07/22/13 04:22	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/22/13 04:22	1
Chloroethane	ND	*	10	0.38	ug/L			07/22/13 04:22	1
Chloroform	ND		5.0	0.15	ug/L			07/22/13 04:22	1
Chloromethane	ND		10	0.55	ug/L			07/22/13 04:22	1
Cyclohexane	ND		10	0.36	ug/L			07/22/13 04:22	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/22/13 04:22	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/22/13 04:22	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/22/13 04:22	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/22/13 04:22	1
1,4-Dichlorobenzene	3.5	J	5.0	0.35	ug/L			07/22/13 04:22	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/22/13 04:22	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/22/13 04:22	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/22/13 04:22	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/22/13 04:22	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/22/13 04:22	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/22/13 04:22	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/22/13 04:22	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/22/13 04:22	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/22/13 04:22	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/22/13 04:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.25	ug/L			07/22/13 04:22	1
2-Hexanone	ND		20	0.59	ug/L			07/22/13 04:22	1
Isopropylbenzene	2.8	J	5.0	0.26	ug/L			07/22/13 04:22	1
Methyl acetate	ND		25	2.3	ug/L			07/22/13 04:22	1
Methylcyclohexane	ND		10	0.26	ug/L			07/22/13 04:22	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/22/13 04:22	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/22/13 04:22	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/22/13 04:22	1
Styrene	ND		5.0	0.35	ug/L			07/22/13 04:22	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/22/13 04:22	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/22/13 04:22	1
Toluene	ND		5.0	1.0	ug/L			07/22/13 04:22	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/22/13 04:22	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/22/13 04:22	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/22/13 04:22	1
Trichloroethene	ND		5.0	0.29	ug/L			07/22/13 04:22	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/22/13 04:22	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/22/13 04:22	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/22/13 04:22	1
o-Xylene	ND		5.0	0.32	ug/L			07/22/13 04:22	1

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TestAmerica St. Louis

Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: PZ-207-AS

Lab Sample ID: 160-3040-8

Date Collected: 07/18/13 14:32

Matrix: Water

Date Received: 07/19/13 08:10

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			07/22/13 04:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		82 - 121					07/22/13 04:22	1
1,2-Dichloroethane-d4 (Surr)	99		82 - 132					07/22/13 04:22	1
Toluene-d8 (Surr)	102		85 - 115					07/22/13 04:22	1
Dibromofluoromethane (Surr)	106		85 - 119					07/22/13 04:22	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/25/13 11:42	07/26/13 17:43	1
Antimony	5.1	J	10	4.0	ug/L		07/25/13 11:42	07/26/13 17:43	1
Arsenic	21		10	2.0	ug/L		07/25/13 11:42	07/26/13 17:43	1
Barium	770		50	4.0	ug/L		07/25/13 11:42	07/26/13 17:43	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:42	07/26/13 17:43	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:42	07/26/13 17:43	1
Calcium	120000	E	1000	110	ug/L		07/25/13 11:42	07/26/13 17:43	1
Calcium	120000		10000	1100	ug/L		07/25/13 11:42	07/26/13 19:23	10
Chromium	8.0	J	10	3.1	ug/L		07/25/13 11:42	07/26/13 17:43	1
Cobalt	5.5	J	50	4.0	ug/L		07/25/13 11:42	07/26/13 17:43	1
Copper	11	J	25	4.6	ug/L		07/25/13 11:42	07/26/13 17:43	1
Iron	20000		100	28	ug/L		07/25/13 11:42	07/26/13 17:43	1
Iron	16000		1000	280	ug/L		07/25/13 11:42	07/26/13 19:23	10
Lead	5.1	J	10	1.5	ug/L		07/25/13 11:42	07/26/13 17:43	1
Magnesium	77000	E	1000	130	ug/L		07/25/13 11:42	07/26/13 17:43	1
Magnesium	63000		10000	1300	ug/L		07/25/13 11:42	07/26/13 19:23	10
Manganese	65		15	3.3	ug/L		07/25/13 11:42	07/26/13 17:43	1
Nickel	21	J	40	13	ug/L		07/25/13 11:42	07/26/13 17:43	1
Potassium	63000		5000	1700	ug/L		07/25/13 11:42	07/26/13 17:43	1
Selenium	ND		15	2.7	ug/L		07/25/13 11:42	07/26/13 17:43	1
Silver	ND		10	6.0	ug/L		07/25/13 11:42	07/26/13 17:43	1
Sodium	240000	E	1000	320	ug/L		07/25/13 11:42	07/26/13 17:43	1
Sodium	200000		10000	3200	ug/L		07/25/13 11:42	07/26/13 19:23	10
Thallium	ND		20	4.0	ug/L		07/25/13 11:42	07/26/13 17:43	1
Vanadium	4.2	J	50	4.1	ug/L		07/25/13 11:42	07/26/13 17:43	1
Zinc	16	J	20	5.2	ug/L		07/25/13 11:42	07/26/13 17:43	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/25/13 11:37	07/29/13 21:14	1
Antimony	5.9	J	10	4.0	ug/L		07/25/13 11:37	07/29/13 21:14	1
Arsenic	22		10	2.0	ug/L		07/25/13 11:37	07/29/13 21:14	1
Barium	780		50	4.0	ug/L		07/25/13 11:37	07/29/13 21:14	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:37	07/29/13 21:14	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:37	07/29/13 21:14	1
Calcium	110000	E	1000	110	ug/L		07/25/13 11:37	07/29/13 21:14	1
Calcium	130000		10000	1100	ug/L		07/25/13 11:37	07/29/13 22:54	10
Chromium	ND		10	3.1	ug/L		07/25/13 11:37	07/29/13 21:14	1
Cobalt	6.5	J	50	4.0	ug/L		07/25/13 11:37	07/29/13 21:14	1
Copper	ND		25	4.6	ug/L		07/25/13 11:37	07/29/13 21:14	1

TestAmerica St. Louis

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Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: PZ-207-AS

Lab Sample ID: 160-3040-8

Date Collected: 07/18/13 14:32

Matrix: Water

Date Received: 07/19/13 08:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	20000		100	28	ug/L		07/25/13 11:37	07/29/13 21:14	1
Iron	20000		1000	280	ug/L		07/25/13 11:37	07/29/13 22:54	10
Lead	3.5	J	10	1.5	ug/L		07/25/13 11:37	07/29/13 21:14	1
Magnesium	76000	E	1000	130	ug/L		07/25/13 11:37	07/29/13 21:14	1
Magnesium	78000		10000	1300	ug/L		07/25/13 11:37	07/29/13 22:54	10
Manganese	66	B	15	3.3	ug/L		07/25/13 11:37	07/29/13 21:14	1
Nickel	18	J	40	13	ug/L		07/25/13 11:37	07/29/13 21:14	1
Potassium	63000		5000	1700	ug/L		07/25/13 11:37	07/29/13 21:14	1
Selenium	ND		15	2.7	ug/L		07/25/13 11:37	07/29/13 21:14	1
Silver	ND		10	6.0	ug/L		07/25/13 11:37	07/29/13 21:14	1
Sodium	240000	E	1000	320	ug/L		07/25/13 11:37	07/29/13 21:14	1
Sodium	240000		10000	3200	ug/L		07/25/13 11:37	07/29/13 22:54	10
Thallium	ND	^	20	4.0	ug/L		07/25/13 11:37	07/29/13 21:14	1
Vanadium	ND		50	4.1	ug/L		07/25/13 11:37	07/29/13 21:14	1
Zinc	ND		20	5.2	ug/L		07/25/13 11:37	07/29/13 21:14	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/24/13 10:11	07/24/13 16:08	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		07/24/13 10:13	07/24/13 16:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0050	J	0.020	0.0040	mg/L			07/19/13 23:15	1
Bromide	2.7		0.25	0.025	mg/L			07/19/13 23:15	1
Sulfate	0.16	J	0.50	0.050	mg/L			07/19/13 23:15	1
Iodide	0.21	J	1.0	0.10	mg/L			07/20/13 01:27	1
Alkalinity	1300	B	25	2.7	mg/L			07/30/13 09:42	5

General Chemistry - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		20	2.0	mg/L			07/19/13 23:48	100

Client Sample ID: DUPLICATE 07

Lab Sample ID: 160-3040-9

Date Collected: 07/18/13 00:00

Matrix: Water

Date Received: 07/19/13 08:10

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 04:46	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/22/13 04:46	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/22/13 04:46	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/22/13 04:46	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/22/13 04:46	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/22/13 04:46	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/22/13 04:46	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/22/13 04:46	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/22/13 04:46	1

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Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: DUPLICATE 07

Lab Sample ID: 160-3040-9

Date Collected: 07/18/13 00:00

Matrix: Water

Date Received: 07/19/13 08:10

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			07/22/13 04:46	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/22/13 04:46	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/22/13 04:46	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/22/13 04:46	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/22/13 04:46	1
2-Hexanone	ND		20	0.59	ug/L			07/22/13 04:46	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/22/13 04:46	1
Acetone	ND		20	6.7	ug/L			07/22/13 04:46	1
Benzene	ND		5.0	0.25	ug/L			07/22/13 04:46	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/22/13 04:46	1
Bromoform	ND		5.0	0.37	ug/L			07/22/13 04:46	1
Bromomethane	ND		10	0.40	ug/L			07/22/13 04:46	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/22/13 04:46	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/22/13 04:46	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/22/13 04:46	1
Chloroethane	ND	*	10	0.38	ug/L			07/22/13 04:46	1
Chloroform	ND		5.0	0.15	ug/L			07/22/13 04:46	1
Chloromethane	ND		10	0.55	ug/L			07/22/13 04:46	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/22/13 04:46	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/22/13 04:46	1
Cyclohexane	ND		10	0.36	ug/L			07/22/13 04:46	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/22/13 04:46	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/22/13 04:46	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/22/13 04:46	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/22/13 04:46	1
Methyl acetate	ND		25	2.3	ug/L			07/22/13 04:46	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/22/13 04:46	1
Methylcyclohexane	ND		10	0.26	ug/L			07/22/13 04:46	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/22/13 04:46	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/22/13 04:46	1
o-Xylene	ND		5.0	0.32	ug/L			07/22/13 04:46	1
Styrene	ND		5.0	0.35	ug/L			07/22/13 04:46	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/22/13 04:46	1
Toluene	ND		5.0	1.0	ug/L			07/22/13 04:46	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/22/13 04:46	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/22/13 04:46	1
Trichloroethene	ND		5.0	0.29	ug/L			07/22/13 04:46	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/22/13 04:46	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/22/13 04:46	1
Xylenes, Total	ND		10	0.85	ug/L			07/22/13 04:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		82 - 132		07/22/13 04:46	1
4-Bromofluorobenzene (Surr)	88		82 - 121		07/22/13 04:46	1
Dibromofluoromethane (Surr)	99		85 - 119		07/22/13 04:46	1
Toluene-d8 (Surr)	109		85 - 115		07/22/13 04:46	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	480		200	80	ug/L		07/25/13 11:42	07/26/13 17:47	1

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Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: DUPLICATE 07

Lab Sample ID: 160-3040-9

Date Collected: 07/18/13 00:00

Matrix: Water

Date Received: 07/19/13 08:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	4.0	ug/L		07/25/13 11:42	07/26/13 17:47	1
Arsenic	ND		10	2.0	ug/L		07/25/13 11:42	07/26/13 17:47	1
Barium	200		50	4.0	ug/L		07/25/13 11:42	07/26/13 17:47	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:42	07/26/13 17:47	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:42	07/26/13 17:47	1
Calcium	110000	E	1000	110	ug/L		07/25/13 11:42	07/26/13 17:47	1
Calcium	120000		10000	1100	ug/L		07/25/13 11:42	07/26/13 19:27	10
Chromium	3.8	J	10	3.1	ug/L		07/25/13 11:42	07/26/13 17:47	1
Cobalt	6.5	J	50	4.0	ug/L		07/25/13 11:42	07/26/13 17:47	1
Copper	ND		25	4.6	ug/L		07/25/13 11:42	07/26/13 17:47	1
Iron	710		100	28	ug/L		07/25/13 11:42	07/26/13 17:47	1
Lead	2.8	J	10	1.5	ug/L		07/25/13 11:42	07/26/13 17:47	1
Magnesium	17000		1000	130	ug/L		07/25/13 11:42	07/26/13 17:47	1
Manganese	270		15	3.3	ug/L		07/25/13 11:42	07/26/13 17:47	1
Nickel	ND		40	13	ug/L		07/25/13 11:42	07/26/13 17:47	1
Potassium	5000		5000	1700	ug/L		07/25/13 11:42	07/26/13 17:47	1
Selenium	ND		15	2.7	ug/L		07/25/13 11:42	07/26/13 17:47	1
Silver	ND		10	6.0	ug/L		07/25/13 11:42	07/26/13 17:47	1
Sodium	59000		1000	320	ug/L		07/25/13 11:42	07/26/13 17:47	1
Thallium	ND		20	4.0	ug/L		07/25/13 11:42	07/26/13 17:47	1
Vanadium	5.0	J	50	4.1	ug/L		07/25/13 11:42	07/26/13 17:47	1
Zinc	5.3	J	20	5.2	ug/L		07/25/13 11:42	07/26/13 17:47	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/25/13 11:37	07/29/13 21:18	1
Antimony	4.8	J	10	4.0	ug/L		07/25/13 11:37	07/29/13 21:18	1
Arsenic	ND		10	2.0	ug/L		07/25/13 11:37	07/29/13 21:18	1
Barium	190		50	4.0	ug/L		07/25/13 11:37	07/29/13 21:18	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:37	07/29/13 21:18	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:37	07/29/13 21:18	1
Calcium	110000	E	1000	110	ug/L		07/25/13 11:37	07/29/13 21:18	1
Calcium	120000		10000	1100	ug/L		07/25/13 11:37	07/29/13 22:58	10
Chromium	ND		10	3.1	ug/L		07/25/13 11:37	07/29/13 21:18	1
Cobalt	ND		50	4.0	ug/L		07/25/13 11:37	07/29/13 21:18	1
Copper	ND		25	4.6	ug/L		07/25/13 11:37	07/29/13 21:18	1
Iron	ND		100	28	ug/L		07/25/13 11:37	07/29/13 21:18	1
Lead	2.1	J	10	1.5	ug/L		07/25/13 11:37	07/29/13 21:18	1
Magnesium	17000		1000	130	ug/L		07/25/13 11:37	07/29/13 21:18	1
Manganese	35	B	15	3.3	ug/L		07/25/13 11:37	07/29/13 21:18	1
Nickel	ND		40	13	ug/L		07/25/13 11:37	07/29/13 21:18	1
Potassium	5000		5000	1700	ug/L		07/25/13 11:37	07/29/13 21:18	1
Selenium	ND		15	2.7	ug/L		07/25/13 11:37	07/29/13 21:18	1
Silver	ND		10	6.0	ug/L		07/25/13 11:37	07/29/13 21:18	1
Sodium	60000		1000	320	ug/L		07/25/13 11:37	07/29/13 21:18	1
Thallium	ND	^	20	4.0	ug/L		07/25/13 11:37	07/29/13 21:18	1
Vanadium	ND		50	4.1	ug/L		07/25/13 11:37	07/29/13 21:18	1
Zinc	ND		20	5.2	ug/L		07/25/13 11:37	07/29/13 21:18	1

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TestAmerica St. Louis

Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: DUPLICATE 07

Lab Sample ID: 160-3040-9

Date Collected: 07/18/13 00:00

Matrix: Water

Date Received: 07/19/13 08:10

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/24/13 10:11	07/24/13 16:13	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		07/24/13 10:13	07/24/13 17:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0050	J	0.020	0.0040	mg/L			07/20/13 00:05	1
Bromide	0.050	J	0.25	0.025	mg/L			07/20/13 00:05	1
Iodide	ND		1.0	0.10	mg/L			07/20/13 01:56	1
Alkalinity	320	B	5.0	0.54	mg/L			07/30/13 09:42	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	53		4.0	0.40	mg/L			07/20/13 00:22	20
Sulfate	84		10	1.0	mg/L			07/20/13 00:22	20

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-3040-10

Date Collected: 07/18/13 00:00

Matrix: Water

Date Received: 07/19/13 08:10

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 19:39	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/21/13 19:39	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/21/13 19:39	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/21/13 19:39	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/21/13 19:39	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/21/13 19:39	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/21/13 19:39	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/21/13 19:39	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/21/13 19:39	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/21/13 19:39	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/21/13 19:39	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/21/13 19:39	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/21/13 19:39	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/21/13 19:39	1
2-Hexanone	ND		20	0.59	ug/L			07/21/13 19:39	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/21/13 19:39	1
Acetone	ND		20	6.7	ug/L			07/21/13 19:39	1
Benzene	ND		5.0	0.25	ug/L			07/21/13 19:39	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/21/13 19:39	1
Bromoform	ND		5.0	0.37	ug/L			07/21/13 19:39	1
Bromomethane	ND		10	0.40	ug/L			07/21/13 19:39	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/21/13 19:39	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/21/13 19:39	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/21/13 19:39	1
Chloroethane	ND	*	10	0.38	ug/L			07/21/13 19:39	1
Chloroform	ND		5.0	0.15	ug/L			07/21/13 19:39	1

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Client Sample Results

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

TestAmerica Job ID: 160-3040-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-3040-10

Date Collected: 07/18/13 00:00

Matrix: Water

Date Received: 07/19/13 08:10

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 19:39	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/21/13 19:39	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/21/13 19:39	1
Cyclohexane	ND		10	0.36	ug/L			07/21/13 19:39	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/21/13 19:39	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/21/13 19:39	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/21/13 19:39	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/21/13 19:39	1
Methyl acetate	ND		25	2.3	ug/L			07/21/13 19:39	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/21/13 19:39	1
Methylcyclohexane	ND		10	0.26	ug/L			07/21/13 19:39	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/21/13 19:39	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/21/13 19:39	1
o-Xylene	ND		5.0	0.32	ug/L			07/21/13 19:39	1
Styrene	ND		5.0	0.35	ug/L			07/21/13 19:39	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/21/13 19:39	1
Toluene	ND		5.0	1.0	ug/L			07/21/13 19:39	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/21/13 19:39	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/21/13 19:39	1
Trichloroethene	ND		5.0	0.29	ug/L			07/21/13 19:39	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/21/13 19:39	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/21/13 19:39	1
Xylenes, Total	ND		10	0.85	ug/L			07/21/13 19:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		82 - 132		07/21/13 19:39	1
4-Bromofluorobenzene (Surr)	85		82 - 121		07/21/13 19:39	1
Dibromofluoromethane (Surr)	104		85 - 119		07/21/13 19:39	1
Toluene-d8 (Surr)	93		85 - 115		07/21/13 19:39	1

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QC Sample Results

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

TestAmerica Job ID: 160-3040-1

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: 160-3040-1

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: 160-3040-1

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 LCS		Limits
	%Recovery	Qualifier	
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: MB 160-62292/3-A

Matrix: Water

Analysis Batch: 62292

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L		07/23/13 18:28	1	
2-Butanone (MEK)	ND		20	0.39	ug/L		07/23/13 18:28	1	
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L		07/23/13 18:28	1	
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L		07/23/13 18:28	1	
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L		07/23/13 18:28	1	
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L		07/23/13 18:28	1	
Acetone	ND		20	6.7	ug/L		07/23/13 18:28	1	
Benzene	ND		5.0	0.25	ug/L		07/23/13 18:28	1	
1,1-Dichloroethane	ND		5.0	0.39	ug/L		07/23/13 18:28	1	
Bromodichloromethane	ND		5.0	0.25	ug/L		07/23/13 18:28	1	
1,2-Dichloroethane	ND		5.0	0.37	ug/L		07/23/13 18:28	1	
Bromoform	ND		5.0	0.37	ug/L		07/23/13 18:28	1	
Bromomethane	ND		10	0.40	ug/L		07/23/13 18:28	1	
Carbon disulfide	ND		5.0	0.37	ug/L		07/23/13 18:28	1	
1,1-Dichloroethene	ND		5.0	0.37	ug/L		07/23/13 18:28	1	
Carbon tetrachloride	ND		5.0	0.36	ug/L		07/23/13 18:28	1	
1,2-Dichloropropane	ND		5.0	0.32	ug/L		07/23/13 18:28	1	
Chlorobenzene	ND		5.0	0.38	ug/L		07/23/13 18:28	1	
Chloroethane	ND		10	0.38	ug/L		07/23/13 18:28	1	
Chloroform	ND		5.0	0.15	ug/L		07/23/13 18:28	1	
Chloromethane	ND		10	0.55	ug/L		07/23/13 18:28	1	

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QC Sample Results

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

TestAmerica Job ID: 160-3040-1

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

Lab Sample ID: MB 160-62292/3-A

Matrix: Water

Analysis Batch: 62292

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.25	ug/L			07/23/13 18:28	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/23/13 18:28	1
2-Hexanone	ND		20	0.59	ug/L			07/23/13 18:28	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/23/13 18:28	1
Cyclohexane	ND		10	0.36	ug/L			07/23/13 18:28	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/23/13 18:28	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/23/13 18:28	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/23/13 18:28	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/23/13 18:28	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/23/13 18:28	1
Methyl acetate	ND		25	2.3	ug/L			07/23/13 18:28	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/23/13 18:28	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/23/13 18:28	1
Methylcyclohexane	ND		10	0.26	ug/L			07/23/13 18:28	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/23/13 18:28	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/23/13 18:28	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/23/13 18:28	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/23/13 18:28	1
Styrene	ND		5.0	0.35	ug/L			07/23/13 18:28	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/23/13 18:28	1
Toluene	ND		5.0	1.0	ug/L			07/23/13 18:28	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/23/13 18:28	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/23/13 18:28	1
o-Xylene	ND		5.0	0.32	ug/L			07/23/13 18:28	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/23/13 18:28	1
Trichloroethene	ND		5.0	0.29	ug/L			07/23/13 18:28	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/23/13 18:28	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/23/13 18:28	1
Xylenes, Total	ND		10	0.85	ug/L			07/23/13 18:28	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	94		82 - 121		07/23/13 18:28	1
1,2-Dichloroethane-d4 (Surr)	104		82 - 132		07/23/13 18:28	1
Toluene-d8 (Surr)	104		85 - 115		07/23/13 18:28	1
Dibromofluoromethane (Surr)	101		85 - 119		07/23/13 18:28	1

Lab Sample ID: LCS 160-62292/4-A

Matrix: Water

Analysis Batch: 62292

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
1,2-Dibromo-3-Chloropropane	50.0	57.5		ug/L		115	71 - 123
2-Butanone (MEK)	50.0	60.6		ug/L		121	71 - 123
1,2-Dibromoethane (EDB)	50.0	52.2		ug/L		104	85 - 115
1,2-Dichlorobenzene	50.0	49.4		ug/L		99	85 - 115
1,3-Dichlorobenzene	50.0	50.0		ug/L		100	85 - 115
1,4-Dichlorobenzene	50.0	49.8		ug/L		100	85 - 115
Acetone	50.0	48.5		ug/L		97	51 - 140

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QC Sample Results

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

TestAmerica Job ID: 160-3040-1

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

Lab Sample ID: LCS 160-62292/4-A

Matrix: Water

Analysis Batch: 62292

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	50.2		ug/L		100	85 - 115
1,1-Dichloroethane	50.0	50.4		ug/L		101	85 - 115
Bromodichloromethane	50.0	52.5		ug/L		105	85 - 117
1,2-Dichloroethane	50.0	50.6		ug/L		101	79 - 122
Bromoform	50.0	44.3		ug/L		89	85 - 115
Bromomethane	50.0	50.2		ug/L		100	70 - 135
Carbon disulfide	50.0	48.9		ug/L		98	85 - 123
1,1-Dichloroethene	50.0	47.8		ug/L		96	85 - 118
Carbon tetrachloride	50.0	48.2		ug/L		96	85 - 118
1,2-Dichloropropane	50.0	53.2		ug/L		106	85 - 115
Chlorobenzene	50.0	52.5		ug/L		105	85 - 115
Chloroethane	50.0	59.0		ug/L		118	75 - 125
Chloroform	50.0	47.7		ug/L		95	85 - 115
Chloromethane	50.0	49.1		ug/L		98	73 - 132
cis-1,2-Dichloroethene	50.0	48.8		ug/L		98	85 - 115
2-Hexanone	50.0	59.4		ug/L		119	66 - 121
cis-1,3-Dichloropropene	50.0	54.3		ug/L		109	85 - 127
Cyclohexane	50.0	49.5		ug/L		99	73 - 115
Dibromochloromethane	50.0	51.3		ug/L		103	85 - 115
Dichlorodifluoromethane	50.0	45.2		ug/L		90	62 - 115
4-Methyl-2-pentanone (MIBK)	50.0	58.0		ug/L		116	74 - 123
Ethylbenzene	50.0	46.9		ug/L		94	85 - 115
Isopropylbenzene	50.0	49.3		ug/L		99	85 - 124
Methyl acetate	250	292		ug/L		117	73 - 135
1,1,1,2-Tetrachloroethane	50.0	52.2		ug/L		104	84 - 115
Methyl tert-butyl ether	50.0	52.7		ug/L		105	73 - 115
Methylcyclohexane	50.0	51.9		ug/L		104	85 - 134
Methylene Chloride	50.0	49.2		ug/L		98	84 - 115
1,2,4-Trichlorobenzene	50.0	46.5		ug/L		93	75 - 124
1,1,1-Trichloroethane	50.0	47.1		ug/L		94	85 - 115
1,1,2-Trichloroethane	50.0	55.6		ug/L		111	85 - 115
Styrene	50.0	51.8		ug/L		104	85 - 115
Tetrachloroethene	50.0	49.9		ug/L		100	85 - 115
Toluene	50.0	50.4		ug/L		101	85 - 115
m-Xylene & p-Xylene	50.0	50.3		ug/L		101	85 - 115
trans-1,2-Dichloroethene	50.0	47.3		ug/L		95	85 - 115
o-Xylene	50.0	49.3		ug/L		99	85 - 115
trans-1,3-Dichloropropene	50.0	54.0		ug/L		108	85 - 123
Trichloroethene	50.0	49.4		ug/L		99	85 - 115
Trichlorofluoromethane	50.0	48.1		ug/L		96	85 - 116
Vinyl chloride	50.0	49.7		ug/L		99	68 - 133
Xylenes, Total	100	99.6		ug/L		100	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	96		82 - 121
1,2-Dichloroethane-d4 (Surr)	105		82 - 132
Toluene-d8 (Surr)	102		85 - 115
Dibromofluoromethane (Surr)	103		85 - 119

TestAmerica St. Louis

QC Sample Results

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

TestAmerica Job ID: 160-3040-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 160-62879/1-A
Matrix: Water
Analysis Batch: 63744

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62879

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/25/13 11:37	07/29/13 20:32	1
Antimony	ND		10	4.0	ug/L		07/25/13 11:37	07/29/13 20:32	1
Arsenic	ND		10	2.0	ug/L		07/25/13 11:37	07/29/13 20:32	1
Barium	ND		50	4.0	ug/L		07/25/13 11:37	07/29/13 20:32	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:37	07/29/13 20:32	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:37	07/29/13 20:32	1
Calcium	ND		1000	110	ug/L		07/25/13 11:37	07/29/13 20:32	1
Chromium	ND		10	3.1	ug/L		07/25/13 11:37	07/29/13 20:32	1
Cobalt	ND		50	4.0	ug/L		07/25/13 11:37	07/29/13 20:32	1
Copper	ND		25	4.6	ug/L		07/25/13 11:37	07/29/13 20:32	1
Iron	ND		100	28	ug/L		07/25/13 11:37	07/29/13 20:32	1
Lead	ND		10	1.5	ug/L		07/25/13 11:37	07/29/13 20:32	1
Magnesium	ND		1000	130	ug/L		07/25/13 11:37	07/29/13 20:32	1
Manganese	15.7		15	3.3	ug/L		07/25/13 11:37	07/29/13 20:32	1
Nickel	ND		40	13	ug/L		07/25/13 11:37	07/29/13 20:32	1
Potassium	ND		5000	1700	ug/L		07/25/13 11:37	07/29/13 20:32	1
Selenium	ND		15	2.7	ug/L		07/25/13 11:37	07/29/13 20:32	1
Silver	ND		10	6.0	ug/L		07/25/13 11:37	07/29/13 20:32	1
Sodium	ND		1000	320	ug/L		07/25/13 11:37	07/29/13 20:32	1
Thallium	ND	^	20	4.0	ug/L		07/25/13 11:37	07/29/13 20:32	1
Vanadium	ND		50	4.1	ug/L		07/25/13 11:37	07/29/13 20:32	1
Zinc	5.20	J	20	5.2	ug/L		07/25/13 11:37	07/29/13 20:32	1

Lab Sample ID: MB 160-62879/1-A
Matrix: Water
Analysis Batch: 63920

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62879

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/25/13 11:37	07/30/13 15:40	1
Antimony	ND		10	4.0	ug/L		07/25/13 11:37	07/30/13 15:40	1
Arsenic	ND		10	2.0	ug/L		07/25/13 11:37	07/30/13 15:40	1
Barium	ND		50	4.0	ug/L		07/25/13 11:37	07/30/13 15:40	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:37	07/30/13 15:40	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:37	07/30/13 15:40	1
Calcium	ND		1000	110	ug/L		07/25/13 11:37	07/30/13 15:40	1
Chromium	ND		10	3.1	ug/L		07/25/13 11:37	07/30/13 15:40	1
Cobalt	ND		50	4.0	ug/L		07/25/13 11:37	07/30/13 15:40	1
Copper	ND		25	4.6	ug/L		07/25/13 11:37	07/30/13 15:40	1
Iron	ND		100	28	ug/L		07/25/13 11:37	07/30/13 15:40	1
Lead	ND		10	1.5	ug/L		07/25/13 11:37	07/30/13 15:40	1
Magnesium	ND		1000	130	ug/L		07/25/13 11:37	07/30/13 15:40	1
Manganese	11.4	J	15	3.3	ug/L		07/25/13 11:37	07/30/13 15:40	1
Nickel	ND		40	13	ug/L		07/25/13 11:37	07/30/13 15:40	1
Potassium	ND		5000	1700	ug/L		07/25/13 11:37	07/30/13 15:40	1
Selenium	ND		15	2.7	ug/L		07/25/13 11:37	07/30/13 15:40	1
Silver	ND		10	6.0	ug/L		07/25/13 11:37	07/30/13 15:40	1
Sodium	ND		1000	320	ug/L		07/25/13 11:37	07/30/13 15:40	1
Thallium	ND		20	4.0	ug/L		07/25/13 11:37	07/30/13 15:40	1

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QC Sample Results

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

TestAmerica Job ID: 160-3040-1

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

Lab Sample ID: MB 160-62879/1-A

Matrix: Water

Analysis Batch: 63920

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 62879

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	ND		50	4.1	ug/L		07/25/13 11:37	07/30/13 15:40	1
Zinc	7.40	J	20	5.2	ug/L		07/25/13 11:37	07/30/13 15:40	1

Lab Sample ID: LCS 160-62879/2-A

Matrix: Water

Analysis Batch: 63744

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 62879

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9890		ug/L		99	80 - 120
Antimony	500	501		ug/L		100	80 - 120
Arsenic	1000	969		ug/L		97	80 - 120
Barium	1000	1040		ug/L		104	80 - 120
Beryllium	1000	1020		ug/L		102	80 - 120
Cadmium	1000	990		ug/L		99	80 - 120
Calcium	10000	9900		ug/L		99	80 - 120
Chromium	1000	987		ug/L		99	80 - 120
Cobalt	1000	1010		ug/L		101	80 - 120
Copper	1000	1020		ug/L		102	80 - 120
Iron	10000	10200		ug/L		102	80 - 120
Lead	1000	1010		ug/L		101	80 - 120
Magnesium	10000	10000		ug/L		100	80 - 120
Manganese	1000	1030		ug/L		103	80 - 120
Nickel	1000	1000		ug/L		100	80 - 120
Potassium	10000	9950		ug/L		99	80 - 120
Selenium	1000	1010		ug/L		101	80 - 120
Silver	100	83.5		ug/L		84	80 - 120
Sodium	10000	9940		ug/L		99	80 - 120
Thallium	200	220	^	ug/L		110	80 - 120
Vanadium	1000	1000		ug/L		100	80 - 120
Zinc	1000	989		ug/L		99	80 - 120

Lab Sample ID: MB 160-62880/1-A

Matrix: Water

Analysis Batch: 63280

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 62880

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/25/13 11:42	07/26/13 17:02	1
Antimony	ND		10	4.0	ug/L		07/25/13 11:42	07/26/13 17:02	1
Arsenic	ND		10	2.0	ug/L		07/25/13 11:42	07/26/13 17:02	1
Barium	ND		50	4.0	ug/L		07/25/13 11:42	07/26/13 17:02	1
Beryllium	ND		5.0	0.61	ug/L		07/25/13 11:42	07/26/13 17:02	1
Cadmium	ND		5.0	0.91	ug/L		07/25/13 11:42	07/26/13 17:02	1
Calcium	ND		1000	110	ug/L		07/25/13 11:42	07/26/13 17:02	1
Chromium	ND		10	3.1	ug/L		07/25/13 11:42	07/26/13 17:02	1
Cobalt	ND		50	4.0	ug/L		07/25/13 11:42	07/26/13 17:02	1
Copper	ND		25	4.6	ug/L		07/25/13 11:42	07/26/13 17:02	1
Iron	ND		100	28	ug/L		07/25/13 11:42	07/26/13 17:02	1
Lead	ND		10	1.5	ug/L		07/25/13 11:42	07/26/13 17:02	1
Magnesium	ND		1000	130	ug/L		07/25/13 11:42	07/26/13 17:02	1

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QC Sample Results

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

TestAmerica Job ID: 160-3040-1

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

Lab Sample ID: MB 160-62880/1-A

Matrix: Water

Analysis Batch: 63280

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 62880

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Manganese	ND		15	3.3	ug/L		07/25/13 11:42	07/26/13 17:02	1
Nickel	ND		40	13	ug/L		07/25/13 11:42	07/26/13 17:02	1
Potassium	ND		5000	1700	ug/L		07/25/13 11:42	07/26/13 17:02	1
Selenium	ND		15	2.7	ug/L		07/25/13 11:42	07/26/13 17:02	1
Silver	ND		10	6.0	ug/L		07/25/13 11:42	07/26/13 17:02	1
Sodium	ND		1000	320	ug/L		07/25/13 11:42	07/26/13 17:02	1
Thallium	ND		20	4.0	ug/L		07/25/13 11:42	07/26/13 17:02	1
Vanadium	ND		50	4.1	ug/L		07/25/13 11:42	07/26/13 17:02	1
Zinc	ND		20	5.2	ug/L		07/25/13 11:42	07/26/13 17:02	1

Lab Sample ID: LCS 160-62880/2-A

Matrix: Water

Analysis Batch: 63280

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 62880

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Aluminum	10000	10100		ug/L		101	80 - 120
Antimony	500	528		ug/L		106	80 - 120
Arsenic	1000	1040		ug/L		104	80 - 120
Barium	1000	1050		ug/L		105	80 - 120
Beryllium	1000	1040		ug/L		104	80 - 120
Cadmium	1000	1050		ug/L		105	80 - 120
Calcium	10000	10900		ug/L		109	80 - 120
Chromium	1000	1080		ug/L		108	80 - 120
Cobalt	1000	1090		ug/L		109	80 - 120
Copper	1000	1060		ug/L		106	80 - 120
Iron	10000	10400		ug/L		104	80 - 120
Lead	1000	1100		ug/L		110	80 - 120
Magnesium	10000	10400		ug/L		104	80 - 120
Manganese	1000	1050		ug/L		105	80 - 120
Nickel	1000	1090		ug/L		109	80 - 120
Potassium	10000	10000		ug/L		100	80 - 120
Selenium	1000	1060		ug/L		106	80 - 120
Silver	100	88.7		ug/L		89	80 - 120
Sodium	10000	10200		ug/L		102	80 - 120
Thallium	200	233		ug/L		117	80 - 120
Vanadium	1000	1020		ug/L		102	80 - 120
Zinc	1000	1060		ug/L		106	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 160-62431/1-A

Matrix: Water

Analysis Batch: 62861

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 62431

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.060	ug/L		07/24/13 10:11	07/24/13 15:53	1

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QC Sample Results

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

TestAmerica Job ID: 160-3040-1

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

Lab Sample ID: LCS 160-62431/2-A

Matrix: Water

Analysis Batch: 62861

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 62431

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.64		ug/L		113	80 - 120

Lab Sample ID: MB 160-62433/1-A

Matrix: Water

Analysis Batch: 62861

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 62433

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/24/13 10:13	07/24/13 16:41	1

Lab Sample ID: LCS 160-62433/2-A

Matrix: Water

Analysis Batch: 62861

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 62433

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.54		ug/L		111	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 Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iodide	ND		1.0	0.10	mg/L			07/19/13 16:45	1

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: 160-3040-1 MS

Matrix: Water

Analysis Batch: 62155

Client Sample ID: S-53

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iodide	0.28	J	4.00	4.11		mg/L		96	90 - 110

Lab Sample ID: 160-3040-1 DU

Matrix: Water

Analysis Batch: 62155

Client Sample ID: S-53

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Iodide	0.28	J	0.279	J	mg/L		0.4	20

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TestAmerica St. Louis

QC Sample Results

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

TestAmerica Job ID: 160-3040-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 160-62869/9

Matrix: Water

Analysis Batch: 62869

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			07/22/13 16:57	1
Chloride	ND		0.20	0.020	mg/L			07/22/13 16:57	1
Bromide	ND		0.25	0.025	mg/L			07/22/13 16:57	1
Sulfate	ND		0.50	0.050	mg/L			07/22/13 16:57	1

Lab Sample ID: LCS 160-62869/10

Matrix: Water

Analysis Batch: 62869

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	1.88		mg/L		94	90 - 110
Bromide	2.00	1.93		mg/L		97	90 - 110
Sulfate	8.00	7.57		mg/L		95	90 - 110

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: 160-3040-1 DU

Matrix: Water

Analysis Batch: 62889

Client Sample ID: S-53

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	0.014	J	0.0115	J	mg/L		23	20
Bromide	1.0		0.998		mg/L		0.3	20

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TestAmerica St. Louis

QC Sample Results

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

TestAmerica Job ID: 160-3040-1

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 160-3040-1 DU

Matrix: Water

Analysis Batch: 62889

Client Sample ID: S-53

Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Chloride - DL	36		35.6		mg/L		2	20
Sulfate - DL	180		176		mg/L		2	20

Method: 310.1 - Alkalinity

Lab Sample ID: MB 160-63730/1

Matrix: Water

Analysis Batch: 63730

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Alkalinity	0.250	J	1.3	0.14	mg/L			07/30/13 09:42	1

Lab Sample ID: LCS 160-63730/3

Matrix: Water

Analysis Batch: 63730

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Alkalinity	400	376		mg/L		94	90 - 110

Lab Sample ID: LLCS 160-63730/2

Matrix: Water

Analysis Batch: 63730

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS	LLCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Alkalinity	200	189		mg/L		95	90 - 110

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QC Association Summary

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

TestAmerica Job ID: 160-3040-1

GC/MS VOA

Analysis Batch: 61804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3040-1	S-53	Total/NA	Water	8260C	
160-3040-2	D-14	Total/NA	Water	8260C	
160-3040-3	PZ-205-AS	Total/NA	Water	8260C	
160-3040-5	D-13	Total/NA	Water	8260C	
160-3040-6	PZ-104-KS	Total/NA	Water	8260C	
160-3040-7	PZ-206-SS	Total/NA	Water	8260C	
160-3040-8	PZ-207-AS	Total/NA	Water	8260C	
160-3040-9	DUPLICATE 07	Total/NA	Water	8260C	
160-3040-10	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	

Analysis Batch: 62292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3040-3	PZ-205-AS	Total/NA	Water	8260C	
160-3040-4	I-65	Total/NA	Water	8260C	
LCS 160-62292/4-A	Lab Control Sample	Total/NA	Water	8260C	
MB 160-62292/3-A	Method Blank	Total/NA	Water	8260C	

Metals

Prep Batch: 62431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3040-1	S-53	Total/NA	Water	7470A	
160-3040-2	D-14	Total/NA	Water	7470A	
160-3040-3	PZ-205-AS	Total/NA	Water	7470A	
160-3040-4	I-65	Total/NA	Water	7470A	
160-3040-5	D-13	Total/NA	Water	7470A	
160-3040-6	PZ-104-KS	Total/NA	Water	7470A	
160-3040-7	PZ-206-SS	Total/NA	Water	7470A	
160-3040-8	PZ-207-AS	Total/NA	Water	7470A	
160-3040-9	DUPLICATE 07	Total/NA	Water	7470A	
LCS 160-62431/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 160-62431/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 62433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3040-1	S-53	Dissolved	Water	7470A	
160-3040-2	D-14	Dissolved	Water	7470A	
160-3040-3	PZ-205-AS	Dissolved	Water	7470A	
160-3040-4	I-65	Dissolved	Water	7470A	
160-3040-5	D-13	Dissolved	Water	7470A	
160-3040-6	PZ-104-KS	Dissolved	Water	7470A	
160-3040-7	PZ-206-SS	Dissolved	Water	7470A	
160-3040-8	PZ-207-AS	Dissolved	Water	7470A	
160-3040-9	DUPLICATE 07	Dissolved	Water	7470A	
LCS 160-62433/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 160-62433/1-A	Method Blank	Total/NA	Water	7470A	

TestAmerica St. Louis

QC Association Summary

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

TestAmerica Job ID: 160-3040-1

Metals (Continued)

Analysis Batch: 62861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3040-1	S-53	Dissolved	Water	7470A	62433
160-3040-1	S-53	Total/NA	Water	7470A	62431
160-3040-2	D-14	Dissolved	Water	7470A	62433
160-3040-2	D-14	Total/NA	Water	7470A	62431
160-3040-3	PZ-205-AS	Dissolved	Water	7470A	62433
160-3040-3	PZ-205-AS	Total/NA	Water	7470A	62431
160-3040-4	I-65	Dissolved	Water	7470A	62433
160-3040-4	I-65	Total/NA	Water	7470A	62431
160-3040-5	D-13	Dissolved	Water	7470A	62433
160-3040-5	D-13	Total/NA	Water	7470A	62431
160-3040-6	PZ-104-KS	Dissolved	Water	7470A	62433
160-3040-6	PZ-104-KS	Total/NA	Water	7470A	62431
160-3040-7	PZ-206-SS	Dissolved	Water	7470A	62433
160-3040-7	PZ-206-SS	Total/NA	Water	7470A	62431
160-3040-8	PZ-207-AS	Dissolved	Water	7470A	62433
160-3040-8	PZ-207-AS	Total/NA	Water	7470A	62431
160-3040-9	DUPLICATE 07	Dissolved	Water	7470A	62433
160-3040-9	DUPLICATE 07	Total/NA	Water	7470A	62431
LCS 160-62431/2-A	Lab Control Sample	Total/NA	Water	7470A	62431
LCS 160-62433/2-A	Lab Control Sample	Total/NA	Water	7470A	62433
MB 160-62431/1-A	Method Blank	Total/NA	Water	7470A	62431
MB 160-62433/1-A	Method Blank	Total/NA	Water	7470A	62433

Prep Batch: 62879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3040-1	S-53	Dissolved	Water	3010A	
160-3040-2	D-14	Dissolved	Water	3010A	
160-3040-3	PZ-205-AS	Dissolved	Water	3010A	
160-3040-4	I-65	Dissolved	Water	3010A	
160-3040-5	D-13	Dissolved	Water	3010A	
160-3040-6	PZ-104-KS	Dissolved	Water	3010A	
160-3040-7	PZ-206-SS	Dissolved	Water	3010A	
160-3040-8	PZ-207-AS	Dissolved	Water	3010A	
160-3040-9	DUPLICATE 07	Dissolved	Water	3010A	
LCS 160-62879/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 160-62879/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 62880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3040-1	S-53	Total/NA	Water	3010A	
160-3040-2	D-14	Total/NA	Water	3010A	
160-3040-3	PZ-205-AS	Total/NA	Water	3010A	
160-3040-4	I-65	Total/NA	Water	3010A	
160-3040-5	D-13	Total/NA	Water	3010A	
160-3040-6	PZ-104-KS	Total/NA	Water	3010A	
160-3040-7	PZ-206-SS	Total/NA	Water	3010A	
160-3040-8	PZ-207-AS	Total/NA	Water	3010A	
160-3040-9	DUPLICATE 07	Total/NA	Water	3010A	
LCS 160-62880/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 160-62880/1-A	Method Blank	Total/NA	Water	3010A	

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QC Association Summary

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

TestAmerica Job ID: 160-3040-1

Metals (Continued)

Analysis Batch: 63280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3040-1	S-53	Total/NA	Water	6010C	62880
160-3040-1	S-53	Total/NA	Water	6010C	62880
160-3040-2	D-14	Total/NA	Water	6010C	62880
160-3040-2	D-14	Total/NA	Water	6010C	62880
160-3040-3	PZ-205-AS	Total/NA	Water	6010C	62880
160-3040-3	PZ-205-AS	Total/NA	Water	6010C	62880
160-3040-4	I-65	Total/NA	Water	6010C	62880
160-3040-4	I-65	Total/NA	Water	6010C	62880
160-3040-5	D-13	Total/NA	Water	6010C	62880
160-3040-5	D-13	Total/NA	Water	6010C	62880
160-3040-6	PZ-104-KS	Total/NA	Water	6010C	62880
160-3040-6	PZ-104-KS	Total/NA	Water	6010C	62880
160-3040-7	PZ-206-SS	Total/NA	Water	6010C	62880
160-3040-7	PZ-206-SS	Total/NA	Water	6010C	62880
160-3040-8	PZ-207-AS	Total/NA	Water	6010C	62880
160-3040-8	PZ-207-AS	Total/NA	Water	6010C	62880
160-3040-9	DUPLICATE 07	Total/NA	Water	6010C	62880
160-3040-9	DUPLICATE 07	Total/NA	Water	6010C	62880
LCS 160-62880/2-A	Lab Control Sample	Total/NA	Water	6010C	62880
MB 160-62880/1-A	Method Blank	Total/NA	Water	6010C	62880

Analysis Batch: 63744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3040-1	S-53	Dissolved	Water	6010C	62879
160-3040-1	S-53	Dissolved	Water	6010C	62879
160-3040-2	D-14	Dissolved	Water	6010C	62879
160-3040-2	D-14	Dissolved	Water	6010C	62879
160-3040-3	PZ-205-AS	Dissolved	Water	6010C	62879
160-3040-3	PZ-205-AS	Dissolved	Water	6010C	62879
160-3040-4	I-65	Dissolved	Water	6010C	62879
160-3040-4	I-65	Dissolved	Water	6010C	62879
160-3040-5	D-13	Dissolved	Water	6010C	62879
160-3040-5	D-13	Dissolved	Water	6010C	62879
160-3040-6	PZ-104-KS	Dissolved	Water	6010C	62879
160-3040-6	PZ-104-KS	Dissolved	Water	6010C	62879
160-3040-7	PZ-206-SS	Dissolved	Water	6010C	62879
160-3040-7	PZ-206-SS	Dissolved	Water	6010C	62879
160-3040-8	PZ-207-AS	Dissolved	Water	6010C	62879
160-3040-8	PZ-207-AS	Dissolved	Water	6010C	62879
160-3040-9	DUPLICATE 07	Dissolved	Water	6010C	62879
160-3040-9	DUPLICATE 07	Dissolved	Water	6010C	62879
LCS 160-62879/2-A	Lab Control Sample	Total/NA	Water	6010C	62879
MB 160-62879/1-A	Method Blank	Total/NA	Water	6010C	62879

Analysis Batch: 63920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 160-62879/1-A	Method Blank	Total/NA	Water	6010C	62879

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QC Association Summary

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

TestAmerica Job ID: 160-3040-1

General Chemistry

Analysis Batch: 62155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3040-1	S-53	Total/NA	Water	300.0	
160-3040-1 DU	S-53	Total/NA	Water	300.0	
160-3040-1 MS	S-53	Total/NA	Water	300.0	
160-3040-2	D-14	Total/NA	Water	300.0	
160-3040-3	PZ-205-AS	Total/NA	Water	300.0	
160-3040-4	I-65	Total/NA	Water	300.0	
160-3040-5	D-13	Total/NA	Water	300.0	
160-3040-6	PZ-104-KS	Total/NA	Water	300.0	
160-3040-7	PZ-206-SS	Total/NA	Water	300.0	
160-3040-8	PZ-207-AS	Total/NA	Water	300.0	
160-3040-9	DUPLICATE 07	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	

Analysis Batch: 62869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3040-5 - RADL	D-13	Total/NA	Water	300.0	
LCS 160-62869/10	Lab Control Sample	Total/NA	Water	300.0	
MB 160-62869/9	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 62889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3040-1	S-53	Total/NA	Water	300.0	
160-3040-1 - DL	S-53	Total/NA	Water	300.0	
160-3040-1 DU	S-53	Total/NA	Water	300.0	
160-3040-1 DU - DL	S-53	Total/NA	Water	300.0	
160-3040-2	D-14	Total/NA	Water	300.0	
160-3040-2 - DL2	D-14	Total/NA	Water	300.0	
160-3040-3	PZ-205-AS	Total/NA	Water	300.0	
160-3040-3 - DL2	PZ-205-AS	Total/NA	Water	300.0	
160-3040-4	I-65	Total/NA	Water	300.0	
160-3040-4 - DL	I-65	Total/NA	Water	300.0	
160-3040-5	D-13	Total/NA	Water	300.0	
160-3040-5 - DL	D-13	Total/NA	Water	300.0	
160-3040-6	PZ-104-KS	Total/NA	Water	300.0	
160-3040-6 - DL	PZ-104-KS	Total/NA	Water	300.0	
160-3040-7	PZ-206-SS	Total/NA	Water	300.0	
160-3040-7 - DL	PZ-206-SS	Total/NA	Water	300.0	
160-3040-8	PZ-207-AS	Total/NA	Water	300.0	
160-3040-8 - DL2	PZ-207-AS	Total/NA	Water	300.0	
160-3040-9	DUPLICATE 07	Total/NA	Water	300.0	
160-3040-9 - DL	DUPLICATE 07	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: 63730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3040-1	S-53	Total/NA	Water	310.1	
160-3040-2	D-14	Total/NA	Water	310.1	
160-3040-3	PZ-205-AS	Total/NA	Water	310.1	
160-3040-4	I-65	Total/NA	Water	310.1	

TestAmerica St. Louis

QC Association Summary

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

TestAmerica Job ID: 160-3040-1

General Chemistry (Continued)

Analysis Batch: 63730 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3040-5	D-13	Total/NA	Water	310.1	
160-3040-6	PZ-104-KS	Total/NA	Water	310.1	
160-3040-7	PZ-206-SS	Total/NA	Water	310.1	
160-3040-8	PZ-207-AS	Total/NA	Water	310.1	
160-3040-9	DUPLICATE 07	Total/NA	Water	310.1	
LCS 160-63730/3	Lab Control Sample	Total/NA	Water	310.1	
LLCS 160-63730/2	Lab Control Sample	Total/NA	Water	310.1	
MB 160-63730/1	Method Blank	Total/NA	Water	310.1	

Surrogate Summary

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

TestAmerica Job ID: 160-3040-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (82-132)	BFB (82-121)	DBFM (85-119)	TOL (85-115)
160-3040-1	S-53	98	86	100	96
160-3040-2	D-14	101	86	107	95
160-3040-3	PZ-205-AS	101	80 X	102	101
160-3040-3	PZ-205-AS	99	89	101	101
160-3040-4	I-65	101	90	99	102
160-3040-5	D-13	105	85	108	100
160-3040-6	PZ-104-KS	100	83	107	104
160-3040-7	PZ-206-SS	98	89	97	102
160-3040-8	PZ-207-AS	99	84	106	102
160-3040-9	DUPLICATE 07	99	88	99	109
160-3040-10	TRIP BLANK	103	85	104	93
LCS 160-61804/4-A	Lab Control Sample	100	90	100	95
LCS 160-62292/4-A	Lab Control Sample	105	96	103	102
MB 160-61804/3-A	Method Blank	95	84	95	94
MB 160-62292/3-A	Method Blank	104	94	101	104

Surrogate Legend

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

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