

US EPA ARCHIVE DOCUMENT

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 160-3000-1
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 4:07:46 PM

Rhonda Ridenhower, Customer Service Manager
rhonda.ridenhower@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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



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Case Narrative

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

TestAmerica Job ID: 160-3000-1

Job ID: 160-3000-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Engineering Management Support, Inc.

Project: West Lake Landfill

Report Number: 160-3000-1

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 07/16/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.0 C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples I-66 (160-3000-1), MW-102 (160-3000-2), MW-103 (160-3000-3), PZ-303-AS (160-3000-4), I-11 (160-3000-5), S-10 (160-3000-6), FIELD BLANK @ D-12 (160-3000-7), D-12 (160-3000-8), DUPLICATE 05 (160-3000-9) and TRIP BLANK (160-3000-10) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 07/17/2013 and 07/23/2013.

Analytical batch 61405

The continuing calibration verification (CCV) for 1,2-Dichloroethane, 2-Hexanone, 4-Methyl-2-pentane, Acetone, Chloroethane, and

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Case Narrative

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

TestAmerica Job ID: 160-3000-1

Job ID: 160-3000-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Trichlorofluoromethane associated with batch 61405 recovered above the upper control limit. The samples associated with this CCV were non-detects or not reported for the affected analytes; therefore, the data have been reported.

The CCV for 1,2-Dichloroethane-d4 (Surr) was outside of the +/- 20 %D but was within the surrogate recovery requirements.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 61405 recovered outside control limits for the following analytes: 1,2-Dichloroethane, 2-Hexanone, Chloroethane, 4-Methyl-2-pentanone, and Methylene chloride. These analytes were biased high in the LCS and were not detected or not reported in the associated samples; therefore, the data have been reported.

The matrix spike and/or matrix spike duplicate (MS/MSD) recoveries for 2-Hexanone and Chloroethane associated with batch 61405 were outside control limits: D-12 (160-3000-8 MS), D-12 (160-3000-8 MSD). These compounds were not detected above the RL in the associated sample..

The following analyte recovered outside control limits for the LCS/LCSD associated with batch 61405: trans-1,2-Dichloroethene. This analyte was not indicative of a systematic problem and was within the Marginal Exceedance Limits; therefore, the results have been reported and qualified. The MS/MSD had acceptable trans-1,2-Dichloroethene recoveries.

Analytical batch 62292

Sample, PZ-303-AS (160-3000-4), 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.

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

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 I-66 (160-3000-1), MW-102 (160-3000-2), MW-103 (160-3000-3), PZ-303-AS (160-3000-4), I-11 (160-3000-5), S-10 (160-3000-6), D-12 (160-3000-8) and DUPLICATE 05 (160-3000-9) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 07/17/2013 and 07/18/2013 and analyzed on 07/19/2013 and 07/22/2013.

Analytical batch 61766

The following samples were diluted to bring the concentration of target analytes (calcium, magnesium, manganese, and sodium) within the calibration range. Magnesium also interferes with iron: (160-3000-8 SD), D-12 (160-3000-8), D-12 (160-3000-8 MS), D-12 (160-3000-8 MSD), DUPLICATE 05 (160-3000-9), I-11 (160-3000-5), I-66 (160-3000-1), MW-102 (160-3000-2), MW-103 (160-3000-3), PZ-303-AS (160-3000-4), S-10 (160-3000-6). Elevated reporting limits (RLs) are provided.

The serial dilution performed for the following samples associated with batch 61452 was outside control limits for arsenic, cobalt, and lead indicating a possible matrix interference: (160-3000-8 SD)

The following samples were diluted to bring the concentration of target analytes (calcium, magnesium, manganese, and sodium) within the calibration range. Magnesium also interferes with iron: (160-3000-8 SD), D-12 (160-3000-8), D-12 (160-3000-8 MS), D-12 (160-3000-8 MSD). Elevated reporting limits (RLs) are provided.

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

Analytical batch 62088

The following samples were diluted to bring the concentration of target analytes within the calibration range: (160-3000-8 SD), D-12 (160-3000-8), D-12 (160-3000-8 MS), D-12 (160-3000-8 MSD), DUPLICATE 05 (160-3000-9). Elevated reporting limits (RLs) are provided.

The following samples were diluted to bring the concentration of target analytes within the calibration range: (160-3000-8 SD), D-12 (160-3000-8), D-12 (160-3000-8 MS), D-12 (160-3000-8 MSD). Elevated reporting limits (RLs) are provided.

Case Narrative

Client: Engineering Management Support, Inc.
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TestAmerica Job ID: 160-3000-1

Job ID: 160-3000-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

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

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)

Samples I-66 (160-3000-1), MW-102 (160-3000-2), MW-103 (160-3000-3), PZ-303-AS (160-3000-4), I-11 (160-3000-5), S-10 (160-3000-6), D-12 (160-3000-8) and DUPLICATE 05 (160-3000-9) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 07/18/2013 and analyzed on 07/19/2013.

Insufficient sample volume was available to perform client requested matrix spike/matrix spike duplicate (MS/MSD) on sample: D-12 (160-3000-8). MS/MSD was instead performed on sample I-66 (160-3000-1),

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

TOTAL MERCURY

Samples I-66 (160-3000-1), MW-102 (160-3000-2), MW-103 (160-3000-3), PZ-303-AS (160-3000-4), I-11 (160-3000-5), S-10 (160-3000-6), D-12 (160-3000-8) and DUPLICATE 05 (160-3000-9) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 07/18/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

ANIONS

Samples I-66 (160-3000-1), MW-102 (160-3000-2), MW-103 (160-3000-3), PZ-303-AS (160-3000-4), I-11 (160-3000-5), S-10 (160-3000-6), D-12 (160-3000-8) and DUPLICATE 05 (160-3000-9) were analyzed for anions in accordance with EPA Method 300.0. The samples were analyzed on 07/16/2013 and 07/17/2013.

The following samples were diluted to bring the concentrations of Chloride, Sulfate, and Bromide within the calibration range in IC batch 61021: D-12 (160-3000-8), DUPLICATE 05 (160-3000-9), I-11 (160-3000-5), I-66 (160-3000-1), MW-102 (160-3000-2), MW-103 (160-3000-3), PZ-303-AS (160-3000-4), S-10 (160-3000-6). Elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the anions analysis.

All other quality control parameters were within the acceptance limits.

ALKALINITY

Samples I-66 (160-3000-1), MW-102 (160-3000-2), MW-103 (160-3000-3), PZ-303-AS (160-3000-4), I-11 (160-3000-5), S-10 (160-3000-6), D-12 (160-3000-8) and DUPLICATE 05 (160-3000-9) were analyzed for alkalinity in accordance with EPA Method 310.1. The samples were analyzed on 07/26/2013.

Samples PZ-303-AS (160-3000-4)[5X], S-10 (160-3000-6)[5X], D-12 (160-3000-8)[5X] and DUPLICATE 05 (160-3000-9)[5X] required dilution prior to analysis due to the high level of target analytes. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the alkalinity analysis.

All other quality control parameters were within the acceptance limits.

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TestAmerica

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

Chain of Custody Record

Client Information
 Client Contact: Mr. Paul Rosasco
 Company: Engineering Management Support, Inc.
 Address: 7220 W. Jefferson AVE Suite 406
 City: Lakewood
 State: CO Zip: 80235
 Phone: _____
 Email: panirosasos@emsideer.com
 Project Name: West Lake Landfill- July
 SAc: _____

Due Date Requested: _____
TAT Requested (days): _____
PO #: _____
Purchase Order not required
WO #: _____
Project #: 1602280
SSOW#: _____

Sampler: Hersta Associates, Inc.
Phone: 636-979-9111
Lab Pk#: Ridenhower, Rhonda E
E-Mail: rhonda.ridenhower@testamericainc.com

Counter Tracking Note(s): _____

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=other)	Field Filtered Sample (Yes or No)		3.0.1 - Alkalinity- 310.0		300 - Anions-		80100, 7470A		82800 - VOA		82800 - Standard List		Special Instructions/Note:
					Field Filtered	M/S/D (Y or N)	N	D	A	A	N	D	A	A	N	D	
I-66	7/15/13	1044	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	
MW-102	↑	1110		Water	X	X	X	X	X	X	X	X	X	X	X	X	
MW-103	↑	1144		Water	X	X	X	X	X	X	X	X	X	X	X	X	
P2-303-AS	↑	1220		Water	X	X	X	X	X	X	X	X	X	X	X	X	
I-11	↑	1317		Water	X	X	X	X	X	X	X	X	X	X	X	X	
S-10	↑	1405		Water	X	X	X	X	X	X	X	X	X	X	X	X	
Field Blank @ D-12	↑	1430		Water	X	X	X	X	X	X	X	X	X	X	X	X	
D-12	↑	1527		Water	X	X	X	X	X	X	X	X	X	X	X	X	
Duplicate 05	↑	—		Water	X	X	X	X	X	X	X	X	X	X	X	X	
Trip Blank	7/15/13	—		Water	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 - N8H5O4
 F - H2SO4
 G - Amidator
 H - Ascorbic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - BUA
 Other: _____

Preservation Codes:
 M - Hicant
 N - None
 O - As2O2
 P - Na2O4S
 Q - Na2SO3
 R - Na2S2O3
 S - H2SO4
 T - 15P Doocecalhydrate
 U - Acetone
 V - MCAA
 W - pH 4.5
 X - EDTA
 Y - other (specify)

Special Instructions/Note: _____

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

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Unknown Radioisotopic
 Poison B Poison A

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

Empty Kit Relinquished by: _____
Relinquished by: Matt J. Rosasco
Relinquished by: Paul Rosasco
Relinquished by: _____

Relinquished by: _____
Relinquished by: _____

Company: _____
Date: _____

Relinquished by: Paul Rosasco
Date: 7/16/13
Company: _____

Relinquished by: Paul Rosasco
Date: 7/16/13
Company: _____

Relinquished by: _____
Date: _____
Company: _____

Custody Seals Intact: Yes No
Custody Seal No.: _____

Method of Shipment: _____

Special Instructions/OC Requirements: _____

Login Sample Receipt Checklist

Client: Engineering Management Support, Inc.

Job Number: 160-3000-1

Login Number: 3000

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Only received 3 vials for FIELD BLANK @ D-12
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Definitions/Glossary

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

TestAmerica Job ID: 160-3000-1

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.
F	MS or MSD exceeds the control limits

Metals

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

General Chemistry

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

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: 160-3000-1

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

Protocol References:

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

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

Laboratory References:

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

Sample Summary

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

TestAmerica Job ID: 160-3000-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-3000-1	I-66	Water	07/15/13 10:44	07/16/13 08:30
160-3000-2	MW-102	Water	07/15/13 11:10	07/16/13 08:30
160-3000-3	MW-103	Water	07/15/13 11:44	07/16/13 08:30
160-3000-4	PZ-303-AS	Water	07/15/13 12:20	07/16/13 08:30
160-3000-5	I-11	Water	07/15/13 13:17	07/16/13 08:30
160-3000-6	S-10	Water	07/15/13 14:05	07/16/13 08:30
160-3000-7	FIELD BLANK @ D-12	Water	07/15/13 14:30	07/16/13 08:30
160-3000-8	D-12	Water	07/15/13 15:27	07/16/13 08:30
160-3000-9	DUPLICATE 05	Water	07/15/13 00:00	07/16/13 08:30
160-3000-10	TRIP BLANK	Water	07/15/13 00:00	07/16/13 08:30

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Detection Summary

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: I-66

Lab Sample ID: 160-3000-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	15	J	20	0.39	ug/L	1		8260C	Total/NA
Aluminum	270		200	80	ug/L	1		6010C	Total/NA
Arsenic	7.3	J	10	2.0	ug/L	1		6010C	Total/NA
Barium	140		50	4.0	ug/L	1		6010C	Total/NA
Calcium	140000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	160000		10000	1100	ug/L	10		6010C	Total/NA
Cobalt	5.4	J	50	4.0	ug/L	1		6010C	Total/NA
Iron	3200		100	28	ug/L	1		6010C	Total/NA
Lead	4.7	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	16000		1000	130	ug/L	1		6010C	Total/NA
Manganese	4500		15	3.3	ug/L	1		6010C	Total/NA
Potassium	4800	J	5000	1700	ug/L	1		6010C	Total/NA
Selenium	3.5	J	15	2.7	ug/L	1		6010C	Total/NA
Sodium	41000		1000	320	ug/L	1		6010C	Total/NA
Thallium	6.0	J	20	4.0	ug/L	1		6010C	Total/NA
Zinc	300		20	5.2	ug/L	1		6010C	Total/NA
Arsenic	4.6	J	10	2.0	ug/L	1		6010C	Dissolved
Barium	120		50	4.0	ug/L	1		6010C	Dissolved
Calcium	140000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	160000		10000	1100	ug/L	10		6010C	Dissolved
Cobalt	5.1	J	50	4.0	ug/L	1		6010C	Dissolved
Iron	950		100	28	ug/L	1		6010C	Dissolved
Lead	1.9	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	15000		1000	130	ug/L	1		6010C	Dissolved
Manganese	4200		15	3.3	ug/L	1		6010C	Dissolved
Potassium	4800	J	5000	1700	ug/L	1		6010C	Dissolved
Selenium	2.7	J	15	2.7	ug/L	1		6010C	Dissolved
Sodium	41000		1000	320	ug/L	1		6010C	Dissolved
Thallium	4.5	J	20	4.0	ug/L	1		6010C	Dissolved
Zinc	8.7	J	20	5.2	ug/L	1		6010C	Dissolved
Alkalinity	280	B	5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL	82		4.0	0.40	mg/L	20		300.0	Total/NA
Sulfate - DL	130		10	1.0	mg/L	20		300.0	Total/NA

Client Sample ID: MW-102

Lab Sample ID: 160-3000-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.49	J	5.0	0.39	ug/L	1		8260C	Total/NA
Aluminum	680		200	80	ug/L	1		6010C	Total/NA
Arsenic	18		10	2.0	ug/L	1		6010C	Total/NA
Barium	170		50	4.0	ug/L	1		6010C	Total/NA
Calcium	220000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	270000		10000	1100	ug/L	10		6010C	Total/NA
Cobalt	8.0	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	5.2	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	81000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	82000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	2800		15	3.3	ug/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

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Detection Summary

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: MW-102 (Continued)

Lab Sample ID: 160-3000-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	19	J	40	13	ug/L	1		6010C	Total/NA
Potassium	4800	J	5000	1700	ug/L	1		6010C	Total/NA
Sodium	16000		1000	320	ug/L	1		6010C	Total/NA
Zinc	22		20	5.2	ug/L	1		6010C	Total/NA
Arsenic	21		10	2.0	ug/L	1		6010C	Dissolved
Barium	98		50	4.0	ug/L	1		6010C	Dissolved
Calcium	220000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	260000		10000	1100	ug/L	10		6010C	Dissolved
Iron	5000		100	28	ug/L	1		6010C	Dissolved
Iron	5000		1000	280	ug/L	10		6010C	Dissolved
Lead	1.6	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	80000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	82000		10000	1300	ug/L	10		6010C	Dissolved
Manganese	2600		15	3.3	ug/L	1		6010C	Dissolved
Potassium	4800	J	5000	1700	ug/L	1		6010C	Dissolved
Selenium	3.0	J	15	2.7	ug/L	1		6010C	Dissolved
Sodium	16000		1000	320	ug/L	1		6010C	Dissolved
Zinc	7.3	J	20	5.2	ug/L	1		6010C	Dissolved
Alkalinity	700	B	5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL	8.4		4.0	0.40	mg/L	20		300.0	Total/NA
Sulfate - DL	290		10	1.0	mg/L	20		300.0	Total/NA

Client Sample ID: MW-103

Lab Sample ID: 160-3000-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	16	J	20	0.39	ug/L	1		8260C	Total/NA
Aluminum	18000		200	80	ug/L	1		6010C	Total/NA
Arsenic	3.7	J	10	2.0	ug/L	1		6010C	Total/NA
Barium	290		50	4.0	ug/L	1		6010C	Total/NA
Calcium	130000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	140000		10000	1100	ug/L	10		6010C	Total/NA
Chromium	20		10	3.1	ug/L	1		6010C	Total/NA
Cobalt	7.0	J	50	4.0	ug/L	1		6010C	Total/NA
Copper	20	J	25	4.6	ug/L	1		6010C	Total/NA
Iron	13000		100	28	ug/L	1		6010C	Total/NA
Lead	20		10	1.5	ug/L	1		6010C	Total/NA
Magnesium	39000		1000	130	ug/L	1		6010C	Total/NA
Manganese	1000		15	3.3	ug/L	1		6010C	Total/NA
Nickel	30	J	40	13	ug/L	1		6010C	Total/NA
Potassium	7200		5000	1700	ug/L	1		6010C	Total/NA
Selenium	7.3	J	15	2.7	ug/L	1		6010C	Total/NA
Sodium	19000		1000	320	ug/L	1		6010C	Total/NA
Vanadium	31	J	50	4.1	ug/L	1		6010C	Total/NA
Zinc	74		20	5.2	ug/L	1		6010C	Total/NA
Barium	160		50	4.0	ug/L	1		6010C	Dissolved
Calcium	120000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	140000		10000	1100	ug/L	10		6010C	Dissolved
Lead	1.9	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	35000		1000	130	ug/L	1		6010C	Dissolved
Manganese	880		15	3.3	ug/L	1		6010C	Dissolved

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: 160-3000-1

Client Sample ID: MW-103 (Continued)

Lab Sample ID: 160-3000-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	4000	J	5000	1700	ug/L	1		6010C	Dissolved
Sodium	18000		1000	320	ug/L	1		6010C	Dissolved
Zinc	5.8	J	20	5.2	ug/L	1		6010C	Dissolved
Mercury	0.060	J	0.20	0.060	ug/L	1		7470A	Total/NA
Nitrate as N	0.032		0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	0.086	J	0.25	0.025	mg/L	1		300.0	Total/NA
Alkalinity	410	B	5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL	33		4.0	0.40	mg/L	20		300.0	Total/NA
Sulfate - DL	49		10	1.0	mg/L	20		300.0	Total/NA

Client Sample ID: PZ-303-AS

Lab Sample ID: 160-3000-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	50		5.0	0.25	ug/L	1		8260C	Total/NA
Chloroethane	0.75	J *	10	0.38	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	2.2	J	5.0	0.16	ug/L	1		8260C	Total/NA
Cyclohexane	18		10	0.36	ug/L	1		8260C	Total/NA
Ethylbenzene	29		5.0	0.30	ug/L	1		8260C	Total/NA
Isopropylbenzene	7.5		5.0	0.26	ug/L	1		8260C	Total/NA
Methylcyclohexane	64		10	0.26	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	240		10	1.1	ug/L	1		8260C	Total/NA
o-Xylene	75		5.0	0.32	ug/L	1		8260C	Total/NA
Toluene	26		5.0	1.0	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	0.66	J *	5.0	0.18	ug/L	1		8260C	Total/NA
Vinyl chloride	1.3	J	5.0	0.43	ug/L	1		8260C	Total/NA
Xylenes, Total	280		10	0.85	ug/L	1		8260C	Total/NA
Antimony	9.3	J	10	4.0	ug/L	1		6010C	Total/NA
Arsenic	150		10	2.0	ug/L	1		6010C	Total/NA
Barium	830		50	4.0	ug/L	1		6010C	Total/NA
Calcium	270000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	360000		10000	1100	ug/L	10		6010C	Total/NA
Cobalt	9.6	J	50	4.0	ug/L	1		6010C	Total/NA
Iron	120000	E	100	28	ug/L	1		6010C	Total/NA
Iron	120000		1000	280	ug/L	10		6010C	Total/NA
Lead	10		10	1.5	ug/L	1		6010C	Total/NA
Magnesium	78000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	78000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	2500		15	3.3	ug/L	1		6010C	Total/NA
Nickel	20	J	40	13	ug/L	1		6010C	Total/NA
Potassium	5000		5000	1700	ug/L	1		6010C	Total/NA
Selenium	7.6	J	15	2.7	ug/L	1		6010C	Total/NA
Sodium	64000		1000	320	ug/L	1		6010C	Total/NA
Vanadium	5.6	J	50	4.1	ug/L	1		6010C	Total/NA
Zinc	9.0	J	20	5.2	ug/L	1		6010C	Total/NA
Antimony	10		10	4.0	ug/L	1		6010C	Dissolved
Arsenic	150		10	2.0	ug/L	1		6010C	Dissolved
Barium	690		50	4.0	ug/L	1		6010C	Dissolved
Calcium	270000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	370000		10000	1100	ug/L	10		6010C	Dissolved
Cobalt	7.5	J	50	4.0	ug/L	1		6010C	Dissolved

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: 160-3000-1

Client Sample ID: PZ-303-AS (Continued)

Lab Sample ID: 160-3000-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	110000	E	100	28	ug/L	1		6010C	Dissolved
Iron	120000		1000	280	ug/L	10		6010C	Dissolved
Lead	5.4	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	77000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	80000		10000	1300	ug/L	10		6010C	Dissolved
Manganese	2400		15	3.3	ug/L	1		6010C	Dissolved
Nickel	18	J	40	13	ug/L	1		6010C	Dissolved
Potassium	4900	J	5000	1700	ug/L	1		6010C	Dissolved
Selenium	7.1	J	15	2.7	ug/L	1		6010C	Dissolved
Sodium	64000		1000	320	ug/L	1		6010C	Dissolved
Vanadium	5.8	J	50	4.1	ug/L	1		6010C	Dissolved
Nitrate as N	0.015	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	0.88		0.25	0.025	mg/L	1		300.0	Total/NA
Iodide	0.23	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity	1200	B	25	2.7	mg/L	5		310.1	Total/NA
Chloride - DL	83		4.0	0.40	mg/L	20		300.0	Total/NA
Sulfate - DL	130		10	1.0	mg/L	20		300.0	Total/NA

Client Sample ID: I-11

Lab Sample ID: 160-3000-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.59	J	5.0	0.39	ug/L	1		8260C	Total/NA
Chloroethane	2.2	J*	10	0.38	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	2.0	J	5.0	0.16	ug/L	1		8260C	Total/NA
Aluminum	110	J	200	80	ug/L	1		6010C	Total/NA
Antimony	4.8	J	10	4.0	ug/L	1		6010C	Total/NA
Arsenic	17		10	2.0	ug/L	1		6010C	Total/NA
Barium	820		50	4.0	ug/L	1		6010C	Total/NA
Calcium	200000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	230000		10000	1100	ug/L	10		6010C	Total/NA
Iron	30000		100	28	ug/L	1		6010C	Total/NA
Iron	30000		1000	280	ug/L	10		6010C	Total/NA
Lead	3.0	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	81000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	79000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	1800		15	3.3	ug/L	1		6010C	Total/NA
Nickel	15	J	40	13	ug/L	1		6010C	Total/NA
Potassium	24000		5000	1700	ug/L	1		6010C	Total/NA
Sodium	120000	E	1000	320	ug/L	1		6010C	Total/NA
Sodium	120000		10000	3200	ug/L	10		6010C	Total/NA
Zinc	5.7	J	20	5.2	ug/L	1		6010C	Total/NA
Antimony	4.2	J	10	4.0	ug/L	1		6010C	Dissolved
Arsenic	16		10	2.0	ug/L	1		6010C	Dissolved
Barium	830		50	4.0	ug/L	1		6010C	Dissolved
Calcium	200000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	240000		10000	1100	ug/L	10		6010C	Dissolved
Iron	30000		100	28	ug/L	1		6010C	Dissolved
Iron	30000		1000	280	ug/L	10		6010C	Dissolved
Lead	2.4	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	80000	E	1000	130	ug/L	1		6010C	Dissolved

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: 160-3000-1

Client Sample ID: I-11 (Continued)

Lab Sample ID: 160-3000-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	82000		10000	1300	ug/L	10		6010C	Dissolved
Manganese	1800		15	3.3	ug/L	1		6010C	Dissolved
Nickel	15	J	40	13	ug/L	1		6010C	Dissolved
Potassium	25000		5000	1700	ug/L	1		6010C	Dissolved
Selenium	2.8	J	15	2.7	ug/L	1		6010C	Dissolved
Sodium	120000	E	1000	320	ug/L	1		6010C	Dissolved
Sodium	120000		10000	3200	ug/L	10		6010C	Dissolved
Nitrate as N	0.0099	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	2.4		0.25	0.025	mg/L	1		300.0	Total/NA
Iodide	0.31	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity	890	B	5.0	0.54	mg/L	1		310.1	Total/NA
Sulfate - DL	85		10	1.0	mg/L	20		300.0	Total/NA
Chloride - DL2	220		20	2.0	mg/L	100		300.0	Total/NA

Client Sample ID: S-10

Lab Sample ID: 160-3000-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.45	J	5.0	0.28	ug/L	1		8260C	Total/NA
Benzene	4.0	J	5.0	0.25	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	1.1	J	5.0	0.16	ug/L	1		8260C	Total/NA
Cyclohexane	0.75	J	10	0.36	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.66	J	10	0.26	ug/L	1		8260C	Total/NA
Vinyl chloride	1.1	J	5.0	0.43	ug/L	1		8260C	Total/NA
Aluminum	350		200	80	ug/L	1		6010C	Total/NA
Antimony	6.5	J	10	4.0	ug/L	1		6010C	Total/NA
Arsenic	46		10	2.0	ug/L	1		6010C	Total/NA
Barium	650		50	4.0	ug/L	1		6010C	Total/NA
Calcium	220000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	270000		10000	1100	ug/L	10		6010C	Total/NA
Iron	62000		100	28	ug/L	1		6010C	Total/NA
Iron	62000		1000	280	ug/L	10		6010C	Total/NA
Lead	4.4	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	100000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	98000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	2400		15	3.3	ug/L	1		6010C	Total/NA
Nickel	14	J	40	13	ug/L	1		6010C	Total/NA
Potassium	33000		5000	1700	ug/L	1		6010C	Total/NA
Selenium	4.9	J	15	2.7	ug/L	1		6010C	Total/NA
Sodium	160000	E	1000	320	ug/L	1		6010C	Total/NA
Sodium	150000		10000	3200	ug/L	10		6010C	Total/NA
Vanadium	4.7	J	50	4.1	ug/L	1		6010C	Total/NA
Aluminum	110	J	200	80	ug/L	1		6010C	Dissolved
Antimony	5.3	J	10	4.0	ug/L	1		6010C	Dissolved
Arsenic	46		10	2.0	ug/L	1		6010C	Dissolved
Barium	650		50	4.0	ug/L	1		6010C	Dissolved
Calcium	210000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	280000		10000	1100	ug/L	10		6010C	Dissolved
Iron	61000		100	28	ug/L	1		6010C	Dissolved
Iron	64000		1000	280	ug/L	10		6010C	Dissolved
Lead	4.0	J	10	1.5	ug/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

US EPA ARCHIVE DOCUMENT

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Detection Summary

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: S-10 (Continued)

Lab Sample ID: 160-3000-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	96000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	100000		10000	1300	ug/L	10		6010C	Dissolved
Manganese	2300		15	3.3	ug/L	1		6010C	Dissolved
Nickel	14	J	40	13	ug/L	1		6010C	Dissolved
Potassium	33000		5000	1700	ug/L	1		6010C	Dissolved
Selenium	4.7	J	15	2.7	ug/L	1		6010C	Dissolved
Sodium	160000	E	1000	320	ug/L	1		6010C	Dissolved
Sodium	160000		10000	3200	ug/L	10		6010C	Dissolved
Nitrate as N	0.022		0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	1.7		0.25	0.025	mg/L	1		300.0	Total/NA
Iodide	0.24	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity	1100	B	25	2.7	mg/L	5		310.1	Total/NA
Sulfate - DL	260		10	1.0	mg/L	20		300.0	Total/NA
Chloride - DL2	180		20	2.0	mg/L	100		300.0	Total/NA

Client Sample ID: FIELD BLANK @ D-12

Lab Sample ID: 160-3000-7

No Detections.

Client Sample ID: D-12

Lab Sample ID: 160-3000-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.0	J	5.0	0.39	ug/L	1		8260C	Total/NA
4-Methyl-2-pentanone (MIBK)	24		20	0.33	ug/L	1		8260C	Total/NA
Benzene	4.6	J	5.0	0.25	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	2.1	J	5.0	0.16	ug/L	1		8260C	Total/NA
Ethylbenzene	0.51	J	5.0	0.30	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	0.74	J	5.0	0.57	ug/L	1		8260C	Total/NA
o-Xylene	0.43	J	5.0	0.32	ug/L	1		8260C	Total/NA
Vinyl chloride	0.55	J	5.0	0.43	ug/L	1		8260C	Total/NA
Xylenes, Total	1.2	J	10	0.85	ug/L	1		8260C	Total/NA
Aluminum	250		200	80	ug/L	1		6010C	Total/NA
Antimony	4.4	J	10	4.0	ug/L	1		6010C	Total/NA
Barium	440		50	4.0	ug/L	1		6010C	Total/NA
Calcium	460000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	650000	E	10000	1100	ug/L	10		6010C	Total/NA
Calcium	650000		50000	5300	ug/L	50		6010C	Total/NA
Copper	6.2	J	25	4.6	ug/L	1		6010C	Total/NA
Iron	9700		100	28	ug/L	1		6010C	Total/NA
Iron	9700		1000	280	ug/L	10		6010C	Total/NA
Magnesium	68000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	67000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	1000		15	3.3	ug/L	1		6010C	Total/NA
Nickel	15	J	40	13	ug/L	1		6010C	Total/NA
Potassium	14000		5000	1700	ug/L	1		6010C	Total/NA
Selenium	8.1	J	15	2.7	ug/L	1		6010C	Total/NA
Sodium	180000	E	1000	320	ug/L	1		6010C	Total/NA
Sodium	170000		10000	3200	ug/L	10		6010C	Total/NA
Aluminum	220		200	80	ug/L	1		6010C	Dissolved
Antimony	5.1	J	10	4.0	ug/L	1		6010C	Dissolved
Barium	450		50	4.0	ug/L	1		6010C	Dissolved

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: 160-3000-1

Client Sample ID: D-12 (Continued)

Lab Sample ID: 160-3000-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	460000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	650000	E	10000	1100	ug/L	10		6010C	Dissolved
Calcium	700000		50000	5300	ug/L	50		6010C	Dissolved
Chromium	5.6	J	10	3.1	ug/L	1		6010C	Dissolved
Cobalt	4.0	J	50	4.0	ug/L	1		6010C	Dissolved
Copper	8.4	J	25	4.6	ug/L	1		6010C	Dissolved
Iron	8500		100	28	ug/L	1		6010C	Dissolved
Iron	8600		1000	280	ug/L	10		6010C	Dissolved
Magnesium	67000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	67000		10000	1300	ug/L	10		6010C	Dissolved
Manganese	990		15	3.3	ug/L	1		6010C	Dissolved
Nickel	16	J	40	13	ug/L	1		6010C	Dissolved
Potassium	14000		5000	1700	ug/L	1		6010C	Dissolved
Selenium	11	J	15	2.7	ug/L	1		6010C	Dissolved
Sodium	180000	E	1000	320	ug/L	1		6010C	Dissolved
Sodium	180000		10000	3200	ug/L	10		6010C	Dissolved
Vanadium	5.8	J	50	4.1	ug/L	1		6010C	Dissolved
Nitrate as N	0.0087	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	4.2		0.25	0.025	mg/L	1		300.0	Total/NA
Iodide	0.37	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity	1000	B	25	2.7	mg/L	5		310.1	Total/NA
Chloride - DL2	250		40	4.0	mg/L	200		300.0	Total/NA
Sulfate - DL2	750		100	10	mg/L	200		300.0	Total/NA

Client Sample ID: DUPLICATE 05

Lab Sample ID: 160-3000-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.0	J	5.0	0.39	ug/L	1		8260C	Total/NA
1,2-Dichloroethane	2.6	J *	5.0	0.37	ug/L	1		8260C	Total/NA
2-Butanone (MEK)	16	J	20	0.39	ug/L	1		8260C	Total/NA
4-Methyl-2-pentanone (MIBK)	24		20	0.33	ug/L	1		8260C	Total/NA
Benzene	4.3	J	5.0	0.25	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	2.0	J	5.0	0.16	ug/L	1		8260C	Total/NA
Ethylbenzene	0.51	J	5.0	0.30	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	0.84	J	5.0	0.40	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	0.92	J	5.0	0.57	ug/L	1		8260C	Total/NA
o-Xylene	0.45	J	5.0	0.32	ug/L	1		8260C	Total/NA
Xylenes, Total	1.4	J	10	0.85	ug/L	1		8260C	Total/NA
Aluminum	220		200	80	ug/L	1		6010C	Total/NA
Antimony	4.3	J	10	4.0	ug/L	1		6010C	Total/NA
Barium	440		50	4.0	ug/L	1		6010C	Total/NA
Calcium	440000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	640000	E	10000	1100	ug/L	10		6010C	Total/NA
Calcium	670000		50000	5300	ug/L	50		6010C	Total/NA
Copper	7.5	J	25	4.6	ug/L	1		6010C	Total/NA
Iron	9400		100	28	ug/L	1		6010C	Total/NA
Iron	9600		1000	280	ug/L	10		6010C	Total/NA
Magnesium	65000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	67000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	980		15	3.3	ug/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

Detection Summary

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: DUPLICATE 05 (Continued)

Lab Sample ID: 160-3000-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	15	J	40	13	ug/L	1		6010C	Total/NA
Potassium	13000		5000	1700	ug/L	1		6010C	Total/NA
Selenium	9.9	J	15	2.7	ug/L	1		6010C	Total/NA
Sodium	170000	E	1000	320	ug/L	1		6010C	Total/NA
Sodium	170000		10000	3200	ug/L	10		6010C	Total/NA
Vanadium	4.8	J	50	4.1	ug/L	1		6010C	Total/NA
Aluminum	190	J	200	80	ug/L	1		6010C	Dissolved
Barium	460		50	4.0	ug/L	1		6010C	Dissolved
Calcium	450000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	660000	E	10000	1100	ug/L	10		6010C	Dissolved
Calcium	670000		50000	5300	ug/L	50		6010C	Dissolved
Copper	7.3	J	25	4.6	ug/L	1		6010C	Dissolved
Iron	8600		100	28	ug/L	1		6010C	Dissolved
Iron	8900		1000	280	ug/L	10		6010C	Dissolved
Magnesium	66000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	68000		10000	1300	ug/L	10		6010C	Dissolved
Manganese	980		15	3.3	ug/L	1		6010C	Dissolved
Nickel	15	J	40	13	ug/L	1		6010C	Dissolved
Potassium	14000		5000	1700	ug/L	1		6010C	Dissolved
Selenium	11	J	15	2.7	ug/L	1		6010C	Dissolved
Sodium	180000	E	1000	320	ug/L	1		6010C	Dissolved
Sodium	180000		10000	3200	ug/L	10		6010C	Dissolved
Vanadium	4.7	J	50	4.1	ug/L	1		6010C	Dissolved
Nitrate as N	0.013	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	4.3		0.25	0.025	mg/L	1		300.0	Total/NA
Iodide	0.38	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity	1600	B	25	2.7	mg/L	5		310.1	Total/NA
Chloride - DL2	250		40	4.0	mg/L	200		300.0	Total/NA
Sulfate - DL2	770		100	10	mg/L	200		300.0	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-3000-10

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: 160-3000-1

Client Sample ID: I-66

Lab Sample ID: 160-3000-1

Date Collected: 07/15/13 10:44

Matrix: Water

Date Received: 07/16/13 08:30

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			07/17/13 14:39	1
1,1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/17/13 14:39	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/17/13 14:39	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/17/13 14:39	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/17/13 14:39	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/17/13 14:39	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/17/13 14:39	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/17/13 14:39	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/17/13 14:39	1
1,2-Dichloroethane	ND	*	5.0	0.37	ug/L			07/17/13 14:39	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/17/13 14:39	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/17/13 14:39	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/17/13 14:39	1
2-Butanone (MEK)	15	J	20	0.39	ug/L			07/17/13 14:39	1
2-Hexanone	ND	*	20	0.59	ug/L			07/17/13 14:39	1
4-Methyl-2-pentanone (MIBK)	ND	*	20	0.33	ug/L			07/17/13 14:39	1
Acetone	ND		20	6.7	ug/L			07/17/13 14:39	1
Benzene	ND		5.0	0.25	ug/L			07/17/13 14:39	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/17/13 14:39	1
Bromoform	ND		5.0	0.37	ug/L			07/17/13 14:39	1
Bromomethane	ND		10	0.40	ug/L			07/17/13 14:39	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/17/13 14:39	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/17/13 14:39	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/17/13 14:39	1
Chloroethane	ND	*	10	0.38	ug/L			07/17/13 14:39	1
Chloroform	ND		5.0	0.15	ug/L			07/17/13 14:39	1
Chloromethane	ND		10	0.55	ug/L			07/17/13 14:39	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/17/13 14:39	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/17/13 14:39	1
Cyclohexane	ND		10	0.36	ug/L			07/17/13 14:39	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/17/13 14:39	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/17/13 14:39	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/17/13 14:39	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/17/13 14:39	1
Methyl acetate	ND		25	2.3	ug/L			07/17/13 14:39	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/17/13 14:39	1
Methylcyclohexane	ND		10	0.26	ug/L			07/17/13 14:39	1
Methylene Chloride	ND	*	5.0	1.7	ug/L			07/17/13 14:39	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/17/13 14:39	1
o-Xylene	ND		5.0	0.32	ug/L			07/17/13 14:39	1
Styrene	ND		5.0	0.35	ug/L			07/17/13 14:39	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/17/13 14:39	1
Toluene	ND		5.0	1.0	ug/L			07/17/13 14:39	1
trans-1,2-Dichloroethene	ND	*	5.0	0.18	ug/L			07/17/13 14:39	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/17/13 14:39	1
Trichloroethene	ND		5.0	0.29	ug/L			07/17/13 14:39	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/17/13 14:39	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/17/13 14:39	1
Xylenes, Total	ND		10	0.85	ug/L			07/17/13 14:39	1

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TestAmerica St. Louis

Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: I-66

Lab Sample ID: 160-3000-1

Date Collected: 07/15/13 10:44

Matrix: Water

Date Received: 07/16/13 08:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	123		82 - 132		07/17/13 14:39	1
4-Bromofluorobenzene (Surr)	102		82 - 121		07/17/13 14:39	1
Dibromofluoromethane (Surr)	104		85 - 119		07/17/13 14:39	1
Toluene-d8 (Surr)	103		85 - 115		07/17/13 14:39	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	270		200	80	ug/L		07/17/13 12:39	07/19/13 16:05	1
Antimony	ND		10	4.0	ug/L		07/17/13 12:39	07/19/13 16:05	1
Arsenic	7.3	J	10	2.0	ug/L		07/17/13 12:39	07/19/13 16:05	1
Barium	140		50	4.0	ug/L		07/17/13 12:39	07/19/13 16:05	1
Beryllium	ND		5.0	0.61	ug/L		07/17/13 12:39	07/19/13 16:05	1
Cadmium	ND		5.0	0.91	ug/L		07/17/13 12:39	07/19/13 16:05	1
Calcium	140000	E	1000	110	ug/L		07/17/13 12:39	07/19/13 16:05	1
Calcium	160000		10000	1100	ug/L		07/17/13 12:39	07/19/13 17:33	10
Chromium	ND		10	3.1	ug/L		07/17/13 12:39	07/19/13 16:05	1
Cobalt	5.4	J	50	4.0	ug/L		07/17/13 12:39	07/19/13 16:05	1
Copper	ND		25	4.6	ug/L		07/17/13 12:39	07/19/13 16:05	1
Iron	3200		100	28	ug/L		07/17/13 12:39	07/19/13 16:05	1
Lead	4.7	J	10	1.5	ug/L		07/17/13 12:39	07/19/13 16:05	1
Magnesium	16000		1000	130	ug/L		07/17/13 12:39	07/19/13 16:05	1
Manganese	4500		15	3.3	ug/L		07/17/13 12:39	07/19/13 16:05	1
Nickel	ND		40	13	ug/L		07/17/13 12:39	07/19/13 16:05	1
Potassium	4800	J	5000	1700	ug/L		07/17/13 12:39	07/19/13 16:05	1
Selenium	3.5	J	15	2.7	ug/L		07/17/13 12:39	07/19/13 16:05	1
Silver	ND		10	6.0	ug/L		07/17/13 12:39	07/19/13 16:05	1
Sodium	41000		1000	320	ug/L		07/17/13 12:39	07/19/13 16:05	1
Thallium	6.0	J	20	4.0	ug/L		07/17/13 12:39	07/19/13 16:05	1
Vanadium	ND		50	4.1	ug/L		07/17/13 12:39	07/19/13 16:05	1
Zinc	300		20	5.2	ug/L		07/17/13 12:39	07/19/13 16:05	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/17/13 12:39	07/19/13 16:54	1
Antimony	ND		10	4.0	ug/L		07/17/13 12:39	07/19/13 16:54	1
Arsenic	4.6	J	10	2.0	ug/L		07/17/13 12:39	07/19/13 16:54	1
Barium	120		50	4.0	ug/L		07/17/13 12:39	07/19/13 16:54	1
Beryllium	ND		5.0	0.61	ug/L		07/17/13 12:39	07/19/13 16:54	1
Cadmium	ND		5.0	0.91	ug/L		07/17/13 12:39	07/19/13 16:54	1
Calcium	140000	E	1000	110	ug/L		07/17/13 12:39	07/19/13 16:54	1
Calcium	160000		10000	1100	ug/L		07/17/13 12:39	07/19/13 18:23	10
Chromium	ND		10	3.1	ug/L		07/17/13 12:39	07/19/13 16:54	1
Cobalt	5.1	J	50	4.0	ug/L		07/17/13 12:39	07/19/13 16:54	1
Copper	ND		25	4.6	ug/L		07/17/13 12:39	07/19/13 16:54	1
Iron	950		100	28	ug/L		07/17/13 12:39	07/19/13 16:54	1
Lead	1.9	J	10	1.5	ug/L		07/17/13 12:39	07/19/13 16:54	1
Magnesium	15000		1000	130	ug/L		07/17/13 12:39	07/19/13 16:54	1
Manganese	4200		15	3.3	ug/L		07/17/13 12:39	07/19/13 16:54	1
Nickel	ND		40	13	ug/L		07/17/13 12:39	07/19/13 16:54	1
Potassium	4800	J	5000	1700	ug/L		07/17/13 12:39	07/19/13 16:54	1

TestAmerica St. Louis

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: I-66

Lab Sample ID: 160-3000-1

Date Collected: 07/15/13 10:44

Matrix: Water

Date Received: 07/16/13 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	2.7	J	15	2.7	ug/L		07/17/13 12:39	07/19/13 16:54	1
Silver	ND		10	6.0	ug/L		07/17/13 12:39	07/19/13 16:54	1
Sodium	41000		1000	320	ug/L		07/17/13 12:39	07/19/13 16:54	1
Thallium	4.5	J	20	4.0	ug/L		07/17/13 12:39	07/19/13 16:54	1
Vanadium	ND		50	4.1	ug/L		07/17/13 12:39	07/19/13 16:54	1
Zinc	8.7	J	20	5.2	ug/L		07/17/13 12:39	07/19/13 16:54	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:54	07/18/13 23:30	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:55	07/19/13 00:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.020	0.0040	mg/L			07/16/13 13:08	1
Bromide	ND		0.25	0.025	mg/L			07/16/13 13:08	1
Iodide	ND		1.0	0.10	mg/L			07/16/13 22:47	1
Alkalinity	280	B	5.0	0.54	mg/L			07/26/13 09:51	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	82		4.0	0.40	mg/L			07/16/13 13:25	20
Sulfate	130		10	1.0	mg/L			07/16/13 13:25	20

Client Sample ID: MW-102

Lab Sample ID: 160-3000-2

Date Collected: 07/15/13 11:10

Matrix: Water

Date Received: 07/16/13 08:30

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			07/17/13 15:05	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/17/13 15:05	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/17/13 15:05	1
1,1-Dichloroethane	0.49	J	5.0	0.39	ug/L			07/17/13 15:05	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/17/13 15:05	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/17/13 15:05	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/17/13 15:05	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/17/13 15:05	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/17/13 15:05	1
1,2-Dichloroethane	ND	*	5.0	0.37	ug/L			07/17/13 15:05	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/17/13 15:05	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/17/13 15:05	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/17/13 15:05	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/17/13 15:05	1
2-Hexanone	ND	*	20	0.59	ug/L			07/17/13 15:05	1
4-Methyl-2-pentanone (MIBK)	ND	*	20	0.33	ug/L			07/17/13 15:05	1
Acetone	ND		20	6.7	ug/L			07/17/13 15:05	1
Benzene	ND		5.0	0.25	ug/L			07/17/13 15:05	1

TestAmerica St. Louis

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: MW-102

Lab Sample ID: 160-3000-2

Date Collected: 07/15/13 11:10

Matrix: Water

Date Received: 07/16/13 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		5.0	0.25	ug/L			07/17/13 15:05	1
Bromoform	ND		5.0	0.37	ug/L			07/17/13 15:05	1
Bromomethane	ND		10	0.40	ug/L			07/17/13 15:05	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/17/13 15:05	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/17/13 15:05	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/17/13 15:05	1
Chloroethane	ND	*	10	0.38	ug/L			07/17/13 15:05	1
Chloroform	ND		5.0	0.15	ug/L			07/17/13 15:05	1
Chloromethane	ND		10	0.55	ug/L			07/17/13 15:05	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/17/13 15:05	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/17/13 15:05	1
Cyclohexane	ND		10	0.36	ug/L			07/17/13 15:05	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/17/13 15:05	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/17/13 15:05	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/17/13 15:05	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/17/13 15:05	1
Methyl acetate	ND		25	2.3	ug/L			07/17/13 15:05	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/17/13 15:05	1
Methylcyclohexane	ND		10	0.26	ug/L			07/17/13 15:05	1
Methylene Chloride	ND	*	5.0	1.7	ug/L			07/17/13 15:05	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/17/13 15:05	1
o-Xylene	ND		5.0	0.32	ug/L			07/17/13 15:05	1
Styrene	ND		5.0	0.35	ug/L			07/17/13 15:05	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/17/13 15:05	1
Toluene	ND		5.0	1.0	ug/L			07/17/13 15:05	1
trans-1,2-Dichloroethene	ND	*	5.0	0.18	ug/L			07/17/13 15:05	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/17/13 15:05	1
Trichloroethene	ND		5.0	0.29	ug/L			07/17/13 15:05	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/17/13 15:05	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/17/13 15:05	1
Xylenes, Total	ND		10	0.85	ug/L			07/17/13 15:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		82 - 132		07/17/13 15:05	1
4-Bromofluorobenzene (Surr)	104		82 - 121		07/17/13 15:05	1
Dibromofluoromethane (Surr)	104		85 - 119		07/17/13 15:05	1
Toluene-d8 (Surr)	103		85 - 115		07/17/13 15:05	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	680		200	80	ug/L		07/17/13 12:39	07/19/13 16:08	1
Antimony	ND		10	4.0	ug/L		07/17/13 12:39	07/19/13 16:08	1
Arsenic	18		10	2.0	ug/L		07/17/13 12:39	07/19/13 16:08	1
Barium	170		50	4.0	ug/L		07/17/13 12:39	07/19/13 16:08	1
Beryllium	ND		5.0	0.61	ug/L		07/17/13 12:39	07/19/13 16:08	1
Cadmium	ND		5.0	0.91	ug/L		07/17/13 12:39	07/19/13 16:08	1
Calcium	220000	E	1000	110	ug/L		07/17/13 12:39	07/19/13 16:08	1
Calcium	270000		10000	1100	ug/L		07/17/13 12:39	07/19/13 17:37	10
Chromium	ND		10	3.1	ug/L		07/17/13 12:39	07/19/13 16:08	1
Cobalt	8.0	J	50	4.0	ug/L		07/17/13 12:39	07/19/13 16:08	1

TestAmerica St. Louis

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: MW-102

Lab Sample ID: 160-3000-2

Date Collected: 07/15/13 11:10

Matrix: Water

Date Received: 07/16/13 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		25	4.6	ug/L		07/17/13 12:39	07/19/13 16:08	1
Iron	11000		100	28	ug/L		07/17/13 12:39	07/19/13 16:08	1
Iron	11000		1000	280	ug/L		07/17/13 12:39	07/19/13 17:37	10
Lead	5.2	J	10	1.5	ug/L		07/17/13 12:39	07/19/13 16:08	1
Magnesium	81000	E	1000	130	ug/L		07/17/13 12:39	07/19/13 16:08	1
Magnesium	82000		10000	1300	ug/L		07/17/13 12:39	07/19/13 17:37	10
Manganese	2800		15	3.3	ug/L		07/17/13 12:39	07/19/13 16:08	1
Nickel	19	J	40	13	ug/L		07/17/13 12:39	07/19/13 16:08	1
Potassium	4800	J	5000	1700	ug/L		07/17/13 12:39	07/19/13 16:08	1
Selenium	ND		15	2.7	ug/L		07/17/13 12:39	07/19/13 16:08	1
Silver	ND		10	6.0	ug/L		07/17/13 12:39	07/19/13 16:08	1
Sodium	16000		1000	320	ug/L		07/17/13 12:39	07/19/13 16:08	1
Thallium	ND		20	4.0	ug/L		07/17/13 12:39	07/19/13 16:08	1
Vanadium	ND		50	4.1	ug/L		07/17/13 12:39	07/19/13 16:08	1
Zinc	22		20	5.2	ug/L		07/17/13 12:39	07/19/13 16:08	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/17/13 12:39	07/19/13 16:58	1
Antimony	ND		10	4.0	ug/L		07/17/13 12:39	07/19/13 16:58	1
Arsenic	21		10	2.0	ug/L		07/17/13 12:39	07/19/13 16:58	1
Barium	98		50	4.0	ug/L		07/17/13 12:39	07/19/13 16:58	1
Beryllium	ND		5.0	0.61	ug/L		07/17/13 12:39	07/19/13 16:58	1
Cadmium	ND		5.0	0.91	ug/L		07/17/13 12:39	07/19/13 16:58	1
Calcium	220000	E	1000	110	ug/L		07/17/13 12:39	07/19/13 16:58	1
Calcium	260000		10000	1100	ug/L		07/17/13 12:39	07/19/13 18:27	10
Chromium	ND		10	3.1	ug/L		07/17/13 12:39	07/19/13 16:58	1
Cobalt	ND		50	4.0	ug/L		07/17/13 12:39	07/19/13 16:58	1
Copper	ND		25	4.6	ug/L		07/17/13 12:39	07/19/13 16:58	1
Iron	5000		100	28	ug/L		07/17/13 12:39	07/19/13 16:58	1
Iron	5000		1000	280	ug/L		07/17/13 12:39	07/19/13 18:27	10
Lead	1.6	J	10	1.5	ug/L		07/17/13 12:39	07/19/13 16:58	1
Magnesium	80000	E	1000	130	ug/L		07/17/13 12:39	07/19/13 16:58	1
Magnesium	82000		10000	1300	ug/L		07/17/13 12:39	07/19/13 18:27	10
Manganese	2600		15	3.3	ug/L		07/17/13 12:39	07/19/13 16:58	1
Nickel	ND		40	13	ug/L		07/17/13 12:39	07/19/13 16:58	1
Potassium	4800	J	5000	1700	ug/L		07/17/13 12:39	07/19/13 16:58	1
Selenium	3.0	J	15	2.7	ug/L		07/17/13 12:39	07/19/13 16:58	1
Silver	ND		10	6.0	ug/L		07/17/13 12:39	07/19/13 16:58	1
Sodium	16000		1000	320	ug/L		07/17/13 12:39	07/19/13 16:58	1
Thallium	ND		20	4.0	ug/L		07/17/13 12:39	07/19/13 16:58	1
Vanadium	ND		50	4.1	ug/L		07/17/13 12:39	07/19/13 16:58	1
Zinc	7.3	J	20	5.2	ug/L		07/17/13 12:39	07/19/13 16:58	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:54	07/18/13 23:32	1

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TestAmerica St. Louis

Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: MW-102

Lab Sample ID: 160-3000-2

Date Collected: 07/15/13 11:10

Matrix: Water

Date Received: 07/16/13 08:30

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:55	07/19/13 00:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.020	0.0040	mg/L			07/16/13 13:42	1
Bromide	ND		0.25	0.025	mg/L			07/16/13 13:42	1
Iodide	ND		1.0	0.10	mg/L			07/16/13 23:02	1
Alkalinity	700	B	5.0	0.54	mg/L			07/26/13 09:51	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.4		4.0	0.40	mg/L			07/16/13 13:59	20
Sulfate	290		10	1.0	mg/L			07/16/13 13:59	20

Client Sample ID: MW-103

Lab Sample ID: 160-3000-3

Date Collected: 07/15/13 11:44

Matrix: Water

Date Received: 07/16/13 08:30

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			07/17/13 15:31	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/17/13 15:31	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/17/13 15:31	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/17/13 15:31	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/17/13 15:31	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/17/13 15:31	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/17/13 15:31	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/17/13 15:31	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/17/13 15:31	1
1,2-Dichloroethane	ND	*	5.0	0.37	ug/L			07/17/13 15:31	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/17/13 15:31	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/17/13 15:31	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/17/13 15:31	1
2-Butanone (MEK)	16	J	20	0.39	ug/L			07/17/13 15:31	1
2-Hexanone	ND	*	20	0.59	ug/L			07/17/13 15:31	1
4-Methyl-2-pentanone (MIBK)	ND	*	20	0.33	ug/L			07/17/13 15:31	1
Acetone	ND		20	6.7	ug/L			07/17/13 15:31	1
Benzene	ND		5.0	0.25	ug/L			07/17/13 15:31	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/17/13 15:31	1
Bromoform	ND		5.0	0.37	ug/L			07/17/13 15:31	1
Bromomethane	ND		10	0.40	ug/L			07/17/13 15:31	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/17/13 15:31	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/17/13 15:31	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/17/13 15:31	1
Chloroethane	ND	*	10	0.38	ug/L			07/17/13 15:31	1
Chloroform	ND		5.0	0.15	ug/L			07/17/13 15:31	1
Chloromethane	ND		10	0.55	ug/L			07/17/13 15:31	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/17/13 15:31	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/17/13 15:31	1
Cyclohexane	ND		10	0.36	ug/L			07/17/13 15:31	1

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: MW-103

Lab Sample ID: 160-3000-3

Date Collected: 07/15/13 11:44

Matrix: Water

Date Received: 07/16/13 08:30

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			07/17/13 15:31	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/17/13 15:31	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/17/13 15:31	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/17/13 15:31	1
Methyl acetate	ND		25	2.3	ug/L			07/17/13 15:31	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/17/13 15:31	1
Methylcyclohexane	ND		10	0.26	ug/L			07/17/13 15:31	1
Methylene Chloride	ND	*	5.0	1.7	ug/L			07/17/13 15:31	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/17/13 15:31	1
o-Xylene	ND		5.0	0.32	ug/L			07/17/13 15:31	1
Styrene	ND		5.0	0.35	ug/L			07/17/13 15:31	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/17/13 15:31	1
Toluene	ND		5.0	1.0	ug/L			07/17/13 15:31	1
trans-1,2-Dichloroethene	ND	*	5.0	0.18	ug/L			07/17/13 15:31	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/17/13 15:31	1
Trichloroethene	ND		5.0	0.29	ug/L			07/17/13 15:31	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/17/13 15:31	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/17/13 15:31	1
Xylenes, Total	ND		10	0.85	ug/L			07/17/13 15:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	124		82 - 132		07/17/13 15:31	1
4-Bromofluorobenzene (Surr)	104		82 - 121		07/17/13 15:31	1
Dibromofluoromethane (Surr)	101		85 - 119		07/17/13 15:31	1
Toluene-d8 (Surr)	102		85 - 115		07/17/13 15:31	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	18000		200	80	ug/L		07/17/13 12:39	07/19/13 16:12	1
Antimony	ND		10	4.0	ug/L		07/17/13 12:39	07/19/13 16:12	1
Arsenic	3.7	J	10	2.0	ug/L		07/17/13 12:39	07/19/13 16:12	1
Barium	290		50	4.0	ug/L		07/17/13 12:39	07/19/13 16:12	1
Beryllium	ND		5.0	0.61	ug/L		07/17/13 12:39	07/19/13 16:12	1
Cadmium	ND		5.0	0.91	ug/L		07/17/13 12:39	07/19/13 16:12	1
Calcium	130000	E	1000	110	ug/L		07/17/13 12:39	07/19/13 16:12	1
Calcium	140000		10000	1100	ug/L		07/17/13 12:39	07/19/13 17:41	10
Chromium	20		10	3.1	ug/L		07/17/13 12:39	07/19/13 16:12	1
Cobalt	7.0	J	50	4.0	ug/L		07/17/13 12:39	07/19/13 16:12	1
Copper	20	J	25	4.6	ug/L		07/17/13 12:39	07/19/13 16:12	1
Iron	13000		100	28	ug/L		07/17/13 12:39	07/19/13 16:12	1
Lead	20		10	1.5	ug/L		07/17/13 12:39	07/19/13 16:12	1
Magnesium	39000		1000	130	ug/L		07/17/13 12:39	07/19/13 16:12	1
Manganese	1000		15	3.3	ug/L		07/17/13 12:39	07/19/13 16:12	1
Nickel	30	J	40	13	ug/L		07/17/13 12:39	07/19/13 16:12	1
Potassium	7200		5000	1700	ug/L		07/17/13 12:39	07/19/13 16:12	1
Selenium	7.3	J	15	2.7	ug/L		07/17/13 12:39	07/19/13 16:12	1
Silver	ND		10	6.0	ug/L		07/17/13 12:39	07/19/13 16:12	1
Sodium	19000		1000	320	ug/L		07/17/13 12:39	07/19/13 16:12	1
Thallium	ND		20	4.0	ug/L		07/17/13 12:39	07/19/13 16:12	1
Vanadium	31	J	50	4.1	ug/L		07/17/13 12:39	07/19/13 16:12	1

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: MW-103

Lab Sample ID: 160-3000-3

Date Collected: 07/15/13 11:44

Matrix: Water

Date Received: 07/16/13 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	74		20	5.2	ug/L		07/17/13 12:39	07/19/13 16:12	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/17/13 12:39	07/19/13 17:02	1
Antimony	ND		10	4.0	ug/L		07/17/13 12:39	07/19/13 17:02	1
Arsenic	ND		10	2.0	ug/L		07/17/13 12:39	07/19/13 17:02	1
Barium	160		50	4.0	ug/L		07/17/13 12:39	07/19/13 17:02	1
Beryllium	ND		5.0	0.61	ug/L		07/17/13 12:39	07/19/13 17:02	1
Cadmium	ND		5.0	0.91	ug/L		07/17/13 12:39	07/19/13 17:02	1
Calcium	120000	E	1000	110	ug/L		07/17/13 12:39	07/19/13 17:02	1
Calcium	140000		10000	1100	ug/L		07/17/13 12:39	07/19/13 18:30	10
Chromium	ND		10	3.1	ug/L		07/17/13 12:39	07/19/13 17:02	1
Cobalt	ND		50	4.0	ug/L		07/17/13 12:39	07/19/13 17:02	1
Copper	ND		25	4.6	ug/L		07/17/13 12:39	07/19/13 17:02	1
Iron	ND		100	28	ug/L		07/17/13 12:39	07/19/13 17:02	1
Lead	1.9	J	10	1.5	ug/L		07/17/13 12:39	07/19/13 17:02	1
Magnesium	35000		1000	130	ug/L		07/17/13 12:39	07/19/13 17:02	1
Manganese	880		15	3.3	ug/L		07/17/13 12:39	07/19/13 17:02	1
Nickel	ND		40	13	ug/L		07/17/13 12:39	07/19/13 17:02	1
Potassium	4000	J	5000	1700	ug/L		07/17/13 12:39	07/19/13 17:02	1
Selenium	ND		15	2.7	ug/L		07/17/13 12:39	07/19/13 17:02	1
Silver	ND		10	6.0	ug/L		07/17/13 12:39	07/19/13 17:02	1
Sodium	18000		1000	320	ug/L		07/17/13 12:39	07/19/13 17:02	1
Thallium	ND		20	4.0	ug/L		07/17/13 12:39	07/19/13 17:02	1
Vanadium	ND		50	4.1	ug/L		07/17/13 12:39	07/19/13 17:02	1
Zinc	5.8	J	20	5.2	ug/L		07/17/13 12:39	07/19/13 17:02	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.060	J	0.20	0.060	ug/L		07/18/13 19:54	07/18/13 23:33	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:55	07/19/13 00:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.032		0.020	0.0040	mg/L			07/16/13 14:32	1
Bromide	0.086	J	0.25	0.025	mg/L			07/16/13 14:32	1
Iodide	ND		1.0	0.10	mg/L			07/16/13 23:17	1
Alkalinity	410	B	5.0	0.54	mg/L			07/26/13 09:51	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33		4.0	0.40	mg/L			07/16/13 14:49	20
Sulfate	49		10	1.0	mg/L			07/16/13 14:49	20

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: PZ-303-AS

Lab Sample ID: 160-3000-4

Date Collected: 07/15/13 12:20

Matrix: Water

Date Received: 07/16/13 08:30

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			07/17/13 15:57	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/17/13 15:57	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/17/13 15:57	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/17/13 15:57	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/17/13 15:57	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/17/13 15:57	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/17/13 15:57	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/17/13 15:57	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/17/13 15:57	1
1,2-Dichloroethane	ND	*	5.0	0.37	ug/L			07/17/13 15:57	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/17/13 15:57	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/17/13 15:57	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/17/13 15:57	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/17/13 15:57	1
2-Hexanone	ND	*	20	0.59	ug/L			07/17/13 15:57	1
4-Methyl-2-pentanone (MIBK)	ND	*	20	0.33	ug/L			07/17/13 15:57	1
Acetone	ND		20	6.7	ug/L			07/17/13 15:57	1
Benzene	50		5.0	0.25	ug/L			07/17/13 15:57	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/17/13 15:57	1
Bromoform	ND		5.0	0.37	ug/L			07/17/13 15:57	1
Bromomethane	ND		10	0.40	ug/L			07/17/13 15:57	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/17/13 15:57	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/17/13 15:57	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/17/13 15:57	1
Chloroethane	0.75	J *	10	0.38	ug/L			07/17/13 15:57	1
Chloroform	ND		5.0	0.15	ug/L			07/17/13 15:57	1
Chloromethane	ND		10	0.55	ug/L			07/17/13 15:57	1
cis-1,2-Dichloroethene	2.2	J	5.0	0.16	ug/L			07/17/13 15:57	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/17/13 15:57	1
Cyclohexane	18		10	0.36	ug/L			07/17/13 15:57	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/17/13 15:57	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/17/13 15:57	1
Ethylbenzene	29		5.0	0.30	ug/L			07/17/13 15:57	1
Isopropylbenzene	7.5		5.0	0.26	ug/L			07/17/13 15:57	1
Methyl acetate	ND		25	2.3	ug/L			07/17/13 15:57	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/17/13 15:57	1
Methylcyclohexane	64		10	0.26	ug/L			07/17/13 15:57	1
Methylene Chloride	ND	*	5.0	1.7	ug/L			07/17/13 15:57	1
m-Xylene & p-Xylene	240		10	1.1	ug/L			07/23/13 22:35	1
o-Xylene	75		5.0	0.32	ug/L			07/17/13 15:57	1
Styrene	ND		5.0	0.35	ug/L			07/17/13 15:57	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/17/13 15:57	1
Toluene	26		5.0	1.0	ug/L			07/17/13 15:57	1
trans-1,2-Dichloroethene	0.66	J *	5.0	0.18	ug/L			07/17/13 15:57	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/17/13 15:57	1
Trichloroethene	ND		5.0	0.29	ug/L			07/17/13 15:57	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/17/13 15:57	1
Vinyl chloride	1.3	J	5.0	0.43	ug/L			07/17/13 15:57	1
Xylenes, Total	280		10	0.85	ug/L			07/17/13 15:57	1

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TestAmerica St. Louis

Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: PZ-303-AS

Lab Sample ID: 160-3000-4

Date Collected: 07/15/13 12:20

Matrix: Water

Date Received: 07/16/13 08:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	123		82 - 132		07/17/13 15:57	1
1,2-Dichloroethane-d4 (Surr)	102		82 - 132		07/23/13 22:35	1
4-Bromofluorobenzene (Surr)	109		82 - 121		07/17/13 15:57	1
4-Bromofluorobenzene (Surr)	101		82 - 121		07/23/13 22:35	1
Dibromofluoromethane (Surr)	101		85 - 119		07/17/13 15:57	1
Dibromofluoromethane (Surr)	103		85 - 119		07/23/13 22:35	1
Toluene-d8 (Surr)	99		85 - 115		07/17/13 15:57	1
Toluene-d8 (Surr)	108		85 - 115		07/23/13 22:35	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/17/13 12:39	07/19/13 16:16	1
Antimony	9.3	J	10	4.0	ug/L		07/17/13 12:39	07/19/13 16:16	1
Arsenic	150		10	2.0	ug/L		07/17/13 12:39	07/19/13 16:16	1
Barium	830		50	4.0	ug/L		07/17/13 12:39	07/19/13 16:16	1
Beryllium	ND		5.0	0.61	ug/L		07/17/13 12:39	07/19/13 16:16	1
Cadmium	ND		5.0	0.91	ug/L		07/17/13 12:39	07/19/13 16:16	1
Calcium	270000	E	1000	110	ug/L		07/17/13 12:39	07/19/13 16:16	1
Calcium	360000		10000	1100	ug/L		07/17/13 12:39	07/19/13 17:45	10
Chromium	ND		10	3.1	ug/L		07/17/13 12:39	07/19/13 16:16	1
Cobalt	9.6	J	50	4.0	ug/L		07/17/13 12:39	07/19/13 16:16	1
Copper	ND		25	4.6	ug/L		07/17/13 12:39	07/19/13 16:16	1
Iron	120000	E	100	28	ug/L		07/17/13 12:39	07/19/13 16:16	1
Iron	120000		1000	280	ug/L		07/17/13 12:39	07/19/13 17:45	10
Lead	10		10	1.5	ug/L		07/17/13 12:39	07/19/13 16:16	1
Magnesium	78000	E	1000	130	ug/L		07/17/13 12:39	07/19/13 16:16	1
Magnesium	78000		10000	1300	ug/L		07/17/13 12:39	07/19/13 17:45	10
Manganese	2500		15	3.3	ug/L		07/17/13 12:39	07/19/13 16:16	1
Nickel	20	J	40	13	ug/L		07/17/13 12:39	07/19/13 16:16	1
Potassium	5000		5000	1700	ug/L		07/17/13 12:39	07/19/13 16:16	1
Selenium	7.6	J	15	2.7	ug/L		07/17/13 12:39	07/19/13 16:16	1
Silver	ND		10	6.0	ug/L		07/17/13 12:39	07/19/13 16:16	1
Sodium	64000		1000	320	ug/L		07/17/13 12:39	07/19/13 16:16	1
Thallium	ND		20	4.0	ug/L		07/17/13 12:39	07/19/13 16:16	1
Vanadium	5.6	J	50	4.1	ug/L		07/17/13 12:39	07/19/13 16:16	1
Zinc	9.0	J	20	5.2	ug/L		07/17/13 12:39	07/19/13 16:16	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/17/13 12:39	07/19/13 17:06	1
Antimony	10		10	4.0	ug/L		07/17/13 12:39	07/19/13 17:06	1
Arsenic	150		10	2.0	ug/L		07/17/13 12:39	07/19/13 17:06	1
Barium	690		50	4.0	ug/L		07/17/13 12:39	07/19/13 17:06	1
Beryllium	ND		5.0	0.61	ug/L		07/17/13 12:39	07/19/13 17:06	1
Cadmium	ND		5.0	0.91	ug/L		07/17/13 12:39	07/19/13 17:06	1
Calcium	270000	E	1000	110	ug/L		07/17/13 12:39	07/19/13 17:06	1
Calcium	370000		10000	1100	ug/L		07/17/13 12:39	07/19/13 18:34	10
Chromium	ND		10	3.1	ug/L		07/17/13 12:39	07/19/13 17:06	1
Cobalt	7.5	J	50	4.0	ug/L		07/17/13 12:39	07/19/13 17:06	1
Copper	ND		25	4.6	ug/L		07/17/13 12:39	07/19/13 17:06	1

TestAmerica St. Louis

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: PZ-303-AS

Lab Sample ID: 160-3000-4

Date Collected: 07/15/13 12:20

Matrix: Water

Date Received: 07/16/13 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	110000	E	100	28	ug/L		07/17/13 12:39	07/19/13 17:06	1
Iron	120000		1000	280	ug/L		07/17/13 12:39	07/19/13 18:34	10
Lead	5.4	J	10	1.5	ug/L		07/17/13 12:39	07/19/13 17:06	1
Magnesium	77000	E	1000	130	ug/L		07/17/13 12:39	07/19/13 17:06	1
Magnesium	80000		10000	1300	ug/L		07/17/13 12:39	07/19/13 18:34	10
Manganese	2400		15	3.3	ug/L		07/17/13 12:39	07/19/13 17:06	1
Nickel	18	J	40	13	ug/L		07/17/13 12:39	07/19/13 17:06	1
Potassium	4900	J	5000	1700	ug/L		07/17/13 12:39	07/19/13 17:06	1
Selenium	7.1	J	15	2.7	ug/L		07/17/13 12:39	07/19/13 17:06	1
Silver	ND		10	6.0	ug/L		07/17/13 12:39	07/19/13 17:06	1
Sodium	64000		1000	320	ug/L		07/17/13 12:39	07/19/13 17:06	1
Thallium	ND		20	4.0	ug/L		07/17/13 12:39	07/19/13 17:06	1
Vanadium	5.8	J	50	4.1	ug/L		07/17/13 12:39	07/19/13 17:06	1
Zinc	ND		20	5.2	ug/L		07/17/13 12:39	07/19/13 17:06	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:54	07/18/13 23:35	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:55	07/19/13 00:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.015	J	0.020	0.0040	mg/L			07/16/13 15:40	1
Bromide	0.88		0.25	0.025	mg/L			07/16/13 15:40	1
Iodide	0.23	J	1.0	0.10	mg/L			07/16/13 23:32	1
Alkalinity	1200	B	25	2.7	mg/L			07/26/13 09:51	5

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	83		4.0	0.40	mg/L			07/16/13 15:57	20
Sulfate	130		10	1.0	mg/L			07/16/13 15:57	20

Client Sample ID: I-11

Lab Sample ID: 160-3000-5

Date Collected: 07/15/13 13:17

Matrix: Water

Date Received: 07/16/13 08:30

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			07/17/13 16:24	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/17/13 16:24	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/17/13 16:24	1
1,1-Dichloroethane	0.59	J	5.0	0.39	ug/L			07/17/13 16:24	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/17/13 16:24	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/17/13 16:24	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/17/13 16:24	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/17/13 16:24	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/17/13 16:24	1
1,2-Dichloroethane	ND	*	5.0	0.37	ug/L			07/17/13 16:24	1

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: I-11

Lab Sample ID: 160-3000-5

Date Collected: 07/15/13 13:17

Matrix: Water

Date Received: 07/16/13 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/17/13 16:24	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/17/13 16:24	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/17/13 16:24	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/17/13 16:24	1
2-Hexanone	ND	*	20	0.59	ug/L			07/17/13 16:24	1
4-Methyl-2-pentanone (MIBK)	ND	*	20	0.33	ug/L			07/17/13 16:24	1
Acetone	ND		20	6.7	ug/L			07/17/13 16:24	1
Benzene	ND		5.0	0.25	ug/L			07/17/13 16:24	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/17/13 16:24	1
Bromoform	ND		5.0	0.37	ug/L			07/17/13 16:24	1
Bromomethane	ND		10	0.40	ug/L			07/17/13 16:24	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/17/13 16:24	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/17/13 16:24	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/17/13 16:24	1
Chloroethane	2.2	J *	10	0.38	ug/L			07/17/13 16:24	1
Chloroform	ND		5.0	0.15	ug/L			07/17/13 16:24	1
Chloromethane	ND		10	0.55	ug/L			07/17/13 16:24	1
cis-1,2-Dichloroethene	2.0	J	5.0	0.16	ug/L			07/17/13 16:24	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/17/13 16:24	1
Cyclohexane	ND		10	0.36	ug/L			07/17/13 16:24	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/17/13 16:24	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/17/13 16:24	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/17/13 16:24	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/17/13 16:24	1
Methyl acetate	ND		25	2.3	ug/L			07/17/13 16:24	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/17/13 16:24	1
Methylcyclohexane	ND		10	0.26	ug/L			07/17/13 16:24	1
Methylene Chloride	ND	*	5.0	1.7	ug/L			07/17/13 16:24	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/17/13 16:24	1
o-Xylene	ND		5.0	0.32	ug/L			07/17/13 16:24	1
Styrene	ND		5.0	0.35	ug/L			07/17/13 16:24	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/17/13 16:24	1
Toluene	ND		5.0	1.0	ug/L			07/17/13 16:24	1
trans-1,2-Dichloroethene	ND	*	5.0	0.18	ug/L			07/17/13 16:24	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/17/13 16:24	1
Trichloroethene	ND		5.0	0.29	ug/L			07/17/13 16:24	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/17/13 16:24	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/17/13 16:24	1
Xylenes, Total	ND		10	0.85	ug/L			07/17/13 16:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		82 - 132		07/17/13 16:24	1
4-Bromofluorobenzene (Surr)	101		82 - 121		07/17/13 16:24	1
Dibromofluoromethane (Surr)	102		85 - 119		07/17/13 16:24	1
Toluene-d8 (Surr)	101		85 - 115		07/17/13 16:24	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	110	J	200	80	ug/L		07/17/13 12:39	07/19/13 16:20	1
Antimony	4.8	J	10	4.0	ug/L		07/17/13 12:39	07/19/13 16:20	1

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: I-11

Lab Sample ID: 160-3000-5

Date Collected: 07/15/13 13:17

Matrix: Water

Date Received: 07/16/13 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	17		10	2.0	ug/L		07/17/13 12:39	07/19/13 16:20	1
Barium	820		50	4.0	ug/L		07/17/13 12:39	07/19/13 16:20	1
Beryllium	ND		5.0	0.61	ug/L		07/17/13 12:39	07/19/13 16:20	1
Cadmium	ND		5.0	0.91	ug/L		07/17/13 12:39	07/19/13 16:20	1
Calcium	200000	E	1000	110	ug/L		07/17/13 12:39	07/19/13 16:20	1
Calcium	230000		10000	1100	ug/L		07/17/13 12:39	07/19/13 17:49	10
Chromium	ND		10	3.1	ug/L		07/17/13 12:39	07/19/13 16:20	1
Cobalt	ND		50	4.0	ug/L		07/17/13 12:39	07/19/13 16:20	1
Copper	ND		25	4.6	ug/L		07/17/13 12:39	07/19/13 16:20	1
Iron	30000		100	28	ug/L		07/17/13 12:39	07/19/13 16:20	1
Iron	30000		1000	280	ug/L		07/17/13 12:39	07/19/13 17:49	10
Lead	3.0	J	10	1.5	ug/L		07/17/13 12:39	07/19/13 16:20	1
Magnesium	81000	E	1000	130	ug/L		07/17/13 12:39	07/19/13 16:20	1
Magnesium	79000		10000	1300	ug/L		07/17/13 12:39	07/19/13 17:49	10
Manganese	1800		15	3.3	ug/L		07/17/13 12:39	07/19/13 16:20	1
Nickel	15	J	40	13	ug/L		07/17/13 12:39	07/19/13 16:20	1
Potassium	24000		5000	1700	ug/L		07/17/13 12:39	07/19/13 16:20	1
Selenium	ND		15	2.7	ug/L		07/17/13 12:39	07/19/13 16:20	1
Silver	ND		10	6.0	ug/L		07/17/13 12:39	07/19/13 16:20	1
Sodium	120000	E	1000	320	ug/L		07/17/13 12:39	07/19/13 16:20	1
Sodium	120000		10000	3200	ug/L		07/17/13 12:39	07/19/13 17:49	10
Thallium	ND		20	4.0	ug/L		07/17/13 12:39	07/19/13 16:20	1
Vanadium	ND		50	4.1	ug/L		07/17/13 12:39	07/19/13 16:20	1
Zinc	5.7	J	20	5.2	ug/L		07/17/13 12:39	07/19/13 16:20	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/17/13 12:39	07/19/13 17:10	1
Antimony	4.2	J	10	4.0	ug/L		07/17/13 12:39	07/19/13 17:10	1
Arsenic	16		10	2.0	ug/L		07/17/13 12:39	07/19/13 17:10	1
Barium	830		50	4.0	ug/L		07/17/13 12:39	07/19/13 17:10	1
Beryllium	ND		5.0	0.61	ug/L		07/17/13 12:39	07/19/13 17:10	1
Cadmium	ND		5.0	0.91	ug/L		07/17/13 12:39	07/19/13 17:10	1
Calcium	200000	E	1000	110	ug/L		07/17/13 12:39	07/19/13 17:10	1
Calcium	240000		10000	1100	ug/L		07/17/13 12:39	07/19/13 18:38	10
Chromium	ND		10	3.1	ug/L		07/17/13 12:39	07/19/13 17:10	1
Cobalt	ND		50	4.0	ug/L		07/17/13 12:39	07/19/13 17:10	1
Copper	ND		25	4.6	ug/L		07/17/13 12:39	07/19/13 17:10	1
Iron	30000		100	28	ug/L		07/17/13 12:39	07/19/13 17:10	1
Iron	30000		1000	280	ug/L		07/17/13 12:39	07/19/13 18:38	10
Lead	2.4	J	10	1.5	ug/L		07/17/13 12:39	07/19/13 17:10	1
Magnesium	80000	E	1000	130	ug/L		07/17/13 12:39	07/19/13 17:10	1
Magnesium	82000		10000	1300	ug/L		07/17/13 12:39	07/19/13 18:38	10
Manganese	1800		15	3.3	ug/L		07/17/13 12:39	07/19/13 17:10	1
Nickel	15	J	40	13	ug/L		07/17/13 12:39	07/19/13 17:10	1
Potassium	25000		5000	1700	ug/L		07/17/13 12:39	07/19/13 17:10	1
Selenium	2.8	J	15	2.7	ug/L		07/17/13 12:39	07/19/13 17:10	1
Silver	ND		10	6.0	ug/L		07/17/13 12:39	07/19/13 17:10	1
Sodium	120000	E	1000	320	ug/L		07/17/13 12:39	07/19/13 17:10	1
Sodium	120000		10000	3200	ug/L		07/17/13 12:39	07/19/13 18:38	10

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: I-11

Lab Sample ID: 160-3000-5

Date Collected: 07/15/13 13:17

Matrix: Water

Date Received: 07/16/13 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		20	4.0	ug/L		07/17/13 12:39	07/19/13 17:10	1
Vanadium	ND		50	4.1	ug/L		07/17/13 12:39	07/19/13 17:10	1
Zinc	ND		20	5.2	ug/L		07/17/13 12:39	07/19/13 17:10	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:54	07/18/13 23:36	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:55	07/19/13 00:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0099	J	0.020	0.0040	mg/L			07/16/13 16:31	1
Bromide	2.4		0.25	0.025	mg/L			07/16/13 16:31	1
Iodide	0.31	J	1.0	0.10	mg/L			07/17/13 00:02	1
Alkalinity	890	B	5.0	0.54	mg/L			07/26/13 09:51	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	85		10	1.0	mg/L			07/16/13 16:48	20

General Chemistry - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	220		20	2.0	mg/L			07/16/13 17:05	100

Client Sample ID: S-10

Lab Sample ID: 160-3000-6

Date Collected: 07/15/13 14:05

Matrix: Water

Date Received: 07/16/13 08:30

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			07/17/13 16:50	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/17/13 16:50	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/17/13 16:50	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/17/13 16:50	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/17/13 16:50	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/17/13 16:50	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/17/13 16:50	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/17/13 16:50	1
1,2-Dichlorobenzene	0.45	J	5.0	0.28	ug/L			07/17/13 16:50	1
1,2-Dichloroethane	ND	*	5.0	0.37	ug/L			07/17/13 16:50	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/17/13 16:50	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/17/13 16:50	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/17/13 16:50	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/17/13 16:50	1
2-Hexanone	ND	*	20	0.59	ug/L			07/17/13 16:50	1
4-Methyl-2-pentanone (MIBK)	ND	*	20	0.33	ug/L			07/17/13 16:50	1
Acetone	ND		20	6.7	ug/L			07/17/13 16:50	1
Benzene	4.0	J	5.0	0.25	ug/L			07/17/13 16:50	1

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: S-10

Lab Sample ID: 160-3000-6

Date Collected: 07/15/13 14:05

Matrix: Water

Date Received: 07/16/13 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		5.0	0.25	ug/L			07/17/13 16:50	1
Bromoform	ND		5.0	0.37	ug/L			07/17/13 16:50	1
Bromomethane	ND		10	0.40	ug/L			07/17/13 16:50	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/17/13 16:50	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/17/13 16:50	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/17/13 16:50	1
Chloroethane	ND	*	10	0.38	ug/L			07/17/13 16:50	1
Chloroform	ND		5.0	0.15	ug/L			07/17/13 16:50	1
Chloromethane	ND		10	0.55	ug/L			07/17/13 16:50	1
cis-1,2-Dichloroethene	1.1	J	5.0	0.16	ug/L			07/17/13 16:50	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/17/13 16:50	1
Cyclohexane	0.75	J	10	0.36	ug/L			07/17/13 16:50	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/17/13 16:50	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/17/13 16:50	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/17/13 16:50	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/17/13 16:50	1
Methyl acetate	ND		25	2.3	ug/L			07/17/13 16:50	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/17/13 16:50	1
Methylcyclohexane	0.66	J	10	0.26	ug/L			07/17/13 16:50	1
Methylene Chloride	ND	*	5.0	1.7	ug/L			07/17/13 16:50	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/17/13 16:50	1
o-Xylene	ND		5.0	0.32	ug/L			07/17/13 16:50	1
Styrene	ND		5.0	0.35	ug/L			07/17/13 16:50	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/17/13 16:50	1
Toluene	ND		5.0	1.0	ug/L			07/17/13 16:50	1
trans-1,2-Dichloroethene	ND	*	5.0	0.18	ug/L			07/17/13 16:50	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/17/13 16:50	1
Trichloroethene	ND		5.0	0.29	ug/L			07/17/13 16:50	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/17/13 16:50	1
Vinyl chloride	1.1	J	5.0	0.43	ug/L			07/17/13 16:50	1
Xylenes, Total	ND		10	0.85	ug/L			07/17/13 16:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		82 - 132		07/17/13 16:50	1
4-Bromofluorobenzene (Surr)	98		82 - 121		07/17/13 16:50	1
Dibromofluoromethane (Surr)	103		85 - 119		07/17/13 16:50	1
Toluene-d8 (Surr)	99		85 - 115		07/17/13 16:50	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	350		200	80	ug/L		07/17/13 12:39	07/19/13 16:24	1
Antimony	6.5	J	10	4.0	ug/L		07/17/13 12:39	07/19/13 16:24	1
Arsenic	46		10	2.0	ug/L		07/17/13 12:39	07/19/13 16:24	1
Barium	650		50	4.0	ug/L		07/17/13 12:39	07/19/13 16:24	1
Beryllium	ND		5.0	0.61	ug/L		07/17/13 12:39	07/19/13 16:24	1
Cadmium	ND		5.0	0.91	ug/L		07/17/13 12:39	07/19/13 16:24	1
Calcium	220000	E	1000	110	ug/L		07/17/13 12:39	07/19/13 16:24	1
Calcium	270000		10000	1100	ug/L		07/17/13 12:39	07/19/13 17:52	10
Chromium	ND		10	3.1	ug/L		07/17/13 12:39	07/19/13 16:24	1
Cobalt	ND		50	4.0	ug/L		07/17/13 12:39	07/19/13 16:24	1

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: S-10

Lab Sample ID: 160-3000-6

Date Collected: 07/15/13 14:05

Matrix: Water

Date Received: 07/16/13 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		25	4.6	ug/L		07/17/13 12:39	07/19/13 16:24	1
Iron	62000		100	28	ug/L		07/17/13 12:39	07/19/13 16:24	1
Iron	62000		1000	280	ug/L		07/17/13 12:39	07/19/13 17:52	10
Lead	4.4	J	10	1.5	ug/L		07/17/13 12:39	07/19/13 16:24	1
Magnesium	100000	E	1000	130	ug/L		07/17/13 12:39	07/19/13 16:24	1
Magnesium	98000		10000	1300	ug/L		07/17/13 12:39	07/19/13 17:52	10
Manganese	2400		15	3.3	ug/L		07/17/13 12:39	07/19/13 16:24	1
Nickel	14	J	40	13	ug/L		07/17/13 12:39	07/19/13 16:24	1
Potassium	33000		5000	1700	ug/L		07/17/13 12:39	07/19/13 16:24	1
Selenium	4.9	J	15	2.7	ug/L		07/17/13 12:39	07/19/13 16:24	1
Silver	ND		10	6.0	ug/L		07/17/13 12:39	07/19/13 16:24	1
Sodium	160000	E	1000	320	ug/L		07/17/13 12:39	07/19/13 16:24	1
Sodium	150000		10000	3200	ug/L		07/17/13 12:39	07/19/13 17:52	10
Thallium	ND		20	4.0	ug/L		07/17/13 12:39	07/19/13 16:24	1
Vanadium	4.7	J	50	4.1	ug/L		07/17/13 12:39	07/19/13 16:24	1
Zinc	ND		20	5.2	ug/L		07/17/13 12:39	07/19/13 16:24	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	110	J	200	80	ug/L		07/17/13 12:39	07/19/13 17:14	1
Antimony	5.3	J	10	4.0	ug/L		07/17/13 12:39	07/19/13 17:14	1
Arsenic	46		10	2.0	ug/L		07/17/13 12:39	07/19/13 17:14	1
Barium	650		50	4.0	ug/L		07/17/13 12:39	07/19/13 17:14	1
Beryllium	ND		5.0	0.61	ug/L		07/17/13 12:39	07/19/13 17:14	1
Cadmium	ND		5.0	0.91	ug/L		07/17/13 12:39	07/19/13 17:14	1
Calcium	210000	E	1000	110	ug/L		07/17/13 12:39	07/19/13 17:14	1
Calcium	280000		10000	1100	ug/L		07/17/13 12:39	07/19/13 18:42	10
Chromium	ND		10	3.1	ug/L		07/17/13 12:39	07/19/13 17:14	1
Cobalt	ND		50	4.0	ug/L		07/17/13 12:39	07/19/13 17:14	1
Copper	ND		25	4.6	ug/L		07/17/13 12:39	07/19/13 17:14	1
Iron	61000		100	28	ug/L		07/17/13 12:39	07/19/13 17:14	1
Iron	64000		1000	280	ug/L		07/17/13 12:39	07/19/13 18:42	10
Lead	4.0	J	10	1.5	ug/L		07/17/13 12:39	07/19/13 17:14	1
Magnesium	96000	E	1000	130	ug/L		07/17/13 12:39	07/19/13 17:14	1
Magnesium	100000		10000	1300	ug/L		07/17/13 12:39	07/19/13 18:42	10
Manganese	2300		15	3.3	ug/L		07/17/13 12:39	07/19/13 17:14	1
Nickel	14	J	40	13	ug/L		07/17/13 12:39	07/19/13 17:14	1
Potassium	33000		5000	1700	ug/L		07/17/13 12:39	07/19/13 17:14	1
Selenium	4.7	J	15	2.7	ug/L		07/17/13 12:39	07/19/13 17:14	1
Silver	ND		10	6.0	ug/L		07/17/13 12:39	07/19/13 17:14	1
Sodium	160000	E	1000	320	ug/L		07/17/13 12:39	07/19/13 17:14	1
Sodium	160000		10000	3200	ug/L		07/17/13 12:39	07/19/13 18:42	10
Thallium	ND		20	4.0	ug/L		07/17/13 12:39	07/19/13 17:14	1
Vanadium	ND		50	4.1	ug/L		07/17/13 12:39	07/19/13 17:14	1
Zinc	ND		20	5.2	ug/L		07/17/13 12:39	07/19/13 17:14	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:54	07/18/13 23:38	1

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: S-10

Lab Sample ID: 160-3000-6

Date Collected: 07/15/13 14:05

Matrix: Water

Date Received: 07/16/13 08:30

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:55	07/19/13 00:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.022		0.020	0.0040	mg/L			07/16/13 17:22	1
Bromide	1.7		0.25	0.025	mg/L			07/16/13 17:22	1
Iodide	0.24	J	1.0	0.10	mg/L			07/17/13 00:32	1
Alkalinity	1100	B	25	2.7	mg/L			07/26/13 09:51	5

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	260		10	1.0	mg/L			07/16/13 17:39	20

General Chemistry - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		20	2.0	mg/L			07/16/13 17:56	100

Client Sample ID: FIELD BLANK @ D-12

Lab Sample ID: 160-3000-7

Date Collected: 07/15/13 14:30

Matrix: Water

Date Received: 07/16/13 08:30

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			07/17/13 17:16	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/17/13 17:16	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/17/13 17:16	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/17/13 17:16	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/17/13 17:16	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/17/13 17:16	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/17/13 17:16	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/17/13 17:16	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/17/13 17:16	1
1,2-Dichloroethane	ND	*	5.0	0.37	ug/L			07/17/13 17:16	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/17/13 17:16	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/17/13 17:16	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/17/13 17:16	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/17/13 17:16	1
2-Hexanone	ND	*	20	0.59	ug/L			07/17/13 17:16	1
4-Methyl-2-pentanone (MIBK)	ND	*	20	0.33	ug/L			07/17/13 17:16	1
Acetone	ND		20	6.7	ug/L			07/17/13 17:16	1
Benzene	ND		5.0	0.25	ug/L			07/17/13 17:16	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/17/13 17:16	1
Bromoform	ND		5.0	0.37	ug/L			07/17/13 17:16	1
Bromomethane	ND		10	0.40	ug/L			07/17/13 17:16	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/17/13 17:16	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/17/13 17:16	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/17/13 17:16	1
Chloroethane	ND	*	10	0.38	ug/L			07/17/13 17:16	1
Chloroform	ND		5.0	0.15	ug/L			07/17/13 17:16	1
Chloromethane	ND		10	0.55	ug/L			07/17/13 17:16	1

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: FIELD BLANK @ D-12

Lab Sample ID: 160-3000-7

Date Collected: 07/15/13 14:30

Matrix: Water

Date Received: 07/16/13 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/17/13 17:16	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/17/13 17:16	1
Cyclohexane	ND		10	0.36	ug/L			07/17/13 17:16	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/17/13 17:16	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/17/13 17:16	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/17/13 17:16	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/17/13 17:16	1
Methyl acetate	ND		25	2.3	ug/L			07/17/13 17:16	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/17/13 17:16	1
Methylcyclohexane	ND		10	0.26	ug/L			07/17/13 17:16	1
Methylene Chloride	ND	*	5.0	1.7	ug/L			07/17/13 17:16	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/17/13 17:16	1
o-Xylene	ND		5.0	0.32	ug/L			07/17/13 17:16	1
Styrene	ND		5.0	0.35	ug/L			07/17/13 17:16	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/17/13 17:16	1
Toluene	ND		5.0	1.0	ug/L			07/17/13 17:16	1
trans-1,2-Dichloroethene	ND	*	5.0	0.18	ug/L			07/17/13 17:16	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/17/13 17:16	1
Trichloroethene	ND		5.0	0.29	ug/L			07/17/13 17:16	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/17/13 17:16	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/17/13 17:16	1
Xylenes, Total	ND		10	0.85	ug/L			07/17/13 17:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	124		82 - 132		07/17/13 17:16	1
4-Bromofluorobenzene (Surr)	106		82 - 121		07/17/13 17:16	1
Dibromofluoromethane (Surr)	104		85 - 119		07/17/13 17:16	1
Toluene-d8 (Surr)	98		85 - 115		07/17/13 17:16	1

Client Sample ID: D-12

Lab Sample ID: 160-3000-8

Date Collected: 07/15/13 15:27

Matrix: Water

Date Received: 07/16/13 08:30

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			07/17/13 08:58	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/17/13 08:58	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/17/13 08:58	1
1,1-Dichloroethane	2.0	J	5.0	0.39	ug/L			07/17/13 08:58	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/17/13 08:58	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/17/13 08:58	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/17/13 08:58	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/17/13 08:58	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/17/13 08:58	1
1,2-Dichloroethane	ND	*	5.0	0.37	ug/L			07/17/13 08:58	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/17/13 08:58	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/17/13 08:58	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/17/13 08:58	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/17/13 08:58	1
2-Hexanone	ND	*	20	0.59	ug/L			07/17/13 08:58	1

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: D-12

Lab Sample ID: 160-3000-8

Date Collected: 07/15/13 15:27

Matrix: Water

Date Received: 07/16/13 08:30

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)	24		20	0.33	ug/L			07/23/13 22:59	1
Acetone	ND		20	6.7	ug/L			07/17/13 08:58	1
Benzene	4.6	J	5.0	0.25	ug/L			07/17/13 08:58	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/17/13 08:58	1
Bromoform	ND		5.0	0.37	ug/L			07/17/13 08:58	1
Bromomethane	ND		10	0.40	ug/L			07/17/13 08:58	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/17/13 08:58	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/17/13 08:58	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/17/13 08:58	1
Chloroethane	ND	*	10	0.38	ug/L			07/17/13 08:58	1
Chloroform	ND		5.0	0.15	ug/L			07/17/13 08:58	1
Chloromethane	ND		10	0.55	ug/L			07/17/13 08:58	1
cis-1,2-Dichloroethene	2.1	J	5.0	0.16	ug/L			07/17/13 08:58	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/17/13 08:58	1
Cyclohexane	ND		10	0.36	ug/L			07/17/13 08:58	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/17/13 08:58	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/17/13 08:58	1
Ethylbenzene	0.51	J	5.0	0.30	ug/L			07/17/13 08:58	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/17/13 08:58	1
Methyl acetate	ND		25	2.3	ug/L			07/17/13 08:58	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/17/13 08:58	1
Methylcyclohexane	ND		10	0.26	ug/L			07/17/13 08:58	1
Methylene Chloride	ND	*	5.0	1.7	ug/L			07/17/13 08:58	1
m-Xylene & p-Xylene	0.74	J	5.0	0.57	ug/L			07/17/13 08:58	1
o-Xylene	0.43	J	5.0	0.32	ug/L			07/17/13 08:58	1
Styrene	ND		5.0	0.35	ug/L			07/17/13 08:58	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/17/13 08:58	1
Toluene	ND		5.0	1.0	ug/L			07/17/13 08:58	1
trans-1,2-Dichloroethene	ND	*	5.0	0.18	ug/L			07/17/13 08:58	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/17/13 08:58	1
Trichloroethene	ND		5.0	0.29	ug/L			07/17/13 08:58	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/17/13 08:58	1
Vinyl chloride	0.55	J	5.0	0.43	ug/L			07/17/13 08:58	1
Xylenes, Total	1.2	J	10	0.85	ug/L			07/17/13 08:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		82 - 132		07/17/13 08:58	1
1,2-Dichloroethane-d4 (Surr)	105		82 - 132		07/23/13 22:59	1
4-Bromofluorobenzene (Surr)	104		82 - 121		07/17/13 08:58	1
4-Bromofluorobenzene (Surr)	95		82 - 121		07/23/13 22:59	1
Dibromofluoromethane (Surr)	101		85 - 119		07/17/13 08:58	1
Dibromofluoromethane (Surr)	102		85 - 119		07/23/13 22:59	1
Toluene-d8 (Surr)	101		85 - 115		07/17/13 08:58	1
Toluene-d8 (Surr)	103		85 - 115		07/23/13 22:59	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	250		200	80	ug/L		07/17/13 12:39	07/19/13 16:27	1
Antimony	4.4	J	10	4.0	ug/L		07/17/13 12:39	07/19/13 16:27	1
Arsenic	ND		10	2.0	ug/L		07/17/13 12:39	07/19/13 16:27	1

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: D-12

Lab Sample ID: 160-3000-8

Date Collected: 07/15/13 15:27

Matrix: Water

Date Received: 07/16/13 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	440		50	4.0	ug/L		07/17/13 12:39	07/19/13 16:27	1
Beryllium	ND		5.0	0.61	ug/L		07/17/13 12:39	07/19/13 16:27	1
Cadmium	ND		5.0	0.91	ug/L		07/17/13 12:39	07/19/13 16:27	1
Calcium	460000	E	1000	110	ug/L		07/17/13 12:39	07/19/13 16:27	1
Calcium	650000	E	10000	1100	ug/L		07/17/13 12:39	07/19/13 17:56	10
Calcium	650000		50000	5300	ug/L		07/17/13 12:39	07/22/13 15:11	50
Chromium	ND		10	3.1	ug/L		07/17/13 12:39	07/19/13 16:27	1
Cobalt	ND		50	4.0	ug/L		07/17/13 12:39	07/19/13 16:27	1
Copper	6.2	J	25	4.6	ug/L		07/17/13 12:39	07/19/13 16:27	1
Iron	9700		100	28	ug/L		07/17/13 12:39	07/19/13 16:27	1
Iron	9700		1000	280	ug/L		07/17/13 12:39	07/19/13 17:56	10
Lead	ND		10	1.5	ug/L		07/17/13 12:39	07/19/13 16:27	1
Magnesium	68000	E	1000	130	ug/L		07/17/13 12:39	07/19/13 16:27	1
Magnesium	67000		10000	1300	ug/L		07/17/13 12:39	07/19/13 17:56	10
Manganese	1000		15	3.3	ug/L		07/17/13 12:39	07/19/13 16:27	1
Nickel	15	J	40	13	ug/L		07/17/13 12:39	07/19/13 16:27	1
Potassium	14000		5000	1700	ug/L		07/17/13 12:39	07/19/13 16:27	1
Selenium	8.1	J	15	2.7	ug/L		07/17/13 12:39	07/19/13 16:27	1
Silver	ND		10	6.0	ug/L		07/17/13 12:39	07/19/13 16:27	1
Sodium	180000	E	1000	320	ug/L		07/17/13 12:39	07/19/13 16:27	1
Sodium	170000		10000	3200	ug/L		07/17/13 12:39	07/19/13 17:56	10
Thallium	ND		20	4.0	ug/L		07/17/13 12:39	07/19/13 16:27	1
Vanadium	ND		50	4.1	ug/L		07/17/13 12:39	07/19/13 16:27	1
Zinc	ND		20	5.2	ug/L		07/17/13 12:39	07/19/13 16:27	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	220		200	80	ug/L		07/18/13 15:26	07/19/13 19:08	1
Antimony	5.1	J	10	4.0	ug/L		07/18/13 15:26	07/19/13 19:08	1
Arsenic	ND		10	2.0	ug/L		07/18/13 15:26	07/19/13 19:08	1
Barium	450		50	4.0	ug/L		07/18/13 15:26	07/19/13 19:08	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:26	07/19/13 19:08	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:26	07/19/13 19:08	1
Calcium	460000	E	1000	110	ug/L		07/18/13 15:26	07/19/13 19:08	1
Calcium	650000	E	10000	1100	ug/L		07/18/13 15:26	07/19/13 20:37	10
Calcium	700000		50000	5300	ug/L		07/18/13 15:26	07/22/13 15:34	50
Chromium	5.6	J	10	3.1	ug/L		07/18/13 15:26	07/19/13 19:08	1
Cobalt	4.0	J	50	4.0	ug/L		07/18/13 15:26	07/19/13 19:08	1
Copper	8.4	J	25	4.6	ug/L		07/18/13 15:26	07/19/13 19:08	1
Iron	8500		100	28	ug/L		07/18/13 15:26	07/19/13 19:08	1
Iron	8600		1000	280	ug/L		07/18/13 15:26	07/19/13 20:37	10
Lead	ND		10	1.5	ug/L		07/18/13 15:26	07/19/13 19:08	1
Magnesium	67000	E	1000	130	ug/L		07/18/13 15:26	07/19/13 19:08	1
Magnesium	67000		10000	1300	ug/L		07/18/13 15:26	07/19/13 20:37	10
Manganese	990		15	3.3	ug/L		07/18/13 15:26	07/19/13 19:08	1
Nickel	16	J	40	13	ug/L		07/18/13 15:26	07/19/13 19:08	1
Potassium	14000		5000	1700	ug/L		07/18/13 15:26	07/19/13 19:08	1
Selenium	11	J	15	2.7	ug/L		07/18/13 15:26	07/19/13 19:08	1
Silver	ND		10	6.0	ug/L		07/18/13 15:26	07/19/13 19:08	1
Sodium	180000	E	1000	320	ug/L		07/18/13 15:26	07/19/13 19:08	1

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: D-12

Lab Sample ID: 160-3000-8

Date Collected: 07/15/13 15:27

Matrix: Water

Date Received: 07/16/13 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	180000		10000	3200	ug/L		07/18/13 15:26	07/19/13 20:37	10
Thallium	ND		20	4.0	ug/L		07/18/13 15:26	07/19/13 19:08	1
Vanadium	5.8	J	50	4.1	ug/L		07/18/13 15:26	07/19/13 19:08	1
Zinc	ND		20	5.2	ug/L		07/18/13 15:26	07/19/13 19:08	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:54	07/18/13 23:40	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:55	07/19/13 00:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0087	J	0.020	0.0040	mg/L			07/16/13 18:46	1
Bromide	4.2		0.25	0.025	mg/L			07/16/13 18:46	1
Iodide	0.37	J	1.0	0.10	mg/L			07/17/13 01:31	1
Alkalinity	1000	B	25	2.7	mg/L			07/26/13 09:51	5

General Chemistry - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	250		40	4.0	mg/L			07/16/13 19:20	200
Sulfate	750		100	10	mg/L			07/16/13 19:20	200

Client Sample ID: DUPLICATE 05

Lab Sample ID: 160-3000-9

Date Collected: 07/15/13 00:00

Matrix: Water

Date Received: 07/16/13 08:30

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			07/17/13 17:42	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/17/13 17:42	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/17/13 17:42	1
1,1-Dichloroethane	2.0	J	5.0	0.39	ug/L			07/17/13 17:42	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/17/13 17:42	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/17/13 17:42	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/17/13 17:42	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/17/13 17:42	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/17/13 17:42	1
1,2-Dichloroethane	2.6	J*	5.0	0.37	ug/L			07/17/13 17:42	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/17/13 17:42	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/17/13 17:42	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/17/13 17:42	1
2-Butanone (MEK)	16	J	20	0.39	ug/L			07/17/13 17:42	1
2-Hexanone	ND	*	20	0.59	ug/L			07/17/13 17:42	1
4-Methyl-2-pentanone (MIBK)	24		20	0.33	ug/L			07/23/13 23:24	1
Acetone	ND		20	6.7	ug/L			07/17/13 17:42	1
Benzene	4.3	J	5.0	0.25	ug/L			07/17/13 17:42	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/17/13 17:42	1
Bromoform	ND		5.0	0.37	ug/L			07/17/13 17:42	1

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: DUPLICATE 05

Lab Sample ID: 160-3000-9

Date Collected: 07/15/13 00:00

Matrix: Water

Date Received: 07/16/13 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		10	0.40	ug/L			07/17/13 17:42	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/17/13 17:42	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/17/13 17:42	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/17/13 17:42	1
Chloroethane	ND	*	10	0.38	ug/L			07/17/13 17:42	1
Chloroform	ND		5.0	0.15	ug/L			07/17/13 17:42	1
Chloromethane	ND		10	0.55	ug/L			07/17/13 17:42	1
cis-1,2-Dichloroethene	2.0	J	5.0	0.16	ug/L			07/17/13 17:42	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/17/13 17:42	1
Cyclohexane	ND		10	0.36	ug/L			07/17/13 17:42	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/17/13 17:42	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/17/13 17:42	1
Ethylbenzene	0.51	J	5.0	0.30	ug/L			07/17/13 17:42	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/17/13 17:42	1
Methyl acetate	ND		25	2.3	ug/L			07/17/13 17:42	1
Methyl tert-butyl ether	0.84	J	5.0	0.40	ug/L			07/17/13 17:42	1
Methylcyclohexane	ND		10	0.26	ug/L			07/17/13 17:42	1
Methylene Chloride	ND	*	5.0	1.7	ug/L			07/17/13 17:42	1
m-Xylene & p-Xylene	0.92	J	5.0	0.57	ug/L			07/17/13 17:42	1
o-Xylene	0.45	J	5.0	0.32	ug/L			07/17/13 17:42	1
Styrene	ND		5.0	0.35	ug/L			07/17/13 17:42	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/17/13 17:42	1
Toluene	ND		5.0	1.0	ug/L			07/17/13 17:42	1
trans-1,2-Dichloroethene	ND	*	5.0	0.18	ug/L			07/17/13 17:42	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/17/13 17:42	1
Trichloroethene	ND		5.0	0.29	ug/L			07/17/13 17:42	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/17/13 17:42	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/17/13 17:42	1
Xylenes, Total	1.4	J	10	0.85	ug/L			07/17/13 17:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	125		82 - 132		07/17/13 17:42	1
1,2-Dichloroethane-d4 (Surr)	107		82 - 132		07/23/13 23:24	1
4-Bromofluorobenzene (Surr)	102		82 - 121		07/17/13 17:42	1
4-Bromofluorobenzene (Surr)	95		82 - 121		07/23/13 23:24	1
Dibromofluoromethane (Surr)	100		85 - 119		07/17/13 17:42	1
Dibromofluoromethane (Surr)	97		85 - 119		07/23/13 23:24	1
Toluene-d8 (Surr)	101		85 - 115		07/17/13 17:42	1
Toluene-d8 (Surr)	102		85 - 115		07/23/13 23:24	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	220		200	80	ug/L		07/17/13 12:39	07/19/13 16:50	1
Antimony	4.3	J	10	4.0	ug/L		07/17/13 12:39	07/19/13 16:50	1
Arsenic	ND		10	2.0	ug/L		07/17/13 12:39	07/19/13 16:50	1
Barium	440		50	4.0	ug/L		07/17/13 12:39	07/19/13 16:50	1
Beryllium	ND		5.0	0.61	ug/L		07/17/13 12:39	07/19/13 16:50	1
Cadmium	ND		5.0	0.91	ug/L		07/17/13 12:39	07/19/13 16:50	1
Calcium	440000	E	1000	110	ug/L		07/17/13 12:39	07/19/13 16:50	1
Calcium	640000	E	10000	1100	ug/L		07/17/13 12:39	07/19/13 18:19	10

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: DUPLICATE 05

Lab Sample ID: 160-3000-9

Date Collected: 07/15/13 00:00

Matrix: Water

Date Received: 07/16/13 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	670000		50000	5300	ug/L		07/17/13 12:39	07/22/13 15:27	50
Chromium	ND		10	3.1	ug/L		07/17/13 12:39	07/19/13 16:50	1
Cobalt	ND		50	4.0	ug/L		07/17/13 12:39	07/19/13 16:50	1
Copper	7.5	J	25	4.6	ug/L		07/17/13 12:39	07/19/13 16:50	1
Iron	9400		100	28	ug/L		07/17/13 12:39	07/19/13 16:50	1
Iron	9600		1000	280	ug/L		07/17/13 12:39	07/19/13 18:19	10
Lead	ND		10	1.5	ug/L		07/17/13 12:39	07/19/13 16:50	1
Magnesium	65000	E	1000	130	ug/L		07/17/13 12:39	07/19/13 16:50	1
Magnesium	67000		10000	1300	ug/L		07/17/13 12:39	07/19/13 18:19	10
Manganese	980		15	3.3	ug/L		07/17/13 12:39	07/19/13 16:50	1
Nickel	15	J	40	13	ug/L		07/17/13 12:39	07/19/13 16:50	1
Potassium	13000		5000	1700	ug/L		07/17/13 12:39	07/19/13 16:50	1
Selenium	9.9	J	15	2.7	ug/L		07/17/13 12:39	07/19/13 16:50	1
Silver	ND		10	6.0	ug/L		07/17/13 12:39	07/19/13 16:50	1
Sodium	170000	E	1000	320	ug/L		07/17/13 12:39	07/19/13 16:50	1
Sodium	170000		10000	3200	ug/L		07/17/13 12:39	07/19/13 18:19	10
Thallium	ND		20	4.0	ug/L		07/17/13 12:39	07/19/13 16:50	1
Vanadium	4.8	J	50	4.1	ug/L		07/17/13 12:39	07/19/13 16:50	1
Zinc	ND		20	5.2	ug/L		07/17/13 12:39	07/19/13 16:50	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	190	J	200	80	ug/L		07/17/13 12:39	07/19/13 17:29	1
Antimony	ND		10	4.0	ug/L		07/17/13 12:39	07/19/13 17:29	1
Arsenic	ND		10	2.0	ug/L		07/17/13 12:39	07/19/13 17:29	1
Barium	460		50	4.0	ug/L		07/17/13 12:39	07/19/13 17:29	1
Beryllium	ND		5.0	0.61	ug/L		07/17/13 12:39	07/19/13 17:29	1
Cadmium	ND		5.0	0.91	ug/L		07/17/13 12:39	07/19/13 17:29	1
Calcium	450000	E	1000	110	ug/L		07/17/13 12:39	07/19/13 17:29	1
Calcium	660000	E	10000	1100	ug/L		07/17/13 12:39	07/19/13 18:50	10
Calcium	670000		50000	5300	ug/L		07/17/13 12:39	07/22/13 15:30	50
Chromium	ND		10	3.1	ug/L		07/17/13 12:39	07/19/13 17:29	1
Cobalt	ND		50	4.0	ug/L		07/17/13 12:39	07/19/13 17:29	1
Copper	7.3	J	25	4.6	ug/L		07/17/13 12:39	07/19/13 17:29	1
Iron	8600		100	28	ug/L		07/17/13 12:39	07/19/13 17:29	1
Iron	8900		1000	280	ug/L		07/17/13 12:39	07/19/13 18:50	10
Lead	ND		10	1.5	ug/L		07/17/13 12:39	07/19/13 17:29	1
Magnesium	66000	E	1000	130	ug/L		07/17/13 12:39	07/19/13 17:29	1
Magnesium	68000		10000	1300	ug/L		07/17/13 12:39	07/19/13 18:50	10
Manganese	980		15	3.3	ug/L		07/17/13 12:39	07/19/13 17:29	1
Nickel	15	J	40	13	ug/L		07/17/13 12:39	07/19/13 17:29	1
Potassium	14000		5000	1700	ug/L		07/17/13 12:39	07/19/13 17:29	1
Selenium	11	J	15	2.7	ug/L		07/17/13 12:39	07/19/13 17:29	1
Silver	ND		10	6.0	ug/L		07/17/13 12:39	07/19/13 17:29	1
Sodium	180000	E	1000	320	ug/L		07/17/13 12:39	07/19/13 17:29	1
Sodium	180000		10000	3200	ug/L		07/17/13 12:39	07/19/13 18:50	10
Thallium	ND		20	4.0	ug/L		07/17/13 12:39	07/19/13 17:29	1
Vanadium	4.7	J	50	4.1	ug/L		07/17/13 12:39	07/19/13 17:29	1
Zinc	ND		20	5.2	ug/L		07/17/13 12:39	07/19/13 17:29	1

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: DUPLICATE 05

Lab Sample ID: 160-3000-9

Date Collected: 07/15/13 00:00

Matrix: Water

Date Received: 07/16/13 08:30

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:54	07/18/13 23:49	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:55	07/19/13 00:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.013	J	0.020	0.0040	mg/L			07/16/13 21:52	1
Bromide	4.3		0.25	0.025	mg/L			07/16/13 21:52	1
Iodide	0.38	J	1.0	0.10	mg/L			07/17/13 03:01	1
Alkalinity	1600	B	25	2.7	mg/L			07/26/13 09:51	5

General Chemistry - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	250		40	4.0	mg/L			07/16/13 22:26	200
Sulfate	770		100	10	mg/L			07/16/13 22:26	200

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-3000-10

Date Collected: 07/15/13 00:00

Matrix: Water

Date Received: 07/16/13 08:30

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			07/17/13 08:32	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/17/13 08:32	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/17/13 08:32	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/17/13 08:32	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/17/13 08:32	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/17/13 08:32	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/17/13 08:32	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/17/13 08:32	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/17/13 08:32	1
1,2-Dichloroethane	ND	*	5.0	0.37	ug/L			07/17/13 08:32	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/17/13 08:32	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/17/13 08:32	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/17/13 08:32	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/17/13 08:32	1
2-Hexanone	ND	*	20	0.59	ug/L			07/17/13 08:32	1
4-Methyl-2-pentanone (MIBK)	ND	*	20	0.33	ug/L			07/17/13 08:32	1
Acetone	ND		20	6.7	ug/L			07/17/13 08:32	1
Benzene	ND		5.0	0.25	ug/L			07/17/13 08:32	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/17/13 08:32	1
Bromoform	ND		5.0	0.37	ug/L			07/17/13 08:32	1
Bromomethane	ND		10	0.40	ug/L			07/17/13 08:32	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/17/13 08:32	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/17/13 08:32	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/17/13 08:32	1
Chloroethane	ND	*	10	0.38	ug/L			07/17/13 08:32	1
Chloroform	ND		5.0	0.15	ug/L			07/17/13 08:32	1

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Client Sample Results

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

TestAmerica Job ID: 160-3000-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-3000-10

Date Collected: 07/15/13 00:00

Matrix: Water

Date Received: 07/16/13 08:30

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			07/17/13 08:32	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/17/13 08:32	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/17/13 08:32	1
Cyclohexane	ND		10	0.36	ug/L			07/17/13 08:32	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/17/13 08:32	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/17/13 08:32	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/17/13 08:32	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/17/13 08:32	1
Methyl acetate	ND		25	2.3	ug/L			07/17/13 08:32	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/17/13 08:32	1
Methylcyclohexane	ND		10	0.26	ug/L			07/17/13 08:32	1
Methylene Chloride	ND	*	5.0	1.7	ug/L			07/17/13 08:32	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/17/13 08:32	1
o-Xylene	ND		5.0	0.32	ug/L			07/17/13 08:32	1
Styrene	ND		5.0	0.35	ug/L			07/17/13 08:32	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/17/13 08:32	1
Toluene	ND		5.0	1.0	ug/L			07/17/13 08:32	1
trans-1,2-Dichloroethene	ND	*	5.0	0.18	ug/L			07/17/13 08:32	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/17/13 08:32	1
Trichloroethene	ND		5.0	0.29	ug/L			07/17/13 08:32	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/17/13 08:32	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/17/13 08:32	1
Xylenes, Total	ND		10	0.85	ug/L			07/17/13 08:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		82 - 132		07/17/13 08:32	1
4-Bromofluorobenzene (Surr)	101		82 - 121		07/17/13 08:32	1
Dibromofluoromethane (Surr)	102		85 - 119		07/17/13 08:32	1
Toluene-d8 (Surr)	102		85 - 115		07/17/13 08:32	1

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QC Sample Results

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

TestAmerica Job ID: 160-3000-1

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

Lab Sample ID: MB 160-61405/2

Matrix: Water

Analysis Batch: 61405

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/17/13 08:01	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/17/13 08:01	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/17/13 08:01	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/17/13 08:01	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/17/13 08:01	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/17/13 08:01	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/17/13 08:01	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/17/13 08:01	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/17/13 08:01	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/17/13 08:01	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/17/13 08:01	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/17/13 08:01	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/17/13 08:01	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/17/13 08:01	1
2-Hexanone	ND		20	0.59	ug/L			07/17/13 08:01	1
4-Methyl-2-pentanone (MIBK)	2.49	J	20	0.33	ug/L			07/17/13 08:01	1
Acetone	ND		20	6.7	ug/L			07/17/13 08:01	1
Benzene	ND		5.0	0.25	ug/L			07/17/13 08:01	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/17/13 08:01	1
Bromoform	ND		5.0	0.37	ug/L			07/17/13 08:01	1
Bromomethane	ND		10	0.40	ug/L			07/17/13 08:01	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/17/13 08:01	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/17/13 08:01	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/17/13 08:01	1
Chloroethane	ND		10	0.38	ug/L			07/17/13 08:01	1
Chloroform	ND		5.0	0.15	ug/L			07/17/13 08:01	1
Chloromethane	ND		10	0.55	ug/L			07/17/13 08:01	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/17/13 08:01	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/17/13 08:01	1
Cyclohexane	ND		10	0.36	ug/L			07/17/13 08:01	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/17/13 08:01	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/17/13 08:01	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/17/13 08:01	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/17/13 08:01	1
Methyl acetate	ND		25	2.3	ug/L			07/17/13 08:01	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/17/13 08:01	1
Methylcyclohexane	ND		10	0.26	ug/L			07/17/13 08:01	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/17/13 08:01	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/17/13 08:01	1
o-Xylene	ND		5.0	0.32	ug/L			07/17/13 08:01	1
Styrene	ND		5.0	0.35	ug/L			07/17/13 08:01	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/17/13 08:01	1
Toluene	ND		5.0	1.0	ug/L			07/17/13 08:01	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/17/13 08:01	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/17/13 08:01	1
Trichloroethene	ND		5.0	0.29	ug/L			07/17/13 08:01	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/17/13 08:01	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/17/13 08:01	1

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QC Sample Results

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

TestAmerica Job ID: 160-3000-1

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

Lab Sample ID: MB 160-61405/2

Matrix: Water

Analysis Batch: 61405

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		10	0.85	ug/L			07/17/13 08:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	123		82 - 132		07/17/13 08:01	1
4-Bromofluorobenzene (Surr)	106		82 - 121		07/17/13 08:01	1
Dibromofluoromethane (Surr)	102		85 - 119		07/17/13 08:01	1
Toluene-d8 (Surr)	100		85 - 115		07/17/13 08:01	1

Lab Sample ID: LCS 160-61405/4

Matrix: Water

Analysis Batch: 61405

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	53.4		ug/L		107	85 - 115
1,1,2,2-Tetrachloroethane	50.0	52.9		ug/L		106	84 - 115
1,1,2-Trichloroethane	50.0	50.5		ug/L		101	85 - 115
1,1-Dichloroethane	50.0	52.7		ug/L		105	85 - 115
1,1-Dichloroethene	50.0	46.4		ug/L		93	85 - 118
1,2,4-Trichlorobenzene	50.0	44.3		ug/L		89	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	51.6		ug/L		103	71 - 123
1,2-Dibromoethane (EDB)	50.0	45.9		ug/L		92	85 - 115
1,2-Dichlorobenzene	50.0	51.0		ug/L		102	85 - 115
1,2-Dichloroethane	50.0	62.3	*	ug/L		125	79 - 122
1,2-Dichloropropane	50.0	52.5		ug/L		105	85 - 115
1,3-Dichlorobenzene	50.0	49.2		ug/L		98	85 - 115
1,4-Dichlorobenzene	50.0	48.2		ug/L		96	85 - 115
2-Butanone (MEK)	50.0	54.8		ug/L		110	71 - 123
2-Hexanone	50.0	66.2	*	ug/L		132	66 - 121
4-Methyl-2-pentanone (MIBK)	50.0	61.4		ug/L		123	74 - 123
Acetone	50.0	61.9		ug/L		124	51 - 140
Benzene	50.0	48.9		ug/L		98	85 - 115
Bromodichloromethane	50.0	55.2		ug/L		110	85 - 117
Bromoform	50.0	48.3		ug/L		97	85 - 115
Bromomethane	50.0	50.4		ug/L		101	70 - 135
Carbon disulfide	50.0	46.6		ug/L		93	85 - 123
Carbon tetrachloride	50.0	51.4		ug/L		103	85 - 118
Chlorobenzene	50.0	52.0		ug/L		104	85 - 115
Chloroethane	50.0	72.1	*	ug/L		144	75 - 125
Chloroform	50.0	51.7		ug/L		103	85 - 115
Chloromethane	50.0	49.3		ug/L		99	73 - 132
cis-1,2-Dichloroethene	50.0	44.7		ug/L		89	85 - 115
cis-1,3-Dichloropropene	50.0	52.8		ug/L		106	85 - 127
Cyclohexane	50.0	48.3		ug/L		97	73 - 115
Dibromochloromethane	50.0	47.1		ug/L		94	85 - 115
Dichlorodifluoromethane	50.0	49.9		ug/L		100	62 - 115
Ethylbenzene	50.0	56.7		ug/L		113	85 - 115
Isopropylbenzene	50.0	51.8		ug/L		104	85 - 124
Methyl acetate	250	256		ug/L		102	73 - 135

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QC Sample Results

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

TestAmerica Job ID: 160-3000-1

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

Lab Sample ID: LCS 160-61405/4

Matrix: Water

Analysis Batch: 61405

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	52.3		ug/L		105	73 - 115
Methylcyclohexane	50.0	56.5		ug/L		113	85 - 134
Methylene Chloride	50.0	42.4		ug/L		85	84 - 115
m-Xylene & p-Xylene	50.0	54.9		ug/L		110	85 - 115
o-Xylene	50.0	51.2		ug/L		102	85 - 115
Styrene	50.0	53.0		ug/L		106	85 - 115
Tetrachloroethene	50.0	44.8		ug/L		90	85 - 115
Toluene	50.0	48.9		ug/L		98	85 - 115
trans-1,2-Dichloroethene	50.0	41.1	*	ug/L		82	85 - 115
trans-1,3-Dichloropropene	50.0	51.6		ug/L		103	85 - 123
Trichloroethene	50.0	49.2		ug/L		98	85 - 115
Trichlorofluoromethane	50.0	54.9		ug/L		110	85 - 116
Vinyl chloride	50.0	45.8		ug/L		92	68 - 133
Xylenes, Total	100	106		ug/L		106	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	126		82 - 132
4-Bromofluorobenzene (Surr)	101		82 - 121
Dibromofluoromethane (Surr)	95		85 - 119
Toluene-d8 (Surr)	98		85 - 115

Lab Sample ID: LCSD 160-61405/5

Matrix: Water

Analysis Batch: 61405

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	50.0	52.2		ug/L		104	85 - 115	2	20
1,1,1,2-Tetrachloroethane	50.0	55.5		ug/L		111	84 - 115	5	20
1,1,1,2-Trichloroethane	50.0	52.9		ug/L		106	85 - 115	5	20
1,1-Dichloroethane	50.0	50.1		ug/L		100	85 - 115	5	20
1,1-Dichloroethene	50.0	43.5		ug/L		87	85 - 118	7	20
1,2,4-Trichlorobenzene	50.0	45.0		ug/L		90	75 - 124	2	20
1,2-Dibromo-3-Chloropropane	50.0	48.5		ug/L		97	71 - 123	6	20
1,2-Dibromoethane (EDB)	50.0	51.5		ug/L		103	85 - 115	11	20
1,2-Dichlorobenzene	50.0	51.2		ug/L		102	85 - 115	0	20
1,2-Dichloroethane	50.0	57.9		ug/L		116	79 - 122	7	20
1,2-Dichloropropane	50.0	49.8		ug/L		100	85 - 115	5	20
1,3-Dichlorobenzene	50.0	50.1		ug/L		100	85 - 115	2	20
1,4-Dichlorobenzene	50.0	51.5		ug/L		103	85 - 115	7	20
2-Butanone (MEK)	50.0	53.1		ug/L		106	71 - 123	3	20
2-Hexanone	50.0	67.6	*	ug/L		135	66 - 121	2	20
4-Methyl-2-pentanone (MIBK)	50.0	64.8	*	ug/L		130	74 - 123	5	20
Acetone	50.0	57.8		ug/L		116	51 - 140	7	20
Benzene	50.0	49.9		ug/L		100	85 - 115	2	20
Bromodichloromethane	50.0	53.9		ug/L		108	85 - 117	2	20
Bromoform	50.0	50.9		ug/L		102	85 - 115	5	20
Bromomethane	50.0	46.5		ug/L		93	70 - 135	8	20
Carbon disulfide	50.0	45.0		ug/L		90	85 - 123	3	20

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QC Sample Results

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

TestAmerica Job ID: 160-3000-1

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

Lab Sample ID: LCSD 160-61405/5

Matrix: Water

Analysis Batch: 61405

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon tetrachloride	50.0	49.8		ug/L		100	85 - 118	3	20
Chlorobenzene	50.0	50.0		ug/L		100	85 - 115	4	20
Chloroethane	50.0	65.8	*	ug/L		132	75 - 125	9	20
Chloroform	50.0	52.0		ug/L		104	85 - 115	1	20
Chloromethane	50.0	46.1		ug/L		92	73 - 132	7	20
cis-1,2-Dichloroethene	50.0	44.1		ug/L		88	85 - 115	1	20
cis-1,3-Dichloropropene	50.0	50.0		ug/L		100	85 - 127	6	20
Cyclohexane	50.0	50.7		ug/L		101	73 - 115	5	20
Dibromochloromethane	50.0	50.0		ug/L		100	85 - 115	6	20
Dichlorodifluoromethane	50.0	46.4		ug/L		93	62 - 115	7	20
Ethylbenzene	50.0	54.4		ug/L		109	85 - 115	4	20
Isopropylbenzene	50.0	52.3		ug/L		105	85 - 124	1	20
Methyl acetate	250	266		ug/L		106	73 - 135	4	20
Methyl tert-butyl ether	50.0	50.7		ug/L		101	73 - 115	3	20
Methylcyclohexane	50.0	53.0		ug/L		106	85 - 134	6	20
Methylene Chloride	50.0	41.5	*	ug/L		83	84 - 115	2	20
m-Xylene & p-Xylene	50.0	51.4		ug/L		103	85 - 115	7	20
o-Xylene	50.0	50.7		ug/L		101	85 - 115	1	20
Styrene	50.0	50.5		ug/L		101	85 - 115	5	20
Tetrachloroethene	50.0	46.7		ug/L		93	85 - 115	4	20
Toluene	50.0	49.7		ug/L		99	85 - 115	2	20
trans-1,2-Dichloroethene	50.0	40.3	*	ug/L		81	85 - 115	2	20
trans-1,3-Dichloropropene	50.0	52.2		ug/L		104	85 - 123	1	20
Trichloroethene	50.0	50.3		ug/L		101	85 - 115	2	20
Trichlorofluoromethane	50.0	51.1		ug/L		102	85 - 116	7	20
Vinyl chloride	50.0	45.6		ug/L		91	68 - 133	0	20
Xylenes, Total	100	102		ug/L		102	70 - 130	4	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	117		82 - 132
4-Bromofluorobenzene (Surr)	100		82 - 121
Dibromofluoromethane (Surr)	99		85 - 119
Toluene-d8 (Surr)	99		85 - 115

Lab Sample ID: 160-3000-8 MS

Matrix: Water

Analysis Batch: 61405

Client Sample ID: D-12

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
1,1,1-Trichloroethane	ND		50.0	56.2		ug/L		112	85 - 118
1,1,1,2,2-Tetrachloroethane	ND		50.0	55.3		ug/L		111	85 - 116
1,1,1,2-Trichloroethane	ND		50.0	57.6		ug/L		115	85 - 115
1,1-Dichloroethane	2.0	J	50.0	54.4		ug/L		105	85 - 115
1,1-Dichloroethene	ND		50.0	44.3		ug/L		89	85 - 118
1,2,4-Trichlorobenzene	ND		50.0	51.2		ug/L		102	75 - 124
1,2-Dibromo-3-Chloropropane	ND		50.0	52.3		ug/L		105	71 - 123
1,2-Dibromoethane (EDB)	ND		50.0	51.6		ug/L		103	85 - 115
1,2-Dichlorobenzene	ND		50.0	52.0		ug/L		104	84 - 115

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QC Sample Results

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

TestAmerica Job ID: 160-3000-1

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

Lab Sample ID: 160-3000-8 MS

Matrix: Water

Analysis Batch: 61405

Client Sample ID: D-12

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
1,2-Dichloroethane	ND	*	50.0	60.8		ug/L		122	80 - 125
1,2-Dichloropropane	ND		50.0	51.4		ug/L		103	85 - 117
1,3-Dichlorobenzene	ND		50.0	50.9		ug/L		102	84 - 115
1,4-Dichlorobenzene	ND		50.0	49.1		ug/L		98	85 - 115
2-Butanone (MEK)	ND		50.0	57.2		ug/L		114	73 - 133
2-Hexanone	ND	*	50.0	57.5		ug/L		115	66 - 121
Acetone	ND		50.0	69.5		ug/L		139	38 - 150
Benzene	4.6	J	50.0	56.6		ug/L		104	85 - 115
Bromodichloromethane	ND		50.0	56.8		ug/L		114	56 - 119
Bromoform	ND		50.0	50.6		ug/L		101	84 - 116
Bromomethane	ND		50.0	50.1		ug/L		100	70 - 135
Carbon disulfide	ND		50.0	48.4		ug/L		97	85 - 127
Carbon tetrachloride	ND		50.0	55.0		ug/L		110	85 - 121
Chlorobenzene	ND		50.0	51.5		ug/L		103	85 - 115
Chloroethane	ND	*	50.0	64.6	F	ug/L		129	73 - 123
Chloroform	ND		50.0	53.9		ug/L		108	85 - 115
Chloromethane	ND		50.0	51.7		ug/L		103	67 - 130
cis-1,2-Dichloroethene	2.1	J	50.0	51.3		ug/L		98	80 - 116
cis-1,3-Dichloropropene	ND		50.0	53.6		ug/L		107	85 - 124
Cyclohexane	ND		50.0	52.0		ug/L		104	73 - 115
Dibromochloromethane	ND		50.0	53.1		ug/L		106	85 - 115
Dichlorodifluoromethane	ND		50.0	48.9		ug/L		98	85 - 119
Ethylbenzene	0.51	J	50.0	55.3		ug/L		110	85 - 115
Isopropylbenzene	ND		50.0	53.7		ug/L		107	85 - 124
Methyl acetate	ND		250	280		ug/L		112	49 - 150
Methyl tert-butyl ether	ND		50.0	56.8		ug/L		114	75 - 115
Methylcyclohexane	ND		50.0	55.3		ug/L		111	85 - 137
Methylene Chloride	ND	*	50.0	49.9		ug/L		100	85 - 115
m-Xylene & p-Xylene	0.74	J	50.0	55.0		ug/L		108	85 - 115
o-Xylene	0.43	J	50.0	51.4		ug/L		102	85 - 118
Styrene	ND		50.0	53.9		ug/L		108	85 - 115
Tetrachloroethene	ND		50.0	50.2		ug/L		100	85 - 118
Toluene	ND		50.0	50.5		ug/L		101	85 - 118
trans-1,2-Dichloroethene	ND	*	50.0	46.6		ug/L		93	84 - 115
trans-1,3-Dichloropropene	ND		50.0	53.2		ug/L		106	85 - 127
Trichloroethene	ND		50.0	51.7		ug/L		103	85 - 115
Trichlorofluoromethane	ND		50.0	57.0		ug/L		114	85 - 115
Vinyl chloride	0.55	J	50.0	48.4		ug/L		96	63 - 129
Xylenes, Total	1.2	J	100	106		ug/L		105	70 - 130

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	114		82 - 132
4-Bromofluorobenzene (Surr)	101		82 - 121
Dibromofluoromethane (Surr)	100		85 - 119
Toluene-d8 (Surr)	100		85 - 115

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TestAmerica St. Louis

QC Sample Results

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

TestAmerica Job ID: 160-3000-1

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

Lab Sample ID: 160-3000-8 MSD

Matrix: Water

Analysis Batch: 61405

Client Sample ID: D-12

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits			
1,1,1-Trichloroethane	ND		50.0	53.9		ug/L		108	85 - 118	4	20	
1,1,2,2-Tetrachloroethane	ND		50.0	53.4		ug/L		107	85 - 116	4	20	
1,1,2-Trichloroethane	ND		50.0	54.2		ug/L		108	85 - 115	6	20	
1,1-Dichloroethane	2.0	J	50.0	52.6		ug/L		101	85 - 115	3	20	
1,1-Dichloroethene	ND		50.0	45.2		ug/L		90	85 - 118	2	20	
1,2,4-Trichlorobenzene	ND		50.0	49.9		ug/L		100	75 - 124	3	20	
1,2-Dibromo-3-Chloropropane	ND		50.0	54.0		ug/L		108	71 - 123	3	20	
1,2-Dibromoethane (EDB)	ND		50.0	49.9		ug/L		100	85 - 115	3	20	
1,2-Dichlorobenzene	ND		50.0	52.2		ug/L		104	84 - 115	0	20	
1,2-Dichloroethane	ND	*	50.0	60.3		ug/L		121	80 - 125	1	20	
1,2-Dichloropropane	ND		50.0	49.8		ug/L		100	85 - 117	3	20	
1,3-Dichlorobenzene	ND		50.0	50.4		ug/L		101	84 - 115	1	20	
1,4-Dichlorobenzene	ND		50.0	49.4		ug/L		99	85 - 115	0	20	
2-Butanone (MEK)	ND		50.0	52.3		ug/L		105	73 - 133	9	20	
2-Hexanone	ND	*	50.0	63.2	F	ug/L		126	66 - 121	10	20	
Acetone	ND		50.0	66.6		ug/L		133	38 - 150	4	20	
Benzene	4.6	J	50.0	54.7		ug/L		100	85 - 115	3	20	
Bromodichloromethane	ND		50.0	54.9		ug/L		110	56 - 119	3	20	
Bromoform	ND		50.0	50.7		ug/L		101	84 - 116	0	20	
Bromomethane	ND		50.0	52.4		ug/L		105	70 - 135	4	20	
Carbon disulfide	ND		50.0	48.8		ug/L		98	85 - 127	1	20	
Carbon tetrachloride	ND		50.0	53.9		ug/L		108	85 - 121	2	20	
Chlorobenzene	ND		50.0	49.4		ug/L		99	85 - 115	4	20	
Chloroethane	ND	*	50.0	64.4	F	ug/L		129	73 - 123	0	20	
Chloroform	ND		50.0	53.6		ug/L		107	85 - 115	1	20	
Chloromethane	ND		50.0	51.0		ug/L		102	67 - 130	1	20	
cis-1,2-Dichloroethene	2.1	J	50.0	49.9		ug/L		96	80 - 116	3	20	
cis-1,3-Dichloropropene	ND		50.0	51.2		ug/L		102	85 - 124	5	20	
Cyclohexane	ND		50.0	49.9		ug/L		100	73 - 115	4	20	
Dibromochloromethane	ND		50.0	51.4		ug/L		103	85 - 115	3	20	
Dichlorodifluoromethane	ND		50.0	51.0		ug/L		102	85 - 119	4	20	
Ethylbenzene	0.51	J	50.0	53.6		ug/L		106	85 - 115	3	20	
Isopropylbenzene	ND		50.0	52.6		ug/L		105	85 - 124	2	20	
Methyl acetate	ND		250	278		ug/L		111	49 - 150	1	20	
Methyl tert-butyl ether	ND		50.0	56.4		ug/L		113	75 - 115	1	20	
Methylcyclohexane	ND		50.0	52.7		ug/L		105	85 - 137	5	20	
Methylene Chloride	ND	*	50.0	49.2		ug/L		98	85 - 115	1	20	
m-Xylene & p-Xylene	0.74	J	50.0	51.5		ug/L		101	85 - 115	7	20	
o-Xylene	0.43	J	50.0	50.3		ug/L		100	85 - 118	2	20	
Styrene	ND		50.0	51.3		ug/L		103	85 - 115	5	20	
Tetrachloroethene	ND		50.0	48.2		ug/L		96	85 - 118	4	20	
Toluene	ND		50.0	48.4		ug/L		97	85 - 118	4	20	
trans-1,2-Dichloroethene	ND	*	50.0	46.4		ug/L		93	84 - 115	0	20	
trans-1,3-Dichloropropene	ND		50.0	50.7		ug/L		101	85 - 127	5	20	
Trichloroethene	ND		50.0	51.4		ug/L		103	85 - 115	1	20	
Trichlorofluoromethane	ND		50.0	54.9		ug/L		110	85 - 115	4	20	
Vinyl chloride	0.55	J	50.0	51.0		ug/L		101	63 - 129	5	20	
Xylenes, Total	1.2	J	100	102		ug/L		101	70 - 130	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: 160-3000-1

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

Lab Sample ID: 160-3000-8 MSD

Matrix: Water

Analysis Batch: 61405

Client Sample ID: D-12

Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	114		82 - 132
4-Bromofluorobenzene (Surr)	99		82 - 121
Dibromofluoromethane (Surr)	102		85 - 119
Toluene-d8 (Surr)	102		85 - 115

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

Matrix: Water

Analysis Batch: 62292

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/23/13 18:28	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/23/13 18:28	1
1,1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/23/13 18:28	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/23/13 18:28	1
1,1-Dichloroethene	ND		5.0	0.37	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
1,2-Dibromo-3-Chloropropane	ND		10	1.2	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
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/23/13 18:28	1
1,2-Dichloropropane	ND		5.0	0.32	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
2-Butanone (MEK)	ND		20	0.39	ug/L			07/23/13 18:28	1
2-Hexanone	ND		20	0.59	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
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
Bromodichloromethane	ND		5.0	0.25	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
Carbon tetrachloride	ND		5.0	0.36	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
cis-1,2-Dichloroethene	ND		5.0	0.16	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
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
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

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QC Sample Results

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

TestAmerica Job ID: 160-3000-1

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 Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/23/13 18:28	1
o-Xylene	ND		5.0	0.32	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
trans-1,2-Dichloroethene	ND		5.0	0.18	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 %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		82 - 132		07/23/13 18:28	1
4-Bromofluorobenzene (Surr)	94		82 - 121		07/23/13 18:28	1
Dibromofluoromethane (Surr)	101		85 - 119		07/23/13 18:28	1
Toluene-d8 (Surr)	104		85 - 115		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 Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	47.1		ug/L		94	85 - 115
1,1,1,2-Tetrachloroethane	50.0	52.2		ug/L		104	84 - 115
1,1,2-Trichloroethane	50.0	55.6		ug/L		111	85 - 115
1,1-Dichloroethane	50.0	50.4		ug/L		101	85 - 115
1,1-Dichloroethene	50.0	47.8		ug/L		96	85 - 118
1,2,4-Trichlorobenzene	50.0	46.5		ug/L		93	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	57.5		ug/L		115	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
1,2-Dichloroethane	50.0	50.6		ug/L		101	79 - 122
1,2-Dichloropropane	50.0	53.2		ug/L		106	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
2-Butanone (MEK)	50.0	60.6		ug/L		121	71 - 123
2-Hexanone	50.0	59.4		ug/L		119	66 - 121
4-Methyl-2-pentanone (MIBK)	50.0	58.0		ug/L		116	74 - 123
Acetone	50.0	48.5		ug/L		97	51 - 140
Benzene	50.0	50.2		ug/L		100	85 - 115
Bromodichloromethane	50.0	52.5		ug/L		105	85 - 117
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
Carbon tetrachloride	50.0	48.2		ug/L		96	85 - 118
Chlorobenzene	50.0	52.5		ug/L		105	85 - 115
Chloroethane	50.0	59.0		ug/L		118	75 - 125

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QC Sample Results

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

TestAmerica Job ID: 160-3000-1

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
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
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
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
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
m-Xylene & p-Xylene	50.0	50.3		ug/L		101	85 - 115
o-Xylene	50.0	49.3		ug/L		99	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
trans-1,2-Dichloroethene	50.0	47.3		ug/L		95	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 %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		82 - 132
4-Bromofluorobenzene (Surr)	96		82 - 121
Dibromofluoromethane (Surr)	103		85 - 119
Toluene-d8 (Surr)	102		85 - 115

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 160-60996/1-A

Matrix: Water

Analysis Batch: 61766

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 60996

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/17/13 12:39	07/19/13 15:57	1
Antimony	ND		10	4.0	ug/L		07/17/13 12:39	07/19/13 15:57	1
Arsenic	ND		10	2.0	ug/L		07/17/13 12:39	07/19/13 15:57	1
Barium	ND		50	4.0	ug/L		07/17/13 12:39	07/19/13 15:57	1
Beryllium	0.800	J	5.0	0.61	ug/L		07/17/13 12:39	07/19/13 15:57	1
Cadmium	ND		5.0	0.91	ug/L		07/17/13 12:39	07/19/13 15:57	1
Calcium	ND		1000	110	ug/L		07/17/13 12:39	07/19/13 15:57	1
Chromium	ND		10	3.1	ug/L		07/17/13 12:39	07/19/13 15:57	1
Cobalt	ND		50	4.0	ug/L		07/17/13 12:39	07/19/13 15:57	1
Copper	ND		25	4.6	ug/L		07/17/13 12:39	07/19/13 15:57	1

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QC Sample Results

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

TestAmerica Job ID: 160-3000-1

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

Lab Sample ID: MB 160-60996/1-A
Matrix: Water
Analysis Batch: 61766

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 60996

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Iron	ND		100	28	ug/L		07/17/13 12:39	07/19/13 15:57	1
Lead	ND		10	1.5	ug/L		07/17/13 12:39	07/19/13 15:57	1
Magnesium	ND		1000	130	ug/L		07/17/13 12:39	07/19/13 15:57	1
Manganese	ND		15	3.3	ug/L		07/17/13 12:39	07/19/13 15:57	1
Nickel	ND		40	13	ug/L		07/17/13 12:39	07/19/13 15:57	1
Potassium	ND		5000	1700	ug/L		07/17/13 12:39	07/19/13 15:57	1
Selenium	ND		15	2.7	ug/L		07/17/13 12:39	07/19/13 15:57	1
Silver	ND		10	6.0	ug/L		07/17/13 12:39	07/19/13 15:57	1
Sodium	ND		1000	320	ug/L		07/17/13 12:39	07/19/13 15:57	1
Thallium	ND		20	4.0	ug/L		07/17/13 12:39	07/19/13 15:57	1
Vanadium	ND		50	4.1	ug/L		07/17/13 12:39	07/19/13 15:57	1
Zinc	ND		20	5.2	ug/L		07/17/13 12:39	07/19/13 15:57	1

Lab Sample ID: LCS 160-60996/2-A
Matrix: Water
Analysis Batch: 61766

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60996

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Aluminum	10000	9560		ug/L		96	80 - 120
Antimony	500	498		ug/L		100	80 - 120
Arsenic	1000	980		ug/L		98	80 - 120
Barium	1000	1020		ug/L		102	80 - 120
Beryllium	1000	994		ug/L		99	80 - 120
Cadmium	1000	980		ug/L		98	80 - 120
Calcium	10000	10300		ug/L		103	80 - 120
Chromium	1000	1010		ug/L		101	80 - 120
Cobalt	1000	1020		ug/L		102	80 - 120
Copper	1000	988		ug/L		99	80 - 120
Iron	10000	10000		ug/L		100	80 - 120
Lead	1000	1040		ug/L		104	80 - 120
Magnesium	10000	9790		ug/L		98	80 - 120
Manganese	1000	993		ug/L		99	80 - 120
Nickel	1000	1020		ug/L		102	80 - 120
Potassium	10000	9790		ug/L		98	80 - 120
Selenium	1000	987		ug/L		99	80 - 120
Silver	100	87.6		ug/L		88	80 - 120
Sodium	10000	9980		ug/L		100	80 - 120
Thallium	200	216		ug/L		108	80 - 120
Vanadium	1000	960		ug/L		96	80 - 120
Zinc	1000	992		ug/L		99	80 - 120

Lab Sample ID: 160-3000-8 MS
Matrix: Water
Analysis Batch: 61766

Client Sample ID: D-12
Prep Type: Total/NA
Prep Batch: 60996

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
Aluminum	250		10000	10100		ug/L		99	75 - 125
Antimony	4.4	J	500	495		ug/L		98	75 - 125
Arsenic	ND		1000	981		ug/L		98	75 - 125

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QC Sample Results

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

TestAmerica Job ID: 160-3000-1

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

Lab Sample ID: 160-3000-8 MS

Matrix: Water

Analysis Batch: 61766

Client Sample ID: D-12

Prep Type: Total/NA

Prep Batch: 60996

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits
Barium	440		1000	1460		ug/L		102	75 - 125	
Beryllium	ND		1000	981		ug/L		98	75 - 125	
Cadmium	ND		1000	962		ug/L		96	75 - 125	
Calcium	460000	E	10000	451000	E 4	ug/L		-60	75 - 125	
Chromium	ND		1000	934		ug/L		93	75 - 125	
Cobalt	ND		1000	913		ug/L		91	75 - 125	
Copper	6.2	J	1000	943		ug/L		94	75 - 125	
Iron	9700		10000	19100		ug/L		94	75 - 125	
Lead	ND		1000	901		ug/L		90	75 - 125	
Magnesium	68000	E	10000	76400	E 4	ug/L		85	75 - 125	
Manganese	1000		1000	1960		ug/L		95	75 - 125	
Nickel	15	J	1000	921		ug/L		91	75 - 125	
Potassium	14000		10000	23900		ug/L		103	75 - 125	
Selenium	8.1	J	1000	977		ug/L		97	75 - 125	
Silver	ND		100	89.1		ug/L		89	75 - 125	
Sodium	180000	E	10000	188000	E 4	ug/L		86	75 - 125	
Thallium	ND		200	184		ug/L		92	75 - 125	
Vanadium	ND		1000	971		ug/L		97	75 - 125	
Zinc	ND		1000	968		ug/L		97	75 - 125	

Lab Sample ID: 160-3000-8 MS

Matrix: Water

Analysis Batch: 61766

Client Sample ID: D-12

Prep Type: Total/NA

Prep Batch: 60996

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits
Calcium	650000	E	10000	658000	E 4	ug/L		46	75 - 125	
Iron	9700		10000	19500		ug/L		98	75 - 125	
Magnesium	67000		10000	76400	4	ug/L		93	75 - 125	
Sodium	170000		10000	185000	4	ug/L		105	75 - 125	

Lab Sample ID: 160-3000-8 MS

Matrix: Water

Analysis Batch: 62088

Client Sample ID: D-12

Prep Type: Total/NA

Prep Batch: 60996

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits
Calcium	650000		10000	677000	4	ug/L		250	75 - 125	

Lab Sample ID: 160-3000-8 MSD

Matrix: Water

Analysis Batch: 61766

Client Sample ID: D-12

Prep Type: Total/NA

Prep Batch: 60996

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit	
Aluminum	250		10000	10100		ug/L		98	75 - 125	0	20	
Antimony	4.4	J	500	491		ug/L		97	75 - 125	1	20	
Arsenic	ND		1000	975		ug/L		98	75 - 125	1	20	
Barium	440		1000	1460		ug/L		102	75 - 125	0	20	
Beryllium	ND		1000	981		ug/L		98	75 - 125	0	20	
Cadmium	ND		1000	958		ug/L		96	75 - 125	0	20	
Calcium	460000	E	10000	439000	E 4	ug/L		-177	75 - 125	3	20	

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QC Sample Results

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

TestAmerica Job ID: 160-3000-1

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

Lab Sample ID: 160-3000-8 MSD

Matrix: Water

Analysis Batch: 61766

Client Sample ID: D-12

Prep Type: Total/NA

Prep Batch: 60996

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
Chromium	ND		1000	927		ug/L		93	75 - 125	1	20
Cobalt	ND		1000	906		ug/L		91	75 - 125	1	20
Copper	6.2	J	1000	941		ug/L		94	75 - 125	0	20
Iron	9700		10000	19000		ug/L		93	75 - 125	1	20
Lead	ND		1000	898		ug/L		90	75 - 125	0	20
Magnesium	68000	E	10000	74600	E 4	ug/L		67	75 - 125	2	20
Manganese	1000		1000	1940		ug/L		92	75 - 125	1	20
Nickel	15	J	1000	914		ug/L		90	75 - 125	1	20
Potassium	14000		10000	23800		ug/L		102	75 - 125	0	20
Selenium	8.1	J	1000	977		ug/L		97	75 - 125	0	20
Silver	ND		100	88.4		ug/L		88	75 - 125	1	20
Sodium	180000	E	10000	183000	E 4	ug/L		33	75 - 125	3	20
Thallium	ND		200	183		ug/L		91	75 - 125	1	20
Vanadium	ND		1000	969		ug/L		97	75 - 125	0	20
Zinc	ND		1000	963		ug/L		96	75 - 125	0	20

Lab Sample ID: 160-3000-8 MSD

Matrix: Water

Analysis Batch: 61766

Client Sample ID: D-12

Prep Type: Total/NA

Prep Batch: 60996

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
Calcium	650000	E	10000	646000	E 4	ug/L		-69	75 - 125	2	20
Iron	9700		10000	19800		ug/L		100	75 - 125	1	20
Magnesium	67000		10000	75800	4	ug/L		87	75 - 125	1	20
Sodium	170000		10000	184000	4	ug/L		95	75 - 125	1	20

Lab Sample ID: 160-3000-8 MSD

Matrix: Water

Analysis Batch: 62088

Client Sample ID: D-12

Prep Type: Total/NA

Prep Batch: 60996

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
Calcium	650000		10000	683000	4	ug/L		305	75 - 125	1	20

Lab Sample ID: MB 160-61452/1-A

Matrix: Water

Analysis Batch: 61766

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 61452

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aluminum	ND		200	80	ug/L		07/18/13 15:26	07/19/13 19:01	1
Antimony	ND		10	4.0	ug/L		07/18/13 15:26	07/19/13 19:01	1
Arsenic	ND		10	2.0	ug/L		07/18/13 15:26	07/19/13 19:01	1
Barium	ND		50	4.0	ug/L		07/18/13 15:26	07/19/13 19:01	1
Beryllium	ND		5.0	0.61	ug/L		07/18/13 15:26	07/19/13 19:01	1
Cadmium	ND		5.0	0.91	ug/L		07/18/13 15:26	07/19/13 19:01	1
Calcium	ND		1000	110	ug/L		07/18/13 15:26	07/19/13 19:01	1
Chromium	ND		10	3.1	ug/L		07/18/13 15:26	07/19/13 19:01	1
Cobalt	ND		50	4.0	ug/L		07/18/13 15:26	07/19/13 19:01	1
Copper	ND		25	4.6	ug/L		07/18/13 15:26	07/19/13 19:01	1
Iron	ND		100	28	ug/L		07/18/13 15:26	07/19/13 19:01	1

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QC Sample Results

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

TestAmerica Job ID: 160-3000-1

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

Lab Sample ID: MB 160-61452/1-A

Matrix: Water

Analysis Batch: 61766

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 61452

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	ND		10	1.5	ug/L		07/18/13 15:26	07/19/13 19:01	1
Magnesium	ND		1000	130	ug/L		07/18/13 15:26	07/19/13 19:01	1
Manganese	ND		15	3.3	ug/L		07/18/13 15:26	07/19/13 19:01	1
Nickel	ND		40	13	ug/L		07/18/13 15:26	07/19/13 19:01	1
Potassium	ND		5000	1700	ug/L		07/18/13 15:26	07/19/13 19:01	1
Selenium	ND		15	2.7	ug/L		07/18/13 15:26	07/19/13 19:01	1
Silver	ND		10	6.0	ug/L		07/18/13 15:26	07/19/13 19:01	1
Sodium	ND		1000	320	ug/L		07/18/13 15:26	07/19/13 19:01	1
Thallium	ND		20	4.0	ug/L		07/18/13 15:26	07/19/13 19:01	1
Vanadium	ND		50	4.1	ug/L		07/18/13 15:26	07/19/13 19:01	1
Zinc	ND		20	5.2	ug/L		07/18/13 15:26	07/19/13 19:01	1

Lab Sample ID: LCS 160-61452/2-A

Matrix: Water

Analysis Batch: 61766

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 61452

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	500	516		ug/L		103	80 - 120
Arsenic	1000	1010		ug/L		101	80 - 120
Barium	1000	1040		ug/L		104	80 - 120
Beryllium	1000	997		ug/L		100	80 - 120
Cadmium	1000	1020		ug/L		102	80 - 120
Calcium	10000	10700		ug/L		107	80 - 120
Chromium	1000	1060		ug/L		106	80 - 120
Cobalt	1000	1060		ug/L		106	80 - 120
Copper	1000	1030		ug/L		103	80 - 120
Iron	10000	9860		ug/L		99	80 - 120
Lead	1000	1080		ug/L		108	80 - 120
Magnesium	10000	9830		ug/L		98	80 - 120
Manganese	1000	987		ug/L		99	80 - 120
Nickel	1000	1060		ug/L		106	80 - 120
Potassium	10000	9950		ug/L		99	80 - 120
Selenium	1000	1020		ug/L		102	80 - 120
Silver	100	91.9		ug/L		92	80 - 120
Sodium	10000	10200		ug/L		102	80 - 120
Thallium	200	226		ug/L		113	80 - 120
Vanadium	1000	962		ug/L		96	80 - 120
Zinc	1000	1040		ug/L		104	80 - 120

Lab Sample ID: 160-3000-8 MS

Matrix: Water

Analysis Batch: 61766

Client Sample ID: D-12

Prep Type: Dissolved

Prep Batch: 61452

Analyte	Sample	Sample	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier							
Aluminum	220		10000	10100		ug/L		98	75 - 125
Antimony	5.1	J	500	498		ug/L		99	75 - 125
Arsenic	ND		1000	990		ug/L		99	75 - 125
Barium	450		1000	1480		ug/L		103	75 - 125

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QC Sample Results

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

TestAmerica Job ID: 160-3000-1

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

Lab Sample ID: 160-3000-8 MS

Matrix: Water

Analysis Batch: 61766

Client Sample ID: D-12

Prep Type: Dissolved

Prep Batch: 61452

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Beryllium	ND		1000	971		ug/L		97		75 - 125
Cadmium	ND		1000	975		ug/L		97		75 - 125
Calcium	460000	E	10000	455000	E 4	ug/L		-96		75 - 125
Chromium	5.6	J	1000	949		ug/L		94		75 - 125
Cobalt	4.0	J	1000	916		ug/L		91		75 - 125
Copper	8.4	J	1000	959		ug/L		95		75 - 125
Iron	8500		10000	17800		ug/L		93		75 - 125
Lead	ND		1000	916		ug/L		92		75 - 125
Magnesium	67000	E	10000	73400	E 4	ug/L		66		75 - 125
Manganese	990		1000	1890		ug/L		90		75 - 125
Nickel	16	J	1000	928		ug/L		91		75 - 125
Potassium	14000		10000	24100		ug/L		105		75 - 125
Selenium	11	J	1000	1010		ug/L		99		75 - 125
Silver	ND		100	87.4		ug/L		87		75 - 125
Sodium	180000	E	10000	189000	E 4	ug/L		75		75 - 125
Thallium	ND		200	184		ug/L		92		75 - 125
Vanadium	5.8	J	1000	945		ug/L		94		75 - 125
Zinc	ND		1000	981		ug/L		98		75 - 125

Lab Sample ID: 160-3000-8 MS

Matrix: Water

Analysis Batch: 61766

Client Sample ID: D-12

Prep Type: Dissolved

Prep Batch: 61452

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Calcium	650000	E	10000	657000	E 4	ug/L		102		75 - 125
Iron	8600		10000	18300		ug/L		97		75 - 125
Magnesium	67000		10000	76500	4	ug/L		95		75 - 125
Sodium	180000		10000	188000	4	ug/L		110		75 - 125

Lab Sample ID: 160-3000-8 MS

Matrix: Water

Analysis Batch: 62088

Client Sample ID: D-12

Prep Type: Dissolved

Prep Batch: 61452

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Calcium	700000		10000	684000	4	ug/L		-155		75 - 125

Lab Sample ID: 160-3000-8 MSD

Matrix: Water

Analysis Batch: 61766

Client Sample ID: D-12

Prep Type: Dissolved

Prep Batch: 61452

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier							
Aluminum	220		10000	9910		ug/L		97		75 - 125	2	20
Antimony	5.1	J	500	487		ug/L		96		75 - 125	2	20
Arsenic	ND		1000	967		ug/L		97		75 - 125	2	20
Barium	450		1000	1470		ug/L		103		75 - 125	0	20
Beryllium	ND		1000	956		ug/L		96		75 - 125	2	20
Cadmium	ND		1000	955		ug/L		95		75 - 125	2	20
Calcium	460000	E	10000	452000	E 4	ug/L		-121		75 - 125	1	20
Chromium	5.6	J	1000	931		ug/L		93		75 - 125	2	20

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QC Sample Results

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

TestAmerica Job ID: 160-3000-1

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

Lab Sample ID: 160-3000-8 MSD

Matrix: Water

Analysis Batch: 61766

Client Sample ID: D-12

Prep Type: Dissolved

Prep Batch: 61452

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
Cobalt	4.0	J	1000	897		ug/L		89	75 - 125	2	20
Copper	8.4	J	1000	940		ug/L		93	75 - 125	2	20
Iron	8500		10000	17700		ug/L		92	75 - 125	1	20
Lead	ND		1000	895		ug/L		90	75 - 125	2	20
Magnesium	67000	E	10000	72800	E 4	ug/L		60	75 - 125	1	20
Manganese	990		1000	1870		ug/L		88	75 - 125	1	20
Nickel	16	J	1000	908		ug/L		89	75 - 125	2	20
Potassium	14000		10000	24000		ug/L		104	75 - 125	0	20
Selenium	11	J	1000	981		ug/L		97	75 - 125	2	20
Silver	ND		100	86.2		ug/L		86	75 - 125	1	20
Sodium	180000	E	10000	190000	E 4	ug/L		81	75 - 125	0	20
Thallium	ND		200	181		ug/L		90	75 - 125	2	20
Vanadium	5.8	J	1000	926		ug/L		92	75 - 125	2	20
Zinc	ND		1000	962		ug/L		96	75 - 125	2	20

Lab Sample ID: 160-3000-8 MSD

Matrix: Water

Analysis Batch: 61766

Client Sample ID: D-12

Prep Type: Dissolved

Prep Batch: 61452

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
Calcium	650000	E	10000	675000	E 4	ug/L		284	75 - 125	3	20
Iron	8600		10000	18300		ug/L		97	75 - 125	0	20
Magnesium	67000		10000	76900	4	ug/L		99	75 - 125	1	20
Sodium	180000		10000	190000	4	ug/L		131	75 - 125	1	20

Lab Sample ID: 160-3000-8 MSD

Matrix: Water

Analysis Batch: 62088

Client Sample ID: D-12

Prep Type: Dissolved

Prep Batch: 61452

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
Calcium	700000		10000	690000	4	ug/L		-100	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 160-61465/1-A

Matrix: Water

Analysis Batch: 61580

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 61465

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:54	07/18/13 23:23	1

Lab Sample ID: LCS 160-61465/2-A

Matrix: Water

Analysis Batch: 61580

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 61465

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
							Added
Mercury	5.00	5.34		ug/L		107	80 - 120

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QC Sample Results

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

TestAmerica Job ID: 160-3000-1

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

Lab Sample ID: 160-3000-8 MS
Matrix: Water
Analysis Batch: 61580

Client Sample ID: D-12
Prep Type: Total/NA
Prep Batch: 61465

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		5.00	5.58		ug/L		112	80 - 120

Lab Sample ID: 160-3000-8 MSD
Matrix: Water
Analysis Batch: 61580

Client Sample ID: D-12
Prep Type: Total/NA
Prep Batch: 61465

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		5.00	5.22		ug/L		104	80 - 120	7	20

Lab Sample ID: MB 160-61466/1-A
Matrix: Water
Analysis Batch: 61580

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 61466

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/18/13 19:55	07/19/13 00:30	1

Lab Sample ID: LCS 160-61466/2-A
Matrix: Water
Analysis Batch: 61580

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61466

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.35		ug/L		107	80 - 120

Lab Sample ID: 160-3000-1 MS
Matrix: Water
Analysis Batch: 61580

Client Sample ID: I-66
Prep Type: Dissolved
Prep Batch: 61466

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		5.00	5.14		ug/L		103	80 - 120

Lab Sample ID: 160-3000-1 MSD
Matrix: Water
Analysis Batch: 61580

Client Sample ID: I-66
Prep Type: Dissolved
Prep Batch: 61466

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		5.00	5.13		ug/L		103	80 - 120	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 160-61021/3
Matrix: Water
Analysis Batch: 61021

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			07/16/13 12:34	1
Chloride	ND		0.20	0.020	mg/L			07/16/13 12:34	1
Bromide	ND		0.25	0.025	mg/L			07/16/13 12:34	1
Sulfate	ND		0.50	0.050	mg/L			07/16/13 12:34	1

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QC Sample Results

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

TestAmerica Job ID: 160-3000-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 160-61021/4
Matrix: Water
Analysis Batch: 61021

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	0.383		mg/L		96	90 - 110
Chloride	2.00	1.90		mg/L		95	90 - 110
Bromide	2.00	1.94		mg/L		97	90 - 110
Sulfate	8.00	7.62		mg/L		95	90 - 110

Lab Sample ID: 160-3000-8 MS
Matrix: Water
Analysis Batch: 61021

Client Sample ID: D-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.0087	J	0.400	0.404		mg/L		99	90 - 110
Bromide	4.2		2.00	6.36		mg/L		106	90 - 110

Lab Sample ID: 160-3000-8 DU
Matrix: Water
Analysis Batch: 61021

Client Sample ID: D-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	0.0087	J	0.00656	J	mg/L		28	20
Bromide	4.2		4.27		mg/L		0.5	20

Lab Sample ID: MB 160-61027/9
Matrix: Water
Analysis Batch: 61027

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iodide	ND		1.0	0.10	mg/L			07/16/13 16:50	1

Lab Sample ID: LCS 160-61027/10
Matrix: Water
Analysis Batch: 61027

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	4.02		mg/L		101	90 - 110

Lab Sample ID: 160-3000-8 MS
Matrix: Water
Analysis Batch: 61027

Client Sample ID: D-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iodide	0.37	J	4.00	4.20		mg/L		96	90 - 110

Lab Sample ID: 160-3000-8 DU
Matrix: Water
Analysis Batch: 61027

Client Sample ID: D-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Iodide	0.37	J	0.366	J	mg/L		0.3	20

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QC Sample Results

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

TestAmerica Job ID: 160-3000-1

Method: 300.0 - Anions, Ion Chromatography - DL2

Lab Sample ID: 160-3000-8 MS
Matrix: Water
Analysis Batch: 61021

Client Sample ID: D-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL2	250		400	649		mg/L		99	90 - 110
Sulfate - DL2	750		800	1520		mg/L		96	90 - 110

Lab Sample ID: 160-3000-8 DU
Matrix: Water
Analysis Batch: 61021

Client Sample ID: D-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL2	250		255		mg/L		0.2	20
Sulfate - DL2	750		752		mg/L		0.3	20

Method: 310.1 - Alkalinity

Lab Sample ID: MB 160-63159/1
Matrix: Water
Analysis Batch: 63159

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	0.250	J	1.3	0.14	mg/L			07/26/13 09:51	1

Lab Sample ID: LCS 160-63159/3
Matrix: Water
Analysis Batch: 63159

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	400	384		mg/L		96	90 - 110

Lab Sample ID: LLCS 160-63159/2
Matrix: Water
Analysis Batch: 63159

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	192		mg/L		96	90 - 110

Lab Sample ID: 160-3000-8 MS
Matrix: Water
Analysis Batch: 63159

Client Sample ID: D-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	1000	B	100	1130	4	mg/L		90	80 - 120

Lab Sample ID: 160-3000-8 DU
Matrix: Water
Analysis Batch: 63159

Client Sample ID: D-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	1000	B	1040		mg/L		0.5	20

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QC Association Summary

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

TestAmerica Job ID: 160-3000-1

GC/MS VOA

Analysis Batch: 61405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3000-1	I-66	Total/NA	Water	8260C	
160-3000-2	MW-102	Total/NA	Water	8260C	
160-3000-3	MW-103	Total/NA	Water	8260C	
160-3000-4	PZ-303-AS	Total/NA	Water	8260C	
160-3000-5	I-11	Total/NA	Water	8260C	
160-3000-6	S-10	Total/NA	Water	8260C	
160-3000-7	FIELD BLANK @ D-12	Total/NA	Water	8260C	
160-3000-8	D-12	Total/NA	Water	8260C	
160-3000-8 MS	D-12	Total/NA	Water	8260C	
160-3000-8 MSD	D-12	Total/NA	Water	8260C	
160-3000-9	DUPLICATE 05	Total/NA	Water	8260C	
160-3000-10	TRIP BLANK	Total/NA	Water	8260C	
LCS 160-61405/4	Lab Control Sample	Total/NA	Water	8260C	
LCS D 160-61405/5	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 160-61405/2	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 62292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3000-4	PZ-303-AS	Total/NA	Water	8260C	
160-3000-8	D-12	Total/NA	Water	8260C	
160-3000-9	DUPLICATE 05	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: 60996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3000-1	I-66	Dissolved	Water	3010A	
160-3000-1	I-66	Total/NA	Water	3010A	
160-3000-2	MW-102	Dissolved	Water	3010A	
160-3000-2	MW-102	Total/NA	Water	3010A	
160-3000-3	MW-103	Dissolved	Water	3010A	
160-3000-3	MW-103	Total/NA	Water	3010A	
160-3000-4	PZ-303-AS	Dissolved	Water	3010A	
160-3000-4	PZ-303-AS	Total/NA	Water	3010A	
160-3000-5	I-11	Dissolved	Water	3010A	
160-3000-5	I-11	Total/NA	Water	3010A	
160-3000-6	S-10	Dissolved	Water	3010A	
160-3000-6	S-10	Total/NA	Water	3010A	
160-3000-8	D-12	Total/NA	Water	3010A	
160-3000-8 MS	D-12	Total/NA	Water	3010A	
160-3000-8 MSD	D-12	Total/NA	Water	3010A	
160-3000-9	DUPLICATE 05	Dissolved	Water	3010A	
160-3000-9	DUPLICATE 05	Total/NA	Water	3010A	
LCS 160-60996/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 160-60996/1-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: 160-3000-1

Metals (Continued)

Prep Batch: 61452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3000-8	D-12	Dissolved	Water	3010A	
160-3000-8 MS	D-12	Dissolved	Water	3010A	
160-3000-8 MSD	D-12	Dissolved	Water	3010A	
LCS 160-61452/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 160-61452/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 61465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3000-1	I-66	Total/NA	Water	7470A	
160-3000-2	MW-102	Total/NA	Water	7470A	
160-3000-3	MW-103	Total/NA	Water	7470A	
160-3000-4	PZ-303-AS	Total/NA	Water	7470A	
160-3000-5	I-11	Total/NA	Water	7470A	
160-3000-6	S-10	Total/NA	Water	7470A	
160-3000-8	D-12	Total/NA	Water	7470A	
160-3000-8 MS	D-12	Total/NA	Water	7470A	
160-3000-8 MSD	D-12	Total/NA	Water	7470A	
160-3000-9	DUPLICATE 05	Total/NA	Water	7470A	
LCS 160-61465/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 160-61465/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 61466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3000-1	I-66	Dissolved	Water	7470A	
160-3000-1 MS	I-66	Dissolved	Water	7470A	
160-3000-1 MSD	I-66	Dissolved	Water	7470A	
160-3000-2	MW-102	Dissolved	Water	7470A	
160-3000-3	MW-103	Dissolved	Water	7470A	
160-3000-4	PZ-303-AS	Dissolved	Water	7470A	
160-3000-5	I-11	Dissolved	Water	7470A	
160-3000-6	S-10	Dissolved	Water	7470A	
160-3000-8	D-12	Dissolved	Water	7470A	
160-3000-9	DUPLICATE 05	Dissolved	Water	7470A	
LCS 160-61466/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 160-61466/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 61580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3000-1	I-66	Dissolved	Water	7470A	61466
160-3000-1	I-66	Total/NA	Water	7470A	61465
160-3000-1 MS	I-66	Dissolved	Water	7470A	61466
160-3000-1 MSD	I-66	Dissolved	Water	7470A	61466
160-3000-2	MW-102	Dissolved	Water	7470A	61466
160-3000-2	MW-102	Total/NA	Water	7470A	61465
160-3000-3	MW-103	Dissolved	Water	7470A	61466
160-3000-3	MW-103	Total/NA	Water	7470A	61465
160-3000-4	PZ-303-AS	Dissolved	Water	7470A	61466
160-3000-4	PZ-303-AS	Total/NA	Water	7470A	61465
160-3000-5	I-11	Dissolved	Water	7470A	61466
160-3000-5	I-11	Total/NA	Water	7470A	61465
160-3000-6	S-10	Dissolved	Water	7470A	61466

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QC Association Summary

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

TestAmerica Job ID: 160-3000-1

Metals (Continued)

Analysis Batch: 61580 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3000-6	S-10	Total/NA	Water	7470A	61465
160-3000-8	D-12	Dissolved	Water	7470A	61466
160-3000-8	D-12	Total/NA	Water	7470A	61465
160-3000-8 MS	D-12	Total/NA	Water	7470A	61465
160-3000-8 MSD	D-12	Total/NA	Water	7470A	61465
160-3000-9	DUPLICATE 05	Dissolved	Water	7470A	61466
160-3000-9	DUPLICATE 05	Total/NA	Water	7470A	61465
LCS 160-61465/2-A	Lab Control Sample	Total/NA	Water	7470A	61465
LCS 160-61466/2-A	Lab Control Sample	Total/NA	Water	7470A	61466
MB 160-61465/1-A	Method Blank	Total/NA	Water	7470A	61465
MB 160-61466/1-A	Method Blank	Total/NA	Water	7470A	61466

Analysis Batch: 61766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3000-1	I-66	Dissolved	Water	6010C	60996
160-3000-1	I-66	Dissolved	Water	6010C	60996
160-3000-1	I-66	Total/NA	Water	6010C	60996
160-3000-1	I-66	Total/NA	Water	6010C	60996
160-3000-2	MW-102	Dissolved	Water	6010C	60996
160-3000-2	MW-102	Dissolved	Water	6010C	60996
160-3000-2	MW-102	Total/NA	Water	6010C	60996
160-3000-2	MW-102	Total/NA	Water	6010C	60996
160-3000-3	MW-103	Dissolved	Water	6010C	60996
160-3000-3	MW-103	Dissolved	Water	6010C	60996
160-3000-3	MW-103	Total/NA	Water	6010C	60996
160-3000-3	MW-103	Total/NA	Water	6010C	60996
160-3000-4	PZ-303-AS	Dissolved	Water	6010C	60996
160-3000-4	PZ-303-AS	Dissolved	Water	6010C	60996
160-3000-4	PZ-303-AS	Total/NA	Water	6010C	60996
160-3000-4	PZ-303-AS	Total/NA	Water	6010C	60996
160-3000-5	I-11	Dissolved	Water	6010C	60996
160-3000-5	I-11	Dissolved	Water	6010C	60996
160-3000-5	I-11	Total/NA	Water	6010C	60996
160-3000-5	I-11	Total/NA	Water	6010C	60996
160-3000-6	S-10	Dissolved	Water	6010C	60996
160-3000-6	S-10	Dissolved	Water	6010C	60996
160-3000-6	S-10	Total/NA	Water	6010C	60996
160-3000-6	S-10	Total/NA	Water	6010C	60996
160-3000-8	D-12	Dissolved	Water	6010C	61452
160-3000-8	D-12	Dissolved	Water	6010C	61452
160-3000-8	D-12	Total/NA	Water	6010C	60996
160-3000-8	D-12	Total/NA	Water	6010C	60996
160-3000-8 MS	D-12	Dissolved	Water	6010C	61452
160-3000-8 MS	D-12	Dissolved	Water	6010C	61452
160-3000-8 MS	D-12	Total/NA	Water	6010C	60996
160-3000-8 MS	D-12	Total/NA	Water	6010C	60996
160-3000-8 MSD	D-12	Dissolved	Water	6010C	61452
160-3000-8 MSD	D-12	Dissolved	Water	6010C	61452
160-3000-8 MSD	D-12	Total/NA	Water	6010C	60996
160-3000-8 MSD	D-12	Total/NA	Water	6010C	60996
160-3000-9	DUPLICATE 05	Dissolved	Water	6010C	60996

TestAmerica St. Louis

QC Association Summary

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

TestAmerica Job ID: 160-3000-1

Metals (Continued)

Analysis Batch: 61766 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3000-9	DUPLICATE 05	Dissolved	Water	6010C	60996
160-3000-9	DUPLICATE 05	Total/NA	Water	6010C	60996
160-3000-9	DUPLICATE 05	Total/NA	Water	6010C	60996
LCS 160-60996/2-A	Lab Control Sample	Total/NA	Water	6010C	60996
LCS 160-61452/2-A	Lab Control Sample	Total/NA	Water	6010C	61452
MB 160-60996/1-A	Method Blank	Total/NA	Water	6010C	60996
MB 160-61452/1-A	Method Blank	Total/NA	Water	6010C	61452

Analysis Batch: 62088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3000-8	D-12	Dissolved	Water	6010C	61452
160-3000-8	D-12	Total/NA	Water	6010C	60996
160-3000-8 MS	D-12	Dissolved	Water	6010C	61452
160-3000-8 MS	D-12	Total/NA	Water	6010C	60996
160-3000-8 MSD	D-12	Dissolved	Water	6010C	61452
160-3000-8 MSD	D-12	Total/NA	Water	6010C	60996
160-3000-9	DUPLICATE 05	Dissolved	Water	6010C	60996
160-3000-9	DUPLICATE 05	Total/NA	Water	6010C	60996

General Chemistry

Analysis Batch: 61021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3000-1	I-66	Total/NA	Water	300.0	
160-3000-1 - DL	I-66	Total/NA	Water	300.0	
160-3000-2	MW-102	Total/NA	Water	300.0	
160-3000-2 - DL	MW-102	Total/NA	Water	300.0	
160-3000-3	MW-103	Total/NA	Water	300.0	
160-3000-3 - DL	MW-103	Total/NA	Water	300.0	
160-3000-4	PZ-303-AS	Total/NA	Water	300.0	
160-3000-4 - DL	PZ-303-AS	Total/NA	Water	300.0	
160-3000-5	I-11	Total/NA	Water	300.0	
160-3000-5 - DL	I-11	Total/NA	Water	300.0	
160-3000-5 - DL2	I-11	Total/NA	Water	300.0	
160-3000-6	S-10	Total/NA	Water	300.0	
160-3000-6 - DL	S-10	Total/NA	Water	300.0	
160-3000-6 - DL2	S-10	Total/NA	Water	300.0	
160-3000-8	D-12	Total/NA	Water	300.0	
160-3000-8 - DL2	D-12	Total/NA	Water	300.0	
160-3000-8 DU	D-12	Total/NA	Water	300.0	
160-3000-8 DU - DL2	D-12	Total/NA	Water	300.0	
160-3000-8 MS	D-12	Total/NA	Water	300.0	
160-3000-8 MS - DL2	D-12	Total/NA	Water	300.0	
160-3000-9	DUPLICATE 05	Total/NA	Water	300.0	
160-3000-9 - DL2	DUPLICATE 05	Total/NA	Water	300.0	
LCS 160-61021/4	Lab Control Sample	Total/NA	Water	300.0	
MB 160-61021/3	Method Blank	Total/NA	Water	300.0	

TestAmerica St. Louis

QC Association Summary

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

TestAmerica Job ID: 160-3000-1

General Chemistry (Continued)

Analysis Batch: 61027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3000-1	I-66	Total/NA	Water	300.0	
160-3000-2	MW-102	Total/NA	Water	300.0	
160-3000-3	MW-103	Total/NA	Water	300.0	
160-3000-4	PZ-303-AS	Total/NA	Water	300.0	
160-3000-5	I-11	Total/NA	Water	300.0	
160-3000-6	S-10	Total/NA	Water	300.0	
160-3000-8	D-12	Total/NA	Water	300.0	
160-3000-8 DU	D-12	Total/NA	Water	300.0	
160-3000-8 MS	D-12	Total/NA	Water	300.0	
160-3000-9	DUPLICATE 05	Total/NA	Water	300.0	
LCS 160-61027/10	Lab Control Sample	Total/NA	Water	300.0	
MB 160-61027/9	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 63159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3000-1	I-66	Total/NA	Water	310.1	
160-3000-2	MW-102	Total/NA	Water	310.1	
160-3000-3	MW-103	Total/NA	Water	310.1	
160-3000-4	PZ-303-AS	Total/NA	Water	310.1	
160-3000-5	I-11	Total/NA	Water	310.1	
160-3000-6	S-10	Total/NA	Water	310.1	
160-3000-8	D-12	Total/NA	Water	310.1	
160-3000-8 DU	D-12	Total/NA	Water	310.1	
160-3000-8 MS	D-12	Total/NA	Water	310.1	
160-3000-9	DUPLICATE 05	Total/NA	Water	310.1	
LCS 160-63159/3	Lab Control Sample	Total/NA	Water	310.1	
LLCS 160-63159/2	Lab Control Sample	Total/NA	Water	310.1	
MB 160-63159/1	Method Blank	Total/NA	Water	310.1	

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Surrogate Summary

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

TestAmerica Job ID: 160-3000-1

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)
160-3000-1	I-66	123	102	104	103
160-3000-2	MW-102	121	104	104	103
160-3000-3	MW-103	124	104	101	102
160-3000-4	PZ-303-AS	123	109	101	99
160-3000-4	PZ-303-AS	102	101	103	108
160-3000-5	I-11	119	101	102	101
160-3000-6	S-10	118	98	103	99
160-3000-7	FIELD BLANK @ D-12	124	106	104	98
160-3000-8	D-12	119	104	101	101
160-3000-8	D-12	105	95	102	103
160-3000-8 MS	D-12	114	101	100	100
160-3000-8 MSD	D-12	114	99	102	102
160-3000-9	DUPLICATE 05	125	102	100	101
160-3000-9	DUPLICATE 05	107	95	97	102
160-3000-10	TRIP BLANK	117	101	102	102
LCS 160-61405/4	Lab Control Sample	126	101	95	98
LCS 160-62292/4-A	Lab Control Sample	105	96	103	102
LCSD 160-61405/5	Lab Control Sample Dup	117	100	99	99
MB 160-61405/2	Method Blank	123	106	102	100
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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