

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: 160-2968-1  
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:  
7/29/2013 3:20:04 PM

Rhonda Ridenhower, Customer Service Manager  
[rhonda.ridenhower@testamericainc.com](mailto:rhonda.ridenhower@testamericainc.com)

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[www.testamericainc.com](http://www.testamericainc.com)

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

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



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# Case Narrative

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

TestAmerica Job ID: 160-2968-1

**Job ID: 160-2968-1**

**Laboratory: TestAmerica St. Louis**

**Narrative**

## CASE NARRATIVE

**Client: Engineering Management Support, Inc.**

**Project: West Lake Landfill**

**Report Number: 160-2968-1**

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 07/12/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.0° C and 2.0° C.

### VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples P2-113-SS (160-2968-1), P2-104-SS (160-2968-2), P2-101-SS (160-2968-3), P2-104-SD (160-2968-4), FB@P2-202-SS (160-2968-5), P2-202-SS (160-2968-6), D-83 (160-2968-7), MW-1204 (160-2968-8), S-82 (160-2968-9), P2-116-SS (160-2968-10), D-93 (160-2968-11), I-9 (160-2968-12), P2-115-SS (160-2968-13), DUPLICATE 03 (160-2968-14) and TRIP BLANK (160-2968-15) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 07/15/2013, 07/16/2013, 07/17/2013 and 07/18/2013.

Analytical batch 60813

## Case Narrative

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

TestAmerica Job ID: 160-2968-1

### Job ID: 160-2968-1 (Continued)

#### Laboratory: TestAmerica St. Louis (Continued)

The continuing calibration verification (CCV) for Chloroethane and Methyl acetate associated with batch 60813 recovered above the upper control limit. These analytes were not detected above reporting limit in the affected analytes; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 60813 recovered outside control limits for the following analyte: 2-Hexanone. This analyte was biased high in the LCS and was not present above the reporting limit in the associated samples; therefore, the data have been reported.

The MSD was also outside control limits for 2-Hexanone; this analyte was recovered high in the LCS but was not present above the reporting limit in the associated samples.

Samples were analyzed at a dilution based on results of screening (due to strong sample odor). The reporting limit has been adjusted for those analytes reported from the dilution. All other analytes are reported from undiluted analyses in a subsequent batch.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 60813 were outside control limits for Chloroethane. The associated laboratory control sample (LCS) recovery met acceptance criteria.

#### Analytical batch 61806

The continuing calibration verification (CCV) for Chloroethane associated with batch 61806 recovered above the upper control limit indicating that results for this analyte will be biased high. This analyte was not detected above the reporting limit in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 61806 recovered outside control limits for the following analyte: Chloroethane. This analyte was biased high in the LCS and was not detected above the reporting limit in the associated samples; therefore, the data have been reported.

Sample, MW-1204 (160-2968-8), was analyzed at a dilution due to the presence of high levels of target analytes. The reporting limit has been adjusted for those analytes reported from the dilution.

No other difficulties were encountered during the VOCs analysis.

All other quality control parameters were within the acceptance limits.

#### METALS (ICP)-Total and Dissolved

Samples P2-113-SS (160-2968-1), P2-104-SS (160-2968-2), P2-101-SS (160-2968-3), P2-104-SD (160-2968-4), P2-202-SS (160-2968-6), D-83 (160-2968-7), MW-1204 (160-2968-8), S-82 (160-2968-9), P2-116-SS (160-2968-10), D-93 (160-2968-11), I-9 (160-2968-12), P2-115-SS (160-2968-13) and DUPLICATE 03 (160-2968-14) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 07/16/2013 and analyzed on 07/17/2013 and 07/18/2013.

#### Analytical batch 61388

The following samples were diluted to bring the concentration of target analytes (calcium, magnesium, and sodium) within the calibration range. Magnesium also interferes with iron: (160-2968-6 SD), D-83 (160-2968-7), D-93 (160-2968-11), DUPLICATE 03 (160-2968-14), I-9 (160-2968-12), MW-1204 (160-2968-8), P2-101-SS (160-2968-3), P2-104-SD (160-2968-4), P2-104-SS (160-2968-2), P2-113-SS (160-2968-1), P2-115-SS (160-2968-13), P2-202-SS (160-2968-6), P2-202-SS (160-2968-6 MS), P2-202-SS (160-2968-6 MSD), S-82 (160-2968-9). Elevated reporting limits (RLs) are provided.

Due to the high concentration of calcium and magnesium, the matrix spike / matrix spike duplicate (MS/MSD) for batch 60808 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

The initial calibration verification (ICV) for prep batch 60808 was above the upper control limit for thallium. The affected samples are ND for thallium and the data is reported with this narrative. The data have been qualified and reported.

#### Analytical batch 61428

The following samples were diluted to bring the concentration of target analytes (calcium) within the calibration range: D-93 (160-2968-11), I-9 (160-2968-12), MW-1204 (160-2968-8). Elevated reporting limits (RLs) are provided.

## Case Narrative

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

TestAmerica Job ID: 160-2968-1

### Job ID: 160-2968-1 (Continued)

#### Laboratory: TestAmerica St. Louis (Continued)

##### Analytical batch 61576

The following samples were diluted to bring the concentration of target analytes (calcium, magnesium, and sodium) within the calibration range. Magnesium also interferes with iron: (160-2968-6 SD), D-83 (160-2968-7), D-93 (160-2968-11), DUPLICATE 03 (160-2968-14), I-9 (160-2968-12), MW-1204 (160-2968-8), P2-101-SS (160-2968-3), P2-104-SD (160-2968-4), P2-104-SS (160-2968-2), P2-113-SS (160-2968-1), P2-115-SS (160-2968-13), P2-202-SS (160-2968-6), P2-202-SS (160-2968-6 MS), P2-202-SS (160-2968-6 MSD), S-82 (160-2968-9). Elevated reporting limits (RLs) are provided.

No difficulties were encountered during the metals analysis.

All quality control parameters were within the acceptance limits.

##### DISSOLVED MERCURY

Samples P2-113-SS (160-2968-1), P2-104-SS (160-2968-2), P2-101-SS (160-2968-3), P2-104-SD (160-2968-4), P2-202-SS (160-2968-6), D-83 (160-2968-7), MW-1204 (160-2968-8), S-82 (160-2968-9), P2-116-SS (160-2968-10), D-93 (160-2968-11), I-9 (160-2968-12), P2-115-SS (160-2968-13) and DUPLICATE 03 (160-2968-14) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 07/16/2013 and analyzed on 07/17/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

##### TOTAL MERCURY

Samples P2-113-SS (160-2968-1), P2-104-SS (160-2968-2), P2-101-SS (160-2968-3), P2-104-SD (160-2968-4), P2-202-SS (160-2968-6), D-83 (160-2968-7), MW-1204 (160-2968-8), S-82 (160-2968-9), P2-116-SS (160-2968-10), D-93 (160-2968-11), I-9 (160-2968-12), P2-115-SS (160-2968-13) and DUPLICATE 03 (160-2968-14) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 07/16/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

##### ANIONS

Samples P2-113-SS (160-2968-1), P2-104-SS (160-2968-2), P2-101-SS (160-2968-3), P2-104-SD (160-2968-4), P2-202-SS (160-2968-6), D-83 (160-2968-7), MW-1204 (160-2968-8), S-82 (160-2968-9), P2-116-SS (160-2968-10), D-93 (160-2968-11), I-9 (160-2968-12), P2-115-SS (160-2968-13) and DUPLICATE 03 (160-2968-14) were analyzed for anions in accordance with EPA Method 300.0. The samples were analyzed on 07/12/2013, 07/13/2013 and 07/16/2013.

The following samples were diluted to bring the concentrations of Chloride, Bromide, and Sulfate within the calibration range in IC batch 62158: D-83 (160-2968-7), D-93 (160-2968-11), DUPLICATE 03 (160-2968-14), I-9 (160-2968-12), MW-1204 (160-2968-8), P2-101-SS (160-2968-3), P2-104-SD (160-2968-4), P2-113-SS (160-2968-1), P2-115-SS (160-2968-13), P2-116-SS (160-2968-10), P2-202-SS (160-2968-6), S-82 (160-2968-9). Elevated reporting limits (RLs) are provided.

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

No other difficulties were encountered during the anions analysis.

All other quality control parameters were within the acceptance limits.

##### ALKALINITY

Samples P2-113-SS (160-2968-1), P2-104-SS (160-2968-2), P2-101-SS (160-2968-3), P2-104-SD (160-2968-4), P2-202-SS (160-2968-6), D-83 (160-2968-7), MW-1204 (160-2968-8), S-82 (160-2968-9), P2-116-SS (160-2968-10), D-93 (160-2968-11), I-9 (160-2968-12), P2-115-SS (160-2968-13) and DUPLICATE 03 (160-2968-14) were analyzed for alkalinity in accordance with EPA Method 310.1. The samples were analyzed on 07/25/2013.

## Case Narrative

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

TestAmerica Job ID: 160-2968-1

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### Job ID: 160-2968-1 (Continued)

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#### Laboratory: TestAmerica St. Louis (Continued)

For the analysis of the associated samples in Alkalinity batch 62899, the following samples were diluted to bring the concentration of target analytes within the calibration range: D-93 (160-2968-11), I-9 (160-2968-12), MW-1204 (160-2968-8). Elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the alkalinity analysis.

All other quality control parameters were within the acceptance limits.

Job # 2968

TestAmerica

TestAmerica St. Louis  
 13715 Rider Trail North  
 Earth City, MO 63045  
 Phone (314) 298-8586 Fax (314) 298-8757

## Chain of Custody Record

Client Information		Lab PM:		Carrier Tracking No(s):								
Client Contact: <b>Herst &amp; Associates, Inc.</b>		Ridenhower, Rhonda E										
Company: <b>Engineering Management Support, Inc.</b>		E-Mail: <b>rhonda.ridenhower@testamericainc.com</b>										
Address: <b>7220 W. Jefferson AVE Suite 406</b>		Lab #:		COC No: <b>160-499-253.1</b>								
City: <b>Lakewood</b>		State: <b>CO</b>		Page: <b>1</b> of <b>20</b>								
Zip: <b>80235</b>		Phone: <b>303-939-9111</b>		Lab #:								
PO #: <b>Purchase Order not required</b>		Due Date Requested:		Preservation Codes:								
Project #: <b>16002280</b>		TAT Requested (days):		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Ammonia H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - BDA Other:								
SSOH#:		Matrix (Seawater, Groundwater, Surface Water, Wastewater, Air, etc.):		M - HCL N - None O - As/AsO2 P - Na2CO3 Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - 1% Dioxosulfate U - Acetone V - MCAA W - ph 4-5 Z - Other (specify)								
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Seawater, Groundwater, Surface Water, Wastewater, Air, etc.)	Field Filtered Sample (Yes or No)	310 - Alkalinity - 310	308 - Anions	9610C, 7470A	9260C - VOA	9260C - Standard List	Analysis Requested	Special Instructions/Note:
P2-113-SS	7/11/13	0850	G	Water	X	X	X	X	X	X		
P2-104-SS	↑	0937	G	Water	X	X	X	X	X	X		
P2-101-SS	↑	0940	G	Water	X	X	X	X	X	X		
P2-104-SD	↑	1029	G	Water	X	X	X	X	X	X		
FB @ P2-202-SS	↑	1200	G	Water	X	X	X	X	X	X		
P2-202-SS	↑	1232	G	Water	X	X	X	X	X	X		
D-83	↑	1305	G	Water	X	X	X	X	X	X		
MW-1204	↑	1412	G	Water	X	X	X	X	X	X		
S-82	↑	1432	G	Water	X	X	X	X	X	X		
P2-116-SS	↓	1505	G	Water	X	X	X	X	X	X		
D-93	7/11/13	1540	G	Water	X	X	X	X	X	X		
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)												
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: <b>Matt Stewart</b> Date/Time: <b>7/12/13 0745</b> Company: _____ Relinquished by: <b>Wendy Lee</b> Date/Time: <b>7/12/13 0815</b> Company: _____ Relinquished by: _____ Date/Time: _____ Company: _____												
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Custody Seal No.: _____ Cooler Temperature: _____ °C and Other Remarks: _____												



## Chain of Custody Record

<b>Client Information</b> Client Contact: Mr. Paul Roseboro Company: Engineering Management Support, Inc. Address: 7220 W. Jefferson AVE, Suite 406 City: Lakewood State: Zn CO: 80235 Phone: Email: paulrosas.co@emsidamer.com Project Name: West Lake Landfill- July SIC:		Lab PM: Rhonda E E-Mail: rhonda.rdenhower@testamerica.com Phone: 636-939-9111 Fax: 636-939-9111		Carrier Tracking Note: 160-499-253.1 Page 9 of 2 Job #:	
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required W/O #:		<b>Analysis Requested</b>			
Sample Identification F-9 P2-115-SJ Duplicate O3 Trip Blank		Sample Date 7/11/13 7/11/13 7/11/13		Sample Time 1626 1636 - -	
Matrix (W=Water, S=Solid, O=Other) Sample Type (C=Comp, G=grab) Preservation Code:		Field Filtered Sample (Yes or No) X X X X		Total Number of Containers 7 7 7 3	
Special Instructions/Note: M - Mercury N - None O - As/No/2 P - Na2O/S Q - Na2O/S4 R - Na2S/SO3 S - H2SO4 T - 1.5% Dodecylhydrate U - Acetone V - MCAA W - pH 4-5 X - BDA Z - other (specify) Other:		Special Instructions/Note: Disposed - GCOC, 7/12/13 8260C - VOA 8010C, 7470A 308 - Anions 310.1 - Alkalinity- 31.0			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)					
Empty Kit Relinquished by:		Date:		Method of Shipment:	
Relinquished by: <i>Matt Stannard</i>		Date/Time: 7/12/13 0745		Company:	
Relinquished by: <i>Paul Roseboro</i>		Date/Time: 7/12/13 0815		Company:	
Relinquished by:		Date/Time:		Company:	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:			

## Login Sample Receipt Checklist

Client: Engineering Management Support, Inc.

Job Number: 160-2968-1

**Login Number: 2968**

**List Source: TestAmerica St. Louis**

**List Number: 1**

**Creator: Daniels, Brian J**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	1 vial for D-83 and 2 vials for Trip Blank contain headspace.
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: 160-2968-1

## 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
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

### General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F	MS or MSD 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.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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# Method Summary

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

TestAmerica Job ID: 160-2968-1

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

**Protocol References:**

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

**Laboratory References:**

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

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# Sample Summary

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

TestAmerica Job ID: 160-2968-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-2968-1	P2-113-SS	Water	07/11/13 08:50	07/12/13 08:15
160-2968-2	P2-104-SS	Water	07/11/13 09:37	07/12/13 08:15
160-2968-3	P2-101-SS	Water	07/11/13 09:40	07/12/13 08:15
160-2968-4	P2-104-SD	Water	07/11/13 10:29	07/12/13 08:15
160-2968-5	FB@P2-202-SS	Water	07/11/13 12:00	07/12/13 08:15
160-2968-6	P2-202-SS	Water	07/11/13 12:32	07/12/13 08:15
160-2968-7	D-83	Water	07/11/13 13:05	07/12/13 08:15
160-2968-8	MW-1204	Water	07/11/13 14:12	07/12/13 08:15
160-2968-9	S-82	Water	07/11/13 14:32	07/12/13 08:15
160-2968-10	P2-116-SS	Water	07/11/13 15:05	07/12/13 08:15
160-2968-11	D-93	Water	07/11/13 15:40	07/12/13 08:15
160-2968-12	I-9	Water	07/11/13 16:26	07/12/13 08:15
160-2968-13	P2-115-SS	Water	07/11/13 16:36	07/12/13 08:15
160-2968-14	DUPLICATE 03	Water	07/11/13 00:00	07/12/13 08:15
160-2968-15	TRIP BLANK	Water	07/11/13 00:00	07/12/13 08:15

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# Detection Summary

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-113-SS**

**Lab Sample ID: 160-2968-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12	J	20	6.7	ug/L	1		8260C	Total/NA
Methylene Chloride	2.5	J	5.0	1.7	ug/L	1		8260C	Total/NA
Aluminum	8500		200	80	ug/L	1		6010C	Total/NA
Antimony	4.4	J	10	4.0	ug/L	1		6010C	Total/NA
Arsenic	7.2	J	10	2.0	ug/L	1		6010C	Total/NA
Barium	220		50	4.0	ug/L	1		6010C	Total/NA
Calcium	140000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	150000		10000	1100	ug/L	10		6010C	Total/NA
Chromium	24		10	3.1	ug/L	1		6010C	Total/NA
Cobalt	4.5	J	50	4.0	ug/L	1		6010C	Total/NA
Iron	7400		100	28	ug/L	1		6010C	Total/NA
Iron	7600		1000	280	ug/L	10		6010C	Total/NA
Lead	4.6	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	61000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	61000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	100		15	3.3	ug/L	1		6010C	Total/NA
Nickel	21	J	40	13	ug/L	1		6010C	Total/NA
Potassium	5400		5000	1700	ug/L	1		6010C	Total/NA
Sodium	23000		1000	320	ug/L	1		6010C	Total/NA
Vanadium	27	J	50	4.1	ug/L	1		6010C	Total/NA
Zinc	48		20	5.2	ug/L	1		6010C	Total/NA
Barium	180		50	4.0	ug/L	1		6010C	Dissolved
Calcium	55000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	55000		5000	530	ug/L	5		6010C	Dissolved
Iron	54	J	100	28	ug/L	1		6010C	Dissolved
Magnesium	31000		1000	130	ug/L	1		6010C	Dissolved
Manganese	26		15	3.3	ug/L	1		6010C	Dissolved
Potassium	1800	J	5000	1700	ug/L	1		6010C	Dissolved
Sodium	21000		1000	320	ug/L	1		6010C	Dissolved
Zinc	6.4	J	20	5.2	ug/L	1		6010C	Dissolved
Sulfate	20		0.50	0.050	mg/L	1		300.0	Total/NA
Alkalinity	270	B	5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL	9.7		4.0	0.40	mg/L	20		300.0	Total/NA

**Client Sample ID: P2-104-SS**

**Lab Sample ID: 160-2968-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	7.0		5.0	0.35	ug/L	1		8260C	Total/NA
2-Hexanone	87		20	0.59	ug/L	1		8260C	Total/NA
4-Methyl-2-pentanone (MIBK)	250	J	400	6.6	ug/L	1		8260C	Total/NA
Acetone	16	J	20	6.7	ug/L	1		8260C	Total/NA
Benzene	1800		100	5.0	ug/L	1		8260C	Total/NA
Chloroethane	5.5	J *	10	0.38	ug/L	1		8260C	Total/NA
Ethylbenzene	25		5.0	0.30	ug/L	1		8260C	Total/NA
Isopropylbenzene	2.6	J	5.0	0.26	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	6.3		5.0	0.40	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	44		5.0	0.57	ug/L	1		8260C	Total/NA
o-Xylene	21		5.0	0.32	ug/L	1		8260C	Total/NA
Styrene	1.3	J	5.0	0.35	ug/L	1		8260C	Total/NA
Toluene	140		5.0	1.0	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

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## Detection Summary

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-104-SS (Continued)**

**Lab Sample ID: 160-2968-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	65		10	0.85	ug/L	1		8260C	Total/NA
Antimony	4.0	J	10	4.0	ug/L	1		6010C	Total/NA
Arsenic	2.6	J	10	2.0	ug/L	1		6010C	Total/NA
Barium	100		50	4.0	ug/L	1		6010C	Total/NA
Calcium	89000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	97000		10000	1100	ug/L	10		6010C	Total/NA
Iron	1800		100	28	ug/L	1		6010C	Total/NA
Iron	1800		1000	280	ug/L	10		6010C	Total/NA
Lead	1.7	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	53000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	54000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	40		15	3.3	ug/L	1		6010C	Total/NA
Potassium	2200	J	5000	1700	ug/L	1		6010C	Total/NA
Sodium	12000		1000	320	ug/L	1		6010C	Total/NA
Arsenic	2.2	J	10	2.0	ug/L	1		6010C	Dissolved
Barium	100		50	4.0	ug/L	1		6010C	Dissolved
Calcium	85000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	89000		5000	530	ug/L	5		6010C	Dissolved
Chromium	3.2	J	10	3.1	ug/L	1		6010C	Dissolved
Iron	1800		100	28	ug/L	1		6010C	Dissolved
Magnesium	49000		1000	130	ug/L	1		6010C	Dissolved
Manganese	39		15	3.3	ug/L	1		6010C	Dissolved
Potassium	2200	J	5000	1700	ug/L	1		6010C	Dissolved
Sodium	12000		1000	320	ug/L	1		6010C	Dissolved
Mercury	0.064	J	0.20	0.060	ug/L	1		7470A	Dissolved
Chloride	4.8		0.20	0.020	mg/L	1		300.0	Total/NA
Sulfate	1.0		0.50	0.050	mg/L	1		300.0	Total/NA
Alkalinity	440	B	5.0	0.54	mg/L	1		310.1	Total/NA

**Client Sample ID: P2-101-SS**

**Lab Sample ID: 160-2968-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	0.52	J	5.0	0.35	ug/L	1		8260C	Total/NA
Acetone	34		20	6.7	ug/L	1		8260C	Total/NA
Benzene	0.92	J	5.0	0.25	ug/L	1		8260C	Total/NA
Chlorobenzene	3.3	J	5.0	0.38	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	0.51	J	5.0	0.40	ug/L	1		8260C	Total/NA
Arsenic	3.4	J	10	2.0	ug/L	1		6010C	Total/NA
Barium	530		50	4.0	ug/L	1		6010C	Total/NA
Calcium	150000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	160000		10000	1100	ug/L	10		6010C	Total/NA
Chromium	4.8	J	10	3.1	ug/L	1		6010C	Total/NA
Iron	590		100	28	ug/L	1		6010C	Total/NA
Iron	580	J	1000	280	ug/L	10		6010C	Total/NA
Lead	2.5	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	98000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	97000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	48		15	3.3	ug/L	1		6010C	Total/NA
Nickel	15	J	40	13	ug/L	1		6010C	Total/NA
Potassium	16000		5000	1700	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: 160-2968-1

## Client Sample ID: P2-101-SS (Continued)

## Lab Sample ID: 160-2968-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	110000	E	1000	320	ug/L	1		6010C	Total/NA
Sodium	99000		10000	3200	ug/L	10		6010C	Total/NA
Zinc	8.6	J	20	5.2	ug/L	1		6010C	Total/NA
Arsenic	3.2	J	10	2.0	ug/L	1		6010C	Dissolved
Barium	480		50	4.0	ug/L	1		6010C	Dissolved
Beryllium	5.7		5.0	0.61	ug/L	1		6010C	Dissolved
Calcium	130000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	150000		5000	530	ug/L	5		6010C	Dissolved
Chromium	3.5	J	10	3.1	ug/L	1		6010C	Dissolved
Iron	78	J	100	28	ug/L	1		6010C	Dissolved
Lead	2.1	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	86000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	90000		5000	660	ug/L	5		6010C	Dissolved
Manganese	68		15	3.3	ug/L	1		6010C	Dissolved
Nickel	15	J	40	13	ug/L	1		6010C	Dissolved
Potassium	15000		5000	1700	ug/L	1		6010C	Dissolved
Sodium	92000		1000	320	ug/L	1		6010C	Dissolved
Vanadium	10	J	50	4.1	ug/L	1		6010C	Dissolved
Zinc	16	J	20	5.2	ug/L	1		6010C	Dissolved
Mercury	0.17	J	0.20	0.060	ug/L	1		7470A	Dissolved
Nitrate as N	0.030		0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	1.5		0.25	0.025	mg/L	1		300.0	Total/NA
Sulfate	6.0		0.50	0.050	mg/L	1		300.0	Total/NA
Iodide	1.0		1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity	760	B	5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL2	160		20	2.0	mg/L	100		300.0	Total/NA

## Client Sample ID: P2-104-SD

## Lab Sample ID: 160-2968-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	11		5.0	0.35	ug/L	1		8260C	Total/NA
2-Butanone (MEK)	3200		500	9.8	ug/L	1		8260C	Total/NA
2-Hexanone	42		20	0.59	ug/L	1		8260C	Total/NA
4-Methyl-2-pentanone (MIBK)	110		20	0.33	ug/L	1		8260C	Total/NA
Acetone	3800		500	170	ug/L	1		8260C	Total/NA
Benzene	800		25	1.3	ug/L	1		8260C	Total/NA
Chlorobenzene	4.6	J	5.0	0.38	ug/L	1		8260C	Total/NA
Chloroethane	4.4	J *	10	0.38	ug/L	1		8260C	Total/NA
Ethylbenzene	49		5.0	0.30	ug/L	1		8260C	Total/NA
Isopropylbenzene	5.9		5.0	0.26	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	3.8	J	5.0	0.40	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	100		5.0	0.57	ug/L	1		8260C	Total/NA
o-Xylene	42		5.0	0.32	ug/L	1		8260C	Total/NA
Styrene	2.4	J	5.0	0.35	ug/L	1		8260C	Total/NA
Toluene	430		25	5.0	ug/L	1		8260C	Total/NA
Xylenes, Total	140		10	0.85	ug/L	1		8260C	Total/NA
Antimony	4.4	J	10	4.0	ug/L	1		6010C	Total/NA
Arsenic	12		10	2.0	ug/L	1		6010C	Total/NA
Barium	800		50	4.0	ug/L	1		6010C	Total/NA
Calcium	110000	E	1000	110	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: 160-2968-1

### Client Sample ID: P2-104-SD (Continued)

### Lab Sample ID: 160-2968-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	130000		10000	1100	ug/L	10		6010C	Total/NA
Chromium	16		10	3.1	ug/L	1		6010C	Total/NA
Cobalt	5.0	J	50	4.0	ug/L	1		6010C	Total/NA
Iron	8900		100	28	ug/L	1		6010C	Total/NA
Iron	9000		1000	280	ug/L	10		6010C	Total/NA
Lead	2.0	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	66000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	66000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	160		15	3.3	ug/L	1		6010C	Total/NA
Nickel	31	J	40	13	ug/L	1		6010C	Total/NA
Potassium	20000		5000	1700	ug/L	1		6010C	Total/NA
Sodium	130000	E	1000	320	ug/L	1		6010C	Total/NA
Sodium	120000		10000	3200	ug/L	10		6010C	Total/NA
Vanadium	11	J	50	4.1	ug/L	1		6010C	Total/NA
Zinc	8.9	J	20	5.2	ug/L	1		6010C	Total/NA
Arsenic	14		10	2.0	ug/L	1		6010C	Dissolved
Barium	1000		50	4.0	ug/L	1		6010C	Dissolved
Calcium	110000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	140000		5000	530	ug/L	5		6010C	Dissolved
Chromium	19		10	3.1	ug/L	1		6010C	Dissolved
Cobalt	5.8	J	50	4.0	ug/L	1		6010C	Dissolved
Iron	13000		100	28	ug/L	1		6010C	Dissolved
Iron	14000		500	140	ug/L	5		6010C	Dissolved
Lead	1.6	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	66000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	71000		5000	660	ug/L	5		6010C	Dissolved
Manganese	160		15	3.3	ug/L	1		6010C	Dissolved
Nickel	36	J	40	13	ug/L	1		6010C	Dissolved
Potassium	23000		5000	1700	ug/L	1		6010C	Dissolved
Sodium	160000	E	1000	320	ug/L	1		6010C	Dissolved
Sodium	170000		5000	1600	ug/L	5		6010C	Dissolved
Vanadium	16	J	50	4.1	ug/L	1		6010C	Dissolved
Mercury	0.16	J	0.20	0.060	ug/L	1		7470A	Dissolved
Bromide	0.64		0.25	0.025	mg/L	1		300.0	Total/NA
Iodide	0.45	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity	580	B	5.0	0.54	mg/L	1		310.1	Total/NA
Sulfate - DL	39		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: FB@P2-202-SS

### Lab Sample ID: 160-2968-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12	J	20	6.7	ug/L	1		8260C	Total/NA

### Client Sample ID: P2-202-SS

### Lab Sample ID: 160-2968-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloroethane	37		5.0	0.57	ug/L	1		8260C	Total/NA
Acetone	30		20	6.7	ug/L	1		8260C	Total/NA
Benzene	34		5.0	0.25	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

# Detection Summary

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-202-SS (Continued)**

**Lab Sample ID: 160-2968-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	4.3	J	5.0	0.40	ug/L	1		8260C	Total/NA
Aluminum	98	J	200	80	ug/L	1		6010C	Total/NA
Arsenic	7.4	J	10	2.0	ug/L	1		6010C	Total/NA
Barium	580		50	4.0	ug/L	1		6010C	Total/NA
Calcium	180000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	200000		10000	1100	ug/L	10		6010C	Total/NA
Cobalt	6.9	J	50	4.0	ug/L	1		6010C	Total/NA
Iron	4900		100	28	ug/L	1		6010C	Total/NA
Iron	5000		1000	280	ug/L	10		6010C	Total/NA
Lead	2.1	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	78000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	79000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	940		15	3.3	ug/L	1		6010C	Total/NA
Nickel	21	J	40	13	ug/L	1		6010C	Total/NA
Potassium	3100	J	5000	1700	ug/L	1		6010C	Total/NA
Sodium	14000		1000	320	ug/L	1		6010C	Total/NA
Zinc	7.0	J	20	5.2	ug/L	1		6010C	Total/NA
Arsenic	6.8	J	10	2.0	ug/L	1		6010C	Dissolved
Barium	550		50	4.0	ug/L	1		6010C	Dissolved
Calcium	160000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	200000		5000	530	ug/L	5		6010C	Dissolved
Cobalt	6.3	J	50	4.0	ug/L	1		6010C	Dissolved
Iron	4600		100	28	ug/L	1		6010C	Dissolved
Iron	4900		500	140	ug/L	5		6010C	Dissolved
Lead	2.9	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	71000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	76000		5000	660	ug/L	5		6010C	Dissolved
Manganese	870		15	3.3	ug/L	1		6010C	Dissolved
Nickel	20	J	40	13	ug/L	1		6010C	Dissolved
Potassium	3100	J	5000	1700	ug/L	1		6010C	Dissolved
Sodium	13000		1000	320	ug/L	1		6010C	Dissolved
Zinc	6.1	J	20	5.2	ug/L	1		6010C	Dissolved
Mercury	0.14	J	0.20	0.060	ug/L	1		7470A	Total/NA
Mercury	0.20		0.20	0.060	ug/L	1		7470A	Dissolved
Bromide	0.51		0.25	0.025	mg/L	1		300.0	Total/NA
Iodide	0.14	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity	610	B	5.0	0.54	mg/L	1		310.1	Total/NA
Sulfate - DL	58		10	1.0	mg/L	20		300.0	Total/NA
Chloride - DL2	84		20	2.0	mg/L	100		300.0	Total/NA

**Client Sample ID: D-83**

**Lab Sample ID: 160-2968-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	2.0	J	5.0	0.38	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	0.68	J	5.0	0.40	ug/L	1		8260C	Total/NA
Antimony	5.0	J	10	4.0	ug/L	1		6010C	Total/NA
Arsenic	2.8	J	10	2.0	ug/L	1		6010C	Total/NA
Barium	1800		50	4.0	ug/L	1		6010C	Total/NA
Calcium	110000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	120000		10000	1100	ug/L	10		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

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## Detection Summary

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: D-83 (Continued)**

**Lab Sample ID: 160-2968-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	17000		100	28	ug/L	1		6010C	Total/NA
Lead	2.8	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	42000		1000	130	ug/L	1		6010C	Total/NA
Manganese	410		15	3.3	ug/L	1		6010C	Total/NA
Potassium	45000		5000	1700	ug/L	1		6010C	Total/NA
Sodium	57000		1000	320	ug/L	1		6010C	Total/NA
Zinc	5.4	J	20	5.2	ug/L	1		6010C	Total/NA
Barium	1700		50	4.0	ug/L	1		6010C	Dissolved
Calcium	98000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	110000		5000	530	ug/L	5		6010C	Dissolved
Iron	16000		100	28	ug/L	1		6010C	Dissolved
Lead	2.9	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	38000		1000	130	ug/L	1		6010C	Dissolved
Manganese	390		15	3.3	ug/L	1		6010C	Dissolved
Potassium	44000		5000	1700	ug/L	1		6010C	Dissolved
Sodium	53000		1000	320	ug/L	1		6010C	Dissolved
Mercury	0.099	J	0.20	0.060	ug/L	1		7470A	Total/NA
Mercury	0.29		0.20	0.060	ug/L	1		7470A	Dissolved
Bromide	0.88		0.25	0.025	mg/L	1		300.0	Total/NA
Sulfate	8.2		0.50	0.050	mg/L	1		300.0	Total/NA
Alkalinity	690	B	5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL	54		4.0	0.40	mg/L	20		300.0	Total/NA

**Client Sample ID: MW-1204**

**Lab Sample ID: 160-2968-8**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	1900		200	3.9	ug/L	1		8260C	Total/NA
2-Hexanone	8.5	J	20	0.59	ug/L	1		8260C	Total/NA
4-Methyl-2-pentanone (MIBK)	22		20	0.33	ug/L	1		8260C	Total/NA
Acetone	3300		1000	330	ug/L	1		8260C	Total/NA
Benzene	1.1	J	5.0	0.25	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	1.9	J	5.0	0.40	ug/L	1		8260C	Total/NA
Toluene	1700		50	10	ug/L	1		8260C	Total/NA
Aluminum	160	J	200	80	ug/L	1		6010C	Total/NA
Arsenic	5.9	J	10	2.0	ug/L	1		6010C	Total/NA
Barium	1300		50	4.0	ug/L	1		6010C	Total/NA
Calcium	260000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	330000		10000	1100	ug/L	10		6010C	Total/NA
Chromium	40		10	3.1	ug/L	1		6010C	Total/NA
Iron	12000		100	28	ug/L	1		6010C	Total/NA
Iron	13000		1000	280	ug/L	10		6010C	Total/NA
Lead	2.4	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	150000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	150000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	120		15	3.3	ug/L	1		6010C	Total/NA
Potassium	7300		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
Vanadium	7.0	J	50	4.1	ug/L	1		6010C	Total/NA
Zinc	14	J	20	5.2	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: 160-2968-1

### Client Sample ID: MW-1204 (Continued)

### Lab Sample ID: 160-2968-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	95	J	200	80	ug/L	1		6010C	Dissolved
Arsenic	4.6	J	10	2.0	ug/L	1		6010C	Dissolved
Barium	1100		50	4.0	ug/L	1		6010C	Dissolved
Calcium	230000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	290000	E	5000	530	ug/L	5		6010C	Dissolved
Calcium	300000		10000	1100	ug/L	10		6010C	Dissolved
Chromium	32		10	3.1	ug/L	1		6010C	Dissolved
Iron	11000		100	28	ug/L	1		6010C	Dissolved
Iron	12000		500	140	ug/L	5		6010C	Dissolved
Lead	2.4	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	130000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	130000		5000	660	ug/L	5		6010C	Dissolved
Manganese	110		15	3.3	ug/L	1		6010C	Dissolved
Potassium	6100		5000	1700	ug/L	1		6010C	Dissolved
Sodium	100000	E	1000	320	ug/L	1		6010C	Dissolved
Sodium	100000		5000	1600	ug/L	5		6010C	Dissolved
Vanadium	6.6	J	50	4.1	ug/L	1		6010C	Dissolved
Mercury	0.11	J	0.20	0.060	ug/L	1		7470A	Total/NA
Mercury	0.31		0.20	0.060	ug/L	1		7470A	Dissolved
Bromide	1.0		0.25	0.025	mg/L	1		300.0	Total/NA
Sulfate	6.1		0.50	0.050	mg/L	1		300.0	Total/NA
Iodide	0.20	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity - DL	1100	B	10	1.1	mg/L	2		310.1	Total/NA
Chloride - DL2	280		40	4.0	mg/L	200		300.0	Total/NA

### Client Sample ID: S-82

### Lab Sample ID: 160-2968-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	7.8	J	20	0.39	ug/L	1		8260C	Total/NA
Acetone	23		20	6.7	ug/L	1		8260C	Total/NA
Chlorobenzene	1.0	J	5.0	0.38	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.42	J	5.0	0.16	ug/L	1		8260C	Total/NA
Antimony	4.8	J	10	4.0	ug/L	1		6010C	Total/NA
Arsenic	200		10	2.0	ug/L	1		6010C	Total/NA
Barium	790		50	4.0	ug/L	1		6010C	Total/NA
Calcium	160000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	190000		10000	1100	ug/L	10		6010C	Total/NA
Cobalt	11	J	50	4.0	ug/L	1		6010C	Total/NA
Iron	35000		100	28	ug/L	1		6010C	Total/NA
Iron	36000		1000	280	ug/L	10		6010C	Total/NA
Lead	5.3	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	81000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	83000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	2200		15	3.3	ug/L	1		6010C	Total/NA
Nickel	26	J	40	13	ug/L	1		6010C	Total/NA
Potassium	12000		5000	1700	ug/L	1		6010C	Total/NA
Selenium	2.7	J	15	2.7	ug/L	1		6010C	Total/NA
Sodium	230000	E	1000	320	ug/L	1		6010C	Total/NA
Sodium	220000		10000	3200	ug/L	10		6010C	Total/NA
Zinc	7.1	J	20	5.2	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: 160-2968-1

### Client Sample ID: S-82 (Continued)

### Lab Sample ID: 160-2968-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	210		10	2.0	ug/L	1		6010C	Dissolved
Barium	790		50	4.0	ug/L	1		6010C	Dissolved
Calcium	160000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	200000		5000	530	ug/L	5		6010C	Dissolved
Cobalt	9.9	J	50	4.0	ug/L	1		6010C	Dissolved
Iron	35000		100	28	ug/L	1		6010C	Dissolved
Iron	37000		500	140	ug/L	5		6010C	Dissolved
Lead	3.3	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	77000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	81000		5000	660	ug/L	5		6010C	Dissolved
Manganese	2100		15	3.3	ug/L	1		6010C	Dissolved
Nickel	25	J	40	13	ug/L	1		6010C	Dissolved
Potassium	12000		5000	1700	ug/L	1		6010C	Dissolved
Sodium	220000	E	1000	320	ug/L	1		6010C	Dissolved
Sodium	230000		5000	1600	ug/L	5		6010C	Dissolved
Mercury	0.065	J	0.20	0.060	ug/L	1		7470A	Total/NA
Mercury	0.23		0.20	0.060	ug/L	1		7470A	Dissolved
Nitrate as N	0.0072	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	2.9		0.25	0.025	mg/L	1		300.0	Total/NA
Sulfate	15		0.50	0.050	mg/L	1		300.0	Total/NA
Iodide	0.30	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity	960	B	5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL2	220		40	4.0	mg/L	200		300.0	Total/NA

### Client Sample ID: P2-116-SS

### Lab Sample ID: 160-2968-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	73		50	4.0	ug/L	1		6010C	Total/NA
Calcium	43000		1000	110	ug/L	1		6010C	Total/NA
Copper	5.3	J	25	4.6	ug/L	1		6010C	Total/NA
Lead	1.6	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	31000		1000	130	ug/L	1		6010C	Total/NA
Manganese	3.8	J	15	3.3	ug/L	1		6010C	Total/NA
Potassium	3800	J	5000	1700	ug/L	1		6010C	Total/NA
Sodium	53000		1000	320	ug/L	1		6010C	Total/NA
Zinc	24		20	5.2	ug/L	1		6010C	Total/NA
Barium	69		50	4.0	ug/L	1		6010C	Dissolved
Calcium	40000		1000	110	ug/L	1		6010C	Dissolved
Magnesium	29000		1000	130	ug/L	1		6010C	Dissolved
Potassium	3600	J	5000	1700	ug/L	1		6010C	Dissolved
Sodium	49000		1000	320	ug/L	1		6010C	Dissolved
Zinc	24		20	5.2	ug/L	1		6010C	Dissolved
Mercury	0.13	J	0.20	0.060	ug/L	1		7470A	Total/NA
Mercury	0.19	J	0.20	0.060	ug/L	1		7470A	Dissolved
Nitrate as N	0.17		0.020	0.0040	mg/L	1		300.0	Total/NA
Chloride	3.5		0.20	0.020	mg/L	1		300.0	Total/NA
Alkalinity	300	B	5.0	0.54	mg/L	1		310.1	Total/NA
Sulfate - DL	34		10	1.0	mg/L	20		300.0	Total/NA

### Client Sample ID: D-93

### Lab Sample ID: 160-2968-11

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: 160-2968-1

### Client Sample ID: D-93 (Continued)

### Lab Sample ID: 160-2968-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.5	J	5.0	0.39	ug/L	1		8260C	Total/NA
Benzene	1.9	J	5.0	0.25	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	29		5.0	0.16	ug/L	1		8260C	Total/NA
Vinyl chloride	30		5.0	0.43	ug/L	1		8260C	Total/NA
Aluminum	200		200	80	ug/L	1		6010C	Total/NA
Antimony	4.3	J	10	4.0	ug/L	1		6010C	Total/NA
Arsenic	2.3	J	10	2.0	ug/L	1		6010C	Total/NA
Barium	1400		50	4.0	ug/L	1		6010C	Total/NA
Calcium	240000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	290000		10000	1100	ug/L	10		6010C	Total/NA
Iron	21000		100	28	ug/L	1		6010C	Total/NA
Iron	21000		1000	280	ug/L	10		6010C	Total/NA
Lead	3.7	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	80000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	81000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	420		15	3.3	ug/L	1		6010C	Total/NA
Potassium	17000		5000	1700	ug/L	1		6010C	Total/NA
Sodium	210000	E	1000	320	ug/L	1		6010C	Total/NA
Sodium	200000		10000	3200	ug/L	10		6010C	Total/NA
Arsenic	2.8	J	10	2.0	ug/L	1		6010C	Dissolved
Barium	1300		50	4.0	ug/L	1		6010C	Dissolved
Calcium	230000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	280000	E	5000	530	ug/L	5		6010C	Dissolved
Calcium	290000		10000	1100	ug/L	10		6010C	Dissolved
Iron	20000		100	28	ug/L	1		6010C	Dissolved
Iron	20000		500	140	ug/L	5		6010C	Dissolved
Lead	2.5	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	76000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	75000		5000	660	ug/L	5		6010C	Dissolved
Manganese	400		15	3.3	ug/L	1		6010C	Dissolved
Potassium	17000		5000	1700	ug/L	1		6010C	Dissolved
Sodium	200000	E	1000	320	ug/L	1		6010C	Dissolved
Sodium	190000		5000	1600	ug/L	5		6010C	Dissolved
Zinc	5.4	J	20	5.2	ug/L	1		6010C	Dissolved
Mercury	0.12	J	0.20	0.060	ug/L	1		7470A	Total/NA
Mercury	0.19	J	0.20	0.060	ug/L	1		7470A	Dissolved
Nitrate as N	0.0072	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	4.1		0.25	0.025	mg/L	1		300.0	Total/NA
Sulfate	12		0.50	0.050	mg/L	1		300.0	Total/NA
Iodide	0.36	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity - DL	1000	B	10	1.1	mg/L	2		310.1	Total/NA
Chloride - DL2	330		40	4.0	mg/L	200		300.0	Total/NA

### Client Sample ID: I-9

### Lab Sample ID: 160-2968-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	18	J	20	6.7	ug/L	1		8260C	Total/NA
Vinyl chloride	2.5	J	5.0	0.43	ug/L	1		8260C	Total/NA
Aluminum	190	J	200	80	ug/L	1		6010C	Total/NA
Antimony	5.6	J	10	4.0	ug/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

US EPA ARCHIVE DOCUMENT

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## Detection Summary

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: I-9 (Continued)**

**Lab Sample ID: 160-2968-12**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	26		10	2.0	ug/L		1	6010C	Total/NA
Barium	1500		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	35000		100	28	ug/L		1	6010C	Total/NA
Iron	36000		1000	280	ug/L		10	6010C	Total/NA
Lead	4.1	J	10	1.5	ug/L		1	6010C	Total/NA
Magnesium	73000	E	1000	130	ug/L		1	6010C	Total/NA
Magnesium	74000		10000	1300	ug/L		10	6010C	Total/NA
Manganese	1300		15	3.3	ug/L		1	6010C	Total/NA
Nickel	14	J	40	13	ug/L		1	6010C	Total/NA
Potassium	21000		5000	1700	ug/L		1	6010C	Total/NA
Sodium	230000	E	1000	320	ug/L		1	6010C	Total/NA
Sodium	220000		10000	3200	ug/L		10	6010C	Total/NA
Zinc	6.2	J	20	5.2	ug/L		1	6010C	Total/NA
Antimony	4.2	J	10	4.0	ug/L		1	6010C	Dissolved
Arsenic	24		10	2.0	ug/L		1	6010C	Dissolved
Barium	1500		50	4.0	ug/L		1	6010C	Dissolved
Calcium	210000	E	1000	110	ug/L		1	6010C	Dissolved
Calcium	260000	E	5000	530	ug/L		5	6010C	Dissolved
Calcium	270000		10000	1100	ug/L		10	6010C	Dissolved
Iron	33000		100	28	ug/L		1	6010C	Dissolved
Iron	34000		500	140	ug/L		5	6010C	Dissolved
Lead	2.9	J	10	1.5	ug/L		1	6010C	Dissolved
Magnesium	68000	E	1000	130	ug/L		1	6010C	Dissolved
Magnesium	69000		5000	660	ug/L		5	6010C	Dissolved
Manganese	1200		15	3.3	ug/L		1	6010C	Dissolved
Nickel	13	J	40	13	ug/L		1	6010C	Dissolved
Potassium	21000		5000	1700	ug/L		1	6010C	Dissolved
Sodium	220000	E	1000	320	ug/L		1	6010C	Dissolved
Sodium	220000		5000	1600	ug/L		5	6010C	Dissolved
Zinc	5.4	J	20	5.2	ug/L		1	6010C	Dissolved
Mercury	0.10	J	0.20	0.060	ug/L		1	7470A	Total/NA
Mercury	0.18	J	0.20	0.060	ug/L		1	7470A	Dissolved
Nitrate as N	0.0080	J	0.020	0.0040	mg/L		1	300.0	Total/NA
Bromide	3.5		0.25	0.025	mg/L		1	300.0	Total/NA
Sulfate	0.58		0.50	0.050	mg/L		1	300.0	Total/NA
Iodide	0.36	J	1.0	0.10	mg/L		1	300.0	Total/NA
Alkalinity - DL	1100	B	10	1.1	mg/L		2	310.1	Total/NA
Chloride - DL2	300		40	4.0	mg/L		200	300.0	Total/NA

**Client Sample ID: P2-115-SS**

**Lab Sample ID: 160-2968-13**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	16	J	20	6.7	ug/L		1	8260C	Total/NA
Antimony	4.3	J	10	4.0	ug/L		1	6010C	Total/NA
Arsenic	6.0	J	10	2.0	ug/L		1	6010C	Total/NA
Barium	330		50	4.0	ug/L		1	6010C	Total/NA
Calcium	160000	E	1000	110	ug/L		1	6010C	Total/NA
Calcium	180000		10000	1100	ug/L		10	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: 160-2968-1

**Client Sample ID: P2-115-SS (Continued)**

**Lab Sample ID: 160-2968-13**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	15	J	50	4.0	ug/L	1		6010C	Total/NA
Iron	1500		100	28	ug/L	1		6010C	Total/NA
Iron	1500		1000	280	ug/L	10		6010C	Total/NA
Lead	2.8	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	82000	E	1000	130	ug/L	1		6010C	Total/NA
Magnesium	84000		10000	1300	ug/L	10		6010C	Total/NA
Manganese	52		15	3.3	ug/L	1		6010C	Total/NA
Nickel	43		40	13	ug/L	1		6010C	Total/NA
Potassium	2800	J	5000	1700	ug/L	1		6010C	Total/NA
Sodium	62000		1000	320	ug/L	1		6010C	Total/NA
Zinc	7.1	J	20	5.2	ug/L	1		6010C	Total/NA
Arsenic	5.1	J	10	2.0	ug/L	1		6010C	Dissolved
Barium	320		50	4.0	ug/L	1		6010C	Dissolved
Calcium	160000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	180000		5000	530	ug/L	5		6010C	Dissolved
Cobalt	20	J	50	4.0	ug/L	1		6010C	Dissolved
Iron	1500		100	28	ug/L	1		6010C	Dissolved
Iron	1600		500	140	ug/L	5		6010C	Dissolved
Lead	1.8	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	78000	E	1000	130	ug/L	1		6010C	Dissolved
Magnesium	79000		5000	660	ug/L	5		6010C	Dissolved
Manganese	51		15	3.3	ug/L	1		6010C	Dissolved
Nickel	44		40	13	ug/L	1		6010C	Dissolved
Potassium	3000	J	5000	1700	ug/L	1		6010C	Dissolved
Sodium	60000		1000	320	ug/L	1		6010C	Dissolved
Mercury	0.083	J	0.20	0.060	ug/L	1		7470A	Total/NA
Mercury	0.16	J	0.20	0.060	ug/L	1		7470A	Dissolved
Bromide	1.2		0.25	0.025	mg/L	1		300.0	Total/NA
Sulfate	17		0.50	0.050	mg/L	1		300.0	Total/NA
Iodide	0.13	J	1.0	0.10	mg/L	1		300.0	Total/NA
Alkalinity	560	B	5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL2	220		20	2.0	mg/L	100		300.0	Total/NA

**Client Sample ID: DUPLICATE 03**

**Lab Sample ID: 160-2968-14**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.7	J	20	6.7	ug/L	1		8260C	Total/NA
Chlorobenzene	2.0	J	5.0	0.38	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	0.71	J	5.0	0.40	ug/L	1		8260C	Total/NA
Antimony	4.5	J	10	4.0	ug/L	1		6010C	Total/NA
Arsenic	3.2	J	10	2.0	ug/L	1		6010C	Total/NA
Barium	1700		50	4.0	ug/L	1		6010C	Total/NA
Calcium	100000	E	1000	110	ug/L	1		6010C	Total/NA
Calcium	110000		10000	1100	ug/L	10		6010C	Total/NA
Iron	16000		100	28	ug/L	1		6010C	Total/NA
Lead	2.4	J	10	1.5	ug/L	1		6010C	Total/NA
Magnesium	41000		1000	130	ug/L	1		6010C	Total/NA
Manganese	400		15	3.3	ug/L	1		6010C	Total/NA
Potassium	43000		5000	1700	ug/L	1		6010C	Total/NA
Sodium	54000		1000	320	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: 160-2968-1

### Client Sample ID: DUPLICATE 03 (Continued)

Lab Sample ID: 160-2968-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.2	J	10	2.0	ug/L	1		6010C	Dissolved
Barium	1700		50	4.0	ug/L	1		6010C	Dissolved
Calcium	99000	E	1000	110	ug/L	1		6010C	Dissolved
Calcium	110000		5000	530	ug/L	5		6010C	Dissolved
Iron	16000		100	28	ug/L	1		6010C	Dissolved
Lead	2.4	J	10	1.5	ug/L	1		6010C	Dissolved
Magnesium	38000		1000	130	ug/L	1		6010C	Dissolved
Manganese	380		15	3.3	ug/L	1		6010C	Dissolved
Potassium	44000		5000	1700	ug/L	1		6010C	Dissolved
Sodium	52000		1000	320	ug/L	1		6010C	Dissolved
Zinc	6.4	J	20	5.2	ug/L	1		6010C	Dissolved
Mercury	0.075	J	0.20	0.060	ug/L	1		7470A	Total/NA
Mercury	0.13	J	0.20	0.060	ug/L	1		7470A	Dissolved
Nitrate as N	0.0040	J	0.020	0.0040	mg/L	1		300.0	Total/NA
Bromide	0.87		0.25	0.025	mg/L	1		300.0	Total/NA
Sulfate	8.2		0.50	0.050	mg/L	1		300.0	Total/NA
Alkalinity	710	B	5.0	0.54	mg/L	1		310.1	Total/NA
Chloride - DL	55		4.0	0.40	mg/L	20		300.0	Total/NA

### Client Sample ID: TRIP BLANK

Lab Sample ID: 160-2968-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.0	J	20	6.7	ug/L	1		8260C	Total/NA

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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: 160-2968-1

**Client Sample ID: P2-113-SS**

**Lab Sample ID: 160-2968-1**

**Date Collected: 07/11/13 08:50**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/15/13 20:07	1
1,1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/15/13 20:07	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/15/13 20:07	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/15/13 20:07	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/15/13 20:07	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/15/13 20:07	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/15/13 20:07	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/15/13 20:07	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/15/13 20:07	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/15/13 20:07	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/15/13 20:07	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/15/13 20:07	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/15/13 20:07	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/15/13 20:07	1
2-Hexanone	ND	*	20	0.59	ug/L			07/15/13 20:07	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/15/13 20:07	1
<b>Acetone</b>	<b>12</b>	<b>J</b>	20	6.7	ug/L			07/15/13 20:07	1
Benzene	ND		5.0	0.25	ug/L			07/15/13 20:07	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/15/13 20:07	1
Bromoform	ND		5.0	0.37	ug/L			07/15/13 20:07	1
Bromomethane	ND		10	0.40	ug/L			07/15/13 20:07	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/15/13 20:07	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/15/13 20:07	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/15/13 20:07	1
Chloroethane	ND		10	0.38	ug/L			07/15/13 20:07	1
Chloroform	ND		5.0	0.15	ug/L			07/15/13 20:07	1
Chloromethane	ND		10	0.55	ug/L			07/15/13 20:07	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/15/13 20:07	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/15/13 20:07	1
Cyclohexane	ND		10	0.36	ug/L			07/15/13 20:07	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/15/13 20:07	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/15/13 20:07	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/15/13 20:07	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/15/13 20:07	1
Methyl acetate	ND		25	2.3	ug/L			07/15/13 20:07	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/15/13 20:07	1
Methylcyclohexane	ND		10	0.26	ug/L			07/15/13 20:07	1
<b>Methylene Chloride</b>	<b>2.5</b>	<b>J</b>	5.0	1.7	ug/L			07/15/13 20:07	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/15/13 20:07	1
o-Xylene	ND		5.0	0.32	ug/L			07/15/13 20:07	1
Styrene	ND		5.0	0.35	ug/L			07/15/13 20:07	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/15/13 20:07	1
Toluene	ND		5.0	1.0	ug/L			07/15/13 20:07	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/15/13 20:07	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/15/13 20:07	1
Trichloroethene	ND		5.0	0.29	ug/L			07/15/13 20:07	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/15/13 20:07	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/15/13 20:07	1
Xylenes, Total	ND		10	0.85	ug/L			07/15/13 20:07	1

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TestAmerica St. Louis

# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-113-SS**

**Lab Sample ID: 160-2968-1**

**Date Collected: 07/11/13 08:50**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		82 - 132		07/15/13 20:07	1
4-Bromofluorobenzene (Surr)	100		82 - 121		07/15/13 20:07	1
Dibromofluoromethane (Surr)	106		85 - 119		07/15/13 20:07	1
Toluene-d8 (Surr)	103		85 - 115		07/15/13 20:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8500		200	80	ug/L		07/16/13 14:20	07/18/13 15:34	1
Antimony	4.4	J	10	4.0	ug/L		07/16/13 14:20	07/18/13 15:34	1
Arsenic	7.2	J	10	2.0	ug/L		07/16/13 14:20	07/18/13 15:34	1
Barium	220		50	4.0	ug/L		07/16/13 14:20	07/18/13 15:34	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:20	07/18/13 15:34	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:20	07/18/13 15:34	1
Calcium	140000	E	1000	110	ug/L		07/16/13 14:20	07/18/13 15:34	1
Calcium	150000		10000	1100	ug/L		07/16/13 14:20	07/18/13 16:42	10
Chromium	24		10	3.1	ug/L		07/16/13 14:20	07/18/13 15:34	1
Cobalt	4.5	J	50	4.0	ug/L		07/16/13 14:20	07/18/13 15:34	1
Copper	ND		25	4.6	ug/L		07/16/13 14:20	07/18/13 15:34	1
Iron	7400		100	28	ug/L		07/16/13 14:20	07/18/13 15:34	1
Iron	7600		1000	280	ug/L		07/16/13 14:20	07/18/13 16:42	10
Lead	4.6	J	10	1.5	ug/L		07/16/13 14:20	07/18/13 15:34	1
Magnesium	61000	E	1000	130	ug/L		07/16/13 14:20	07/18/13 15:34	1
Magnesium	61000		10000	1300	ug/L		07/16/13 14:20	07/18/13 16:42	10
Manganese	100		15	3.3	ug/L		07/16/13 14:20	07/18/13 15:34	1
Nickel	21	J	40	13	ug/L		07/16/13 14:20	07/18/13 15:34	1
Potassium	5400		5000	1700	ug/L		07/16/13 14:20	07/18/13 15:34	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:20	07/18/13 15:34	1
Silver	ND		10	6.0	ug/L		07/16/13 14:20	07/18/13 15:34	1
Sodium	23000		1000	320	ug/L		07/16/13 14:20	07/18/13 15:34	1
Thallium	ND		20	4.0	ug/L		07/16/13 14:20	07/18/13 15:34	1
Vanadium	27	J	50	4.1	ug/L		07/16/13 14:20	07/18/13 15:34	1
Zinc	48		20	5.2	ug/L		07/16/13 14:20	07/18/13 15:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:16	07/17/13 18:58	1
Antimony	ND		10	4.0	ug/L		07/16/13 14:16	07/17/13 18:58	1
Arsenic	ND		10	2.0	ug/L		07/16/13 14:16	07/17/13 18:58	1
Barium	180		50	4.0	ug/L		07/16/13 14:16	07/17/13 18:58	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:16	07/17/13 18:58	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:16	07/17/13 18:58	1
Calcium	55000	E	1000	110	ug/L		07/16/13 14:16	07/17/13 18:58	1
Calcium	55000		5000	530	ug/L		07/16/13 14:16	07/17/13 20:12	5
Chromium	ND		10	3.1	ug/L		07/16/13 14:16	07/17/13 18:58	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:16	07/17/13 18:58	1
Copper	ND		25	4.6	ug/L		07/16/13 14:16	07/17/13 18:58	1
Iron	54	J	100	28	ug/L		07/16/13 14:16	07/17/13 18:58	1
Lead	ND		10	1.5	ug/L		07/16/13 14:16	07/17/13 18:58	1
Magnesium	31000		1000	130	ug/L		07/16/13 14:16	07/17/13 18:58	1
Manganese	26		15	3.3	ug/L		07/16/13 14:16	07/17/13 18:58	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-113-SS**

**Lab Sample ID: 160-2968-1**

Date Collected: 07/11/13 08:50

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	ND		40	13	ug/L		07/16/13 14:16	07/17/13 18:58	1
<b>Potassium</b>	<b>1800</b>	<b>J</b>	5000	1700	ug/L		07/16/13 14:16	07/17/13 18:58	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:16	07/17/13 18:58	1
Silver	ND		10	6.0	ug/L		07/16/13 14:16	07/17/13 18:58	1
<b>Sodium</b>	<b>21000</b>		1000	320	ug/L		07/16/13 14:16	07/17/13 18:58	1
Thallium	ND	^	20	4.0	ug/L		07/16/13 14:16	07/17/13 18:58	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:16	07/17/13 18:58	1
<b>Zinc</b>	<b>6.4</b>	<b>J</b>	20	5.2	ug/L		07/16/13 14:16	07/17/13 18:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:14	07/16/13 16:25	1

**Method: 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:21	07/17/13 11:14	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.020	0.0040	mg/L			07/12/13 13:33	1
Bromide	ND		0.25	0.025	mg/L			07/12/13 13:33	1
<b>Sulfate</b>	<b>20</b>		0.50	0.050	mg/L			07/12/13 13:33	1
Iodide	ND		1.0	0.10	mg/L			07/16/13 17:19	1
<b>Alkalinity</b>	<b>270</b>	<b>B</b>	5.0	0.54	mg/L			07/25/13 12:49	1

**General Chemistry - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>9.7</b>		4.0	0.40	mg/L			07/12/13 13:48	20

**Client Sample ID: P2-104-SS**

**Lab Sample ID: 160-2968-2**

Date Collected: 07/11/13 09:37

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/18/13 03:13	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/18/13 03:13	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/18/13 03:13	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/18/13 03:13	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/18/13 03:13	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/18/13 03:13	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/18/13 03:13	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/18/13 03:13	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/18/13 03:13	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/18/13 03:13	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/18/13 03:13	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/18/13 03:13	1
<b>1,4-Dichlorobenzene</b>	<b>7.0</b>		5.0	0.35	ug/L			07/18/13 03:13	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/18/13 03:13	1
<b>2-Hexanone</b>	<b>87</b>		20	0.59	ug/L			07/18/13 03:13	1
<b>4-Methyl-2-pentanone (MIBK)</b>	<b>250</b>	<b>J</b>	400	6.6	ug/L			07/15/13 20:34	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-104-SS**

**Lab Sample ID: 160-2968-2**

Date Collected: 07/11/13 09:37

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	16	J	20	6.7	ug/L			07/18/13 03:13	1
Benzene	1800		100	5.0	ug/L			07/15/13 20:34	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/18/13 03:13	1
Bromoform	ND		5.0	0.37	ug/L			07/18/13 03:13	1
Bromomethane	ND		10	0.40	ug/L			07/18/13 03:13	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/18/13 03:13	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/18/13 03:13	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/18/13 03:13	1
Chloroethane	5.5	J *	10	0.38	ug/L			07/18/13 03:13	1
Chloroform	ND		5.0	0.15	ug/L			07/18/13 03:13	1
Chloromethane	ND		10	0.55	ug/L			07/18/13 03:13	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/18/13 03:13	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/18/13 03:13	1
Cyclohexane	ND		10	0.36	ug/L			07/18/13 03:13	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/18/13 03:13	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/18/13 03:13	1
Ethylbenzene	25		5.0	0.30	ug/L			07/18/13 03:13	1
Isopropylbenzene	2.6	J	5.0	0.26	ug/L			07/18/13 03:13	1
Methyl acetate	ND		25	2.3	ug/L			07/18/13 03:13	1
Methyl tert-butyl ether	6.3		5.0	0.40	ug/L			07/18/13 03:13	1
Methylcyclohexane	ND		10	0.26	ug/L			07/18/13 03:13	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/18/13 03:13	1
m-Xylene & p-Xylene	44		5.0	0.57	ug/L			07/18/13 03:13	1
o-Xylene	21		5.0	0.32	ug/L			07/18/13 03:13	1
Styrene	1.3	J	5.0	0.35	ug/L			07/18/13 03:13	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/18/13 03:13	1
Toluene	140		5.0	1.0	ug/L			07/18/13 03:13	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/18/13 03:13	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/18/13 03:13	1
Trichloroethene	ND		5.0	0.29	ug/L			07/18/13 03:13	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/18/13 03:13	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/18/13 03:13	1
Xylenes, Total	65		10	0.85	ug/L			07/18/13 03:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		82 - 132		07/15/13 20:34	1
1,2-Dichloroethane-d4 (Surr)	94		82 - 132		07/18/13 03:13	1
4-Bromofluorobenzene (Surr)	98		82 - 121		07/15/13 20:34	1
4-Bromofluorobenzene (Surr)	89		82 - 121		07/18/13 03:13	1
Dibromofluoromethane (Surr)	99		85 - 119		07/15/13 20:34	1
Dibromofluoromethane (Surr)	95		85 - 119		07/18/13 03:13	1
Toluene-d8 (Surr)	97		85 - 115		07/15/13 20:34	1
Toluene-d8 (Surr)	96		85 - 115		07/18/13 03:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:20	07/18/13 15:37	1
Antimony	4.0	J	10	4.0	ug/L		07/16/13 14:20	07/18/13 15:37	1
Arsenic	2.6	J	10	2.0	ug/L		07/16/13 14:20	07/18/13 15:37	1
Barium	100		50	4.0	ug/L		07/16/13 14:20	07/18/13 15:37	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-104-SS**

**Lab Sample ID: 160-2968-2**

Date Collected: 07/11/13 09:37

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:20	07/18/13 15:37	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:20	07/18/13 15:37	1
<b>Calcium</b>	<b>89000</b>	<b>E</b>	1000	110	ug/L		07/16/13 14:20	07/18/13 15:37	1
<b>Calcium</b>	<b>97000</b>		10000	1100	ug/L		07/16/13 14:20	07/18/13 16:46	10
Chromium	ND		10	3.1	ug/L		07/16/13 14:20	07/18/13 15:37	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:20	07/18/13 15:37	1
Copper	ND		25	4.6	ug/L		07/16/13 14:20	07/18/13 15:37	1
<b>Iron</b>	<b>1800</b>		100	28	ug/L		07/16/13 14:20	07/18/13 15:37	1
<b>Iron</b>	<b>1800</b>		1000	280	ug/L		07/16/13 14:20	07/18/13 16:46	10
<b>Lead</b>	<b>1.7</b>	<b>J</b>	10	1.5	ug/L		07/16/13 14:20	07/18/13 15:37	1
<b>Magnesium</b>	<b>53000</b>	<b>E</b>	1000	130	ug/L		07/16/13 14:20	07/18/13 15:37	1
<b>Magnesium</b>	<b>54000</b>		10000	1300	ug/L		07/16/13 14:20	07/18/13 16:46	10
<b>Manganese</b>	<b>40</b>		15	3.3	ug/L		07/16/13 14:20	07/18/13 15:37	1
Nickel	ND		40	13	ug/L		07/16/13 14:20	07/18/13 15:37	1
<b>Potassium</b>	<b>2200</b>	<b>J</b>	5000	1700	ug/L		07/16/13 14:20	07/18/13 15:37	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:20	07/18/13 15:37	1
Silver	ND		10	6.0	ug/L		07/16/13 14:20	07/18/13 15:37	1
<b>Sodium</b>	<b>12000</b>		1000	320	ug/L		07/16/13 14:20	07/18/13 15:37	1
Thallium	ND		20	4.0	ug/L		07/16/13 14:20	07/18/13 15:37	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:20	07/18/13 15:37	1
Zinc	ND		20	5.2	ug/L		07/16/13 14:20	07/18/13 15:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:16	07/17/13 19:02	1
Antimony	ND		10	4.0	ug/L		07/16/13 14:16	07/17/13 19:02	1
<b>Arsenic</b>	<b>2.2</b>	<b>J</b>	10	2.0	ug/L		07/16/13 14:16	07/17/13 19:02	1
<b>Barium</b>	<b>100</b>		50	4.0	ug/L		07/16/13 14:16	07/17/13 19:02	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:16	07/17/13 19:02	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:16	07/17/13 19:02	1
<b>Calcium</b>	<b>85000</b>	<b>E</b>	1000	110	ug/L		07/16/13 14:16	07/17/13 19:02	1
<b>Calcium</b>	<b>89000</b>		5000	530	ug/L		07/16/13 14:16	07/17/13 20:16	5
<b>Chromium</b>	<b>3.2</b>	<b>J</b>	10	3.1	ug/L		07/16/13 14:16	07/17/13 19:02	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:16	07/17/13 19:02	1
Copper	ND		25	4.6	ug/L		07/16/13 14:16	07/17/13 19:02	1
<b>Iron</b>	<b>1800</b>		100	28	ug/L		07/16/13 14:16	07/17/13 19:02	1
Lead	ND		10	1.5	ug/L		07/16/13 14:16	07/17/13 19:02	1
<b>Magnesium</b>	<b>49000</b>		1000	130	ug/L		07/16/13 14:16	07/17/13 19:02	1
<b>Manganese</b>	<b>39</b>		15	3.3	ug/L		07/16/13 14:16	07/17/13 19:02	1
Nickel	ND		40	13	ug/L		07/16/13 14:16	07/17/13 19:02	1
<b>Potassium</b>	<b>2200</b>	<b>J</b>	5000	1700	ug/L		07/16/13 14:16	07/17/13 19:02	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:16	07/17/13 19:02	1
Silver	ND		10	6.0	ug/L		07/16/13 14:16	07/17/13 19:02	1
<b>Sodium</b>	<b>12000</b>		1000	320	ug/L		07/16/13 14:16	07/17/13 19:02	1
Thallium	ND	^	20	4.0	ug/L		07/16/13 14:16	07/17/13 19:02	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:16	07/17/13 19:02	1
Zinc	ND		20	5.2	ug/L		07/16/13 14:16	07/17/13 19:02	1

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## Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-104-SS**

**Lab Sample ID: 160-2968-2**

Date Collected: 07/11/13 09:37

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:14	07/16/13 16:26	1

**Method: 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.064	J	0.20	0.060	ug/L		07/16/13 12:21	07/17/13 11:16	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.020	0.0040	mg/L			07/12/13 14:02	1
Chloride	4.8		0.20	0.020	mg/L			07/12/13 14:02	1
Bromide	ND		0.25	0.025	mg/L			07/12/13 14:02	1
Sulfate	1.0		0.50	0.050	mg/L			07/12/13 14:02	1
Iodide	ND		1.0	0.10	mg/L			07/16/13 17:34	1
Alkalinity	440	B	5.0	0.54	mg/L			07/25/13 12:49	1

**Client Sample ID: P2-101-SS**

**Lab Sample ID: 160-2968-3**

Date Collected: 07/11/13 09:40

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/15/13 21:00	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/15/13 21:00	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/15/13 21:00	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/15/13 21:00	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/15/13 21:00	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/15/13 21:00	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/15/13 21:00	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/15/13 21:00	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/15/13 21:00	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/15/13 21:00	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/15/13 21:00	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/15/13 21:00	1
<b>1,4-Dichlorobenzene</b>	<b>0.52</b>	<b>J</b>	5.0	0.35	ug/L			07/15/13 21:00	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/15/13 21:00	1
2-Hexanone	ND	*	20	0.59	ug/L			07/15/13 21:00	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/15/13 21:00	1
<b>Acetone</b>	<b>34</b>		20	6.7	ug/L			07/15/13 21:00	1
<b>Benzene</b>	<b>0.92</b>	<b>J</b>	5.0	0.25	ug/L			07/15/13 21:00	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/15/13 21:00	1
Bromoform	ND		5.0	0.37	ug/L			07/15/13 21:00	1
Bromomethane	ND		10	0.40	ug/L			07/15/13 21:00	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/15/13 21:00	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/15/13 21:00	1
<b>Chlorobenzene</b>	<b>3.3</b>	<b>J</b>	5.0	0.38	ug/L			07/15/13 21:00	1
Chloroethane	ND		10	0.38	ug/L			07/15/13 21:00	1
Chloroform	ND		5.0	0.15	ug/L			07/15/13 21:00	1
Chloromethane	ND		10	0.55	ug/L			07/15/13 21:00	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/15/13 21:00	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/15/13 21:00	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-101-SS**

**Lab Sample ID: 160-2968-3**

**Date Collected: 07/11/13 09:40**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		10	0.36	ug/L			07/15/13 21:00	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/15/13 21:00	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/15/13 21:00	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/15/13 21:00	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/15/13 21:00	1
Methyl acetate	ND		25	2.3	ug/L			07/15/13 21:00	1
<b>Methyl tert-butyl ether</b>	<b>0.51</b>	<b>J</b>	5.0	0.40	ug/L			07/15/13 21:00	1
Methylcyclohexane	ND		10	0.26	ug/L			07/15/13 21:00	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/15/13 21:00	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/15/13 21:00	1
o-Xylene	ND		5.0	0.32	ug/L			07/15/13 21:00	1
Styrene	ND		5.0	0.35	ug/L			07/15/13 21:00	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/15/13 21:00	1
Toluene	ND		5.0	1.0	ug/L			07/15/13 21:00	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/15/13 21:00	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/15/13 21:00	1
Trichloroethene	ND		5.0	0.29	ug/L			07/15/13 21:00	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/15/13 21:00	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/15/13 21:00	1
Xylenes, Total	ND		10	0.85	ug/L			07/15/13 21:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		82 - 132		07/15/13 21:00	1
4-Bromofluorobenzene (Surr)	103		82 - 121		07/15/13 21:00	1
Dibromofluoromethane (Surr)	101		85 - 119		07/15/13 21:00	1
Toluene-d8 (Surr)	100		85 - 115		07/15/13 21:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:20	07/18/13 15:41	1
Antimony	ND		10	4.0	ug/L		07/16/13 14:20	07/18/13 15:41	1
<b>Arsenic</b>	<b>3.4</b>	<b>J</b>	10	2.0	ug/L		07/16/13 14:20	07/18/13 15:41	1
<b>Barium</b>	<b>530</b>		50	4.0	ug/L		07/16/13 14:20	07/18/13 15:41	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:20	07/18/13 15:41	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:20	07/18/13 15:41	1
<b>Calcium</b>	<b>150000</b>	<b>E</b>	1000	110	ug/L		07/16/13 14:20	07/18/13 15:41	1
<b>Calcium</b>	<b>160000</b>		10000	1100	ug/L		07/16/13 14:20	07/18/13 16:58	10
<b>Chromium</b>	<b>4.8</b>	<b>J</b>	10	3.1	ug/L		07/16/13 14:20	07/18/13 15:41	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:20	07/18/13 15:41	1
Copper	ND		25	4.6	ug/L		07/16/13 14:20	07/18/13 15:41	1
<b>Iron</b>	<b>590</b>		100	28	ug/L		07/16/13 14:20	07/18/13 15:41	1
<b>Iron</b>	<b>580</b>	<b>J</b>	1000	280	ug/L		07/16/13 14:20	07/18/13 16:58	10
<b>Lead</b>	<b>2.5</b>	<b>J</b>	10	1.5	ug/L		07/16/13 14:20	07/18/13 15:41	1
<b>Magnesium</b>	<b>98000</b>	<b>E</b>	1000	130	ug/L		07/16/13 14:20	07/18/13 15:41	1
<b>Magnesium</b>	<b>97000</b>		10000	1300	ug/L		07/16/13 14:20	07/18/13 16:58	10
<b>Manganese</b>	<b>48</b>		15	3.3	ug/L		07/16/13 14:20	07/18/13 15:41	1
<b>Nickel</b>	<b>15</b>	<b>J</b>	40	13	ug/L		07/16/13 14:20	07/18/13 15:41	1
<b>Potassium</b>	<b>16000</b>		5000	1700	ug/L		07/16/13 14:20	07/18/13 15:41	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:20	07/18/13 15:41	1
Silver	ND		10	6.0	ug/L		07/16/13 14:20	07/18/13 15:41	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-101-SS**

**Lab Sample ID: 160-2968-3**

Date Collected: 07/11/13 09:40

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	110000	E	1000	320	ug/L		07/16/13 14:20	07/18/13 15:41	1
Sodium	99000		10000	3200	ug/L		07/16/13 14:20	07/18/13 16:58	10
Thallium	ND		20	4.0	ug/L		07/16/13 14:20	07/18/13 15:41	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:20	07/18/13 15:41	1
Zinc	8.6	J	20	5.2	ug/L		07/16/13 14:20	07/18/13 15:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:16	07/17/13 19:13	1
Antimony	ND		10	4.0	ug/L		07/16/13 14:16	07/17/13 19:13	1
Arsenic	3.2	J	10	2.0	ug/L		07/16/13 14:16	07/17/13 19:13	1
Barium	480		50	4.0	ug/L		07/16/13 14:16	07/17/13 19:13	1
Beryllium	5.7		5.0	0.61	ug/L		07/16/13 14:16	07/17/13 19:13	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:16	07/17/13 19:13	1
Calcium	130000	E	1000	110	ug/L		07/16/13 14:16	07/17/13 19:13	1
Calcium	150000		5000	530	ug/L		07/16/13 14:16	07/17/13 20:20	5
Chromium	3.5	J	10	3.1	ug/L		07/16/13 14:16	07/17/13 19:13	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:16	07/17/13 19:13	1
Copper	ND		25	4.6	ug/L		07/16/13 14:16	07/17/13 19:13	1
Iron	78	J	100	28	ug/L		07/16/13 14:16	07/17/13 19:13	1
Iron	ND		500	140	ug/L		07/16/13 14:16	07/17/13 20:20	5
Lead	2.1	J	10	1.5	ug/L		07/16/13 14:16	07/17/13 19:13	1
Magnesium	86000	E	1000	130	ug/L		07/16/13 14:16	07/17/13 19:13	1
Magnesium	90000		5000	660	ug/L		07/16/13 14:16	07/17/13 20:20	5
Manganese	68		15	3.3	ug/L		07/16/13 14:16	07/17/13 19:13	1
Nickel	15	J	40	13	ug/L		07/16/13 14:16	07/17/13 19:13	1
Potassium	15000		5000	1700	ug/L		07/16/13 14:16	07/17/13 19:13	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:16	07/17/13 19:13	1
Silver	ND		10	6.0	ug/L		07/16/13 14:16	07/17/13 19:13	1
Sodium	92000		1000	320	ug/L		07/16/13 14:16	07/17/13 19:13	1
Thallium	ND	^	20	4.0	ug/L		07/16/13 14:16	07/17/13 19:13	1
Vanadium	10	J	50	4.1	ug/L		07/16/13 14:16	07/17/13 19:13	1
Zinc	16	J	20	5.2	ug/L		07/16/13 14:16	07/17/13 19:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:14	07/16/13 16:28	1

**Method: 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17	J	0.20	0.060	ug/L		07/16/13 12:21	07/17/13 11:17	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.030		0.020	0.0040	mg/L			07/12/13 14:31	1
Bromide	1.5		0.25	0.025	mg/L			07/12/13 14:31	1
Sulfate	6.0		0.50	0.050	mg/L			07/12/13 14:31	1
Iodide	1.0		1.0	0.10	mg/L			07/16/13 17:49	1
Alkalinity	760	B	5.0	0.54	mg/L			07/25/13 12:49	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-101-SS**

**Lab Sample ID: 160-2968-3**

Date Collected: 07/11/13 09:40

Matrix: Water

Date Received: 07/12/13 08:15

**General Chemistry - DL2**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		20	2.0	mg/L			07/12/13 15:00	100

**Client Sample ID: P2-104-SD**

**Lab Sample ID: 160-2968-4**

Date Collected: 07/11/13 10:29

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/18/13 03:38	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/18/13 03:38	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/18/13 03:38	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/18/13 03:38	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/18/13 03:38	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/18/13 03:38	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/18/13 03:38	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/18/13 03:38	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/18/13 03:38	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/18/13 03:38	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/18/13 03:38	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/18/13 03:38	1
<b>1,4-Dichlorobenzene</b>	<b>11</b>		5.0	0.35	ug/L			07/18/13 03:38	1
<b>2-Butanone (MEK)</b>	<b>3200</b>		500	9.8	ug/L			07/16/13 03:31	1
<b>2-Hexanone</b>	<b>42</b>		20	0.59	ug/L			07/18/13 03:38	1
<b>4-Methyl-2-pentanone (MIBK)</b>	<b>110</b>		20	0.33	ug/L			07/18/13 03:38	1
<b>Acetone</b>	<b>3800</b>		500	170	ug/L			07/16/13 03:31	1
<b>Benzene</b>	<b>800</b>		25	1.3	ug/L			07/15/13 21:26	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/18/13 03:38	1
Bromoform	ND		5.0	0.37	ug/L			07/18/13 03:38	1
Bromomethane	ND		10	0.40	ug/L			07/18/13 03:38	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/18/13 03:38	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/18/13 03:38	1
<b>Chlorobenzene</b>	<b>4.6 J</b>		5.0	0.38	ug/L			07/18/13 03:38	1
<b>Chloroethane</b>	<b>4.4 J*</b>		10	0.38	ug/L			07/18/13 03:38	1
Chloroform	ND		5.0	0.15	ug/L			07/18/13 03:38	1
Chloromethane	ND		10	0.55	ug/L			07/18/13 03:38	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/18/13 03:38	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/18/13 03:38	1
Cyclohexane	ND		10	0.36	ug/L			07/18/13 03:38	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/18/13 03:38	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/18/13 03:38	1
<b>Ethylbenzene</b>	<b>49</b>		5.0	0.30	ug/L			07/18/13 03:38	1
<b>Isopropylbenzene</b>	<b>5.9</b>		5.0	0.26	ug/L			07/18/13 03:38	1
Methyl acetate	ND		25	2.3	ug/L			07/18/13 03:38	1
<b>Methyl tert-butyl ether</b>	<b>3.8 J</b>		5.0	0.40	ug/L			07/18/13 03:38	1
Methylcyclohexane	ND		10	0.26	ug/L			07/18/13 03:38	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/18/13 03:38	1
<b>m-Xylene &amp; p-Xylene</b>	<b>100</b>		5.0	0.57	ug/L			07/18/13 03:38	1
<b>o-Xylene</b>	<b>42</b>		5.0	0.32	ug/L			07/18/13 03:38	1
<b>Styrene</b>	<b>2.4 J</b>		5.0	0.35	ug/L			07/18/13 03:38	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/18/13 03:38	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-104-SD**

**Lab Sample ID: 160-2968-4**

**Date Collected: 07/11/13 10:29**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Toluene</b>	<b>430</b>		25	5.0	ug/L			07/15/13 21:26	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/18/13 03:38	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/18/13 03:38	1
Trichloroethene	ND		5.0	0.29	ug/L			07/18/13 03:38	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/18/13 03:38	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/18/13 03:38	1
<b>Xylenes, Total</b>	<b>140</b>		10	0.85	ug/L			07/18/13 03:38	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		82 - 132					07/15/13 21:26	1
1,2-Dichloroethane-d4 (Surr)	118		82 - 132					07/16/13 03:31	1
1,2-Dichloroethane-d4 (Surr)	98		82 - 132					07/18/13 03:38	1
4-Bromofluorobenzene (Surr)	105		82 - 121					07/15/13 21:26	1
4-Bromofluorobenzene (Surr)	102		82 - 121					07/16/13 03:31	1
4-Bromofluorobenzene (Surr)	94		82 - 121					07/18/13 03:38	1
Dibromofluoromethane (Surr)	102		85 - 119					07/15/13 21:26	1
Dibromofluoromethane (Surr)	102		85 - 119					07/16/13 03:31	1
Dibromofluoromethane (Surr)	98		85 - 119					07/18/13 03:38	1
Toluene-d8 (Surr)	103		85 - 115					07/15/13 21:26	1
Toluene-d8 (Surr)	101		85 - 115					07/16/13 03:31	1
Toluene-d8 (Surr)	101		85 - 115					07/18/13 03:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:20	07/18/13 15:45	1
<b>Antimony</b>	<b>4.4</b>	<b>J</b>	10	4.0	ug/L		07/16/13 14:20	07/18/13 15:45	1
<b>Arsenic</b>	<b>12</b>		10	2.0	ug/L		07/16/13 14:20	07/18/13 15:45	1
<b>Barium</b>	<b>800</b>		50	4.0	ug/L		07/16/13 14:20	07/18/13 15:45	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:20	07/18/13 15:45	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:20	07/18/13 15:45	1
<b>Calcium</b>	<b>110000</b>	<b>E</b>	1000	110	ug/L		07/16/13 14:20	07/18/13 15:45	1
<b>Calcium</b>	<b>130000</b>		10000	1100	ug/L		07/16/13 14:20	07/18/13 17:02	10
<b>Chromium</b>	<b>16</b>		10	3.1	ug/L		07/16/13 14:20	07/18/13 15:45	1
<b>Cobalt</b>	<b>5.0</b>	<b>J</b>	50	4.0	ug/L		07/16/13 14:20	07/18/13 15:45	1
Copper	ND		25	4.6	ug/L		07/16/13 14:20	07/18/13 15:45	1
<b>Iron</b>	<b>8900</b>		100	28	ug/L		07/16/13 14:20	07/18/13 15:45	1
<b>Iron</b>	<b>9000</b>		1000	280	ug/L		07/16/13 14:20	07/18/13 17:02	10
<b>Lead</b>	<b>2.0</b>	<b>J</b>	10	1.5	ug/L		07/16/13 14:20	07/18/13 15:45	1
<b>Magnesium</b>	<b>66000</b>	<b>E</b>	1000	130	ug/L		07/16/13 14:20	07/18/13 15:45	1
<b>Magnesium</b>	<b>66000</b>		10000	1300	ug/L		07/16/13 14:20	07/18/13 17:02	10
<b>Manganese</b>	<b>160</b>		15	3.3	ug/L		07/16/13 14:20	07/18/13 15:45	1
<b>Nickel</b>	<b>31</b>	<b>J</b>	40	13	ug/L		07/16/13 14:20	07/18/13 15:45	1
<b>Potassium</b>	<b>20000</b>		5000	1700	ug/L		07/16/13 14:20	07/18/13 15:45	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:20	07/18/13 15:45	1
Silver	ND		10	6.0	ug/L		07/16/13 14:20	07/18/13 15:45	1
<b>Sodium</b>	<b>130000</b>	<b>E</b>	1000	320	ug/L		07/16/13 14:20	07/18/13 15:45	1
<b>Sodium</b>	<b>120000</b>		10000	3200	ug/L		07/16/13 14:20	07/18/13 17:02	10
Thallium	ND		20	4.0	ug/L		07/16/13 14:20	07/18/13 15:45	1
<b>Vanadium</b>	<b>11</b>	<b>J</b>	50	4.1	ug/L		07/16/13 14:20	07/18/13 15:45	1
<b>Zinc</b>	<b>8.9</b>	<b>J</b>	20	5.2	ug/L		07/16/13 14:20	07/18/13 15:45	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-104-SD**

**Lab Sample ID: 160-2968-4**

Date Collected: 07/11/13 10:29

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:16	07/17/13 19:17	1
Antimony	ND		10	4.0	ug/L		07/16/13 14:16	07/17/13 19:17	1
<b>Arsenic</b>	<b>14</b>		10	2.0	ug/L		07/16/13 14:16	07/17/13 19:17	1
<b>Barium</b>	<b>1000</b>		50	4.0	ug/L		07/16/13 14:16	07/17/13 19:17	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:16	07/17/13 19:17	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:16	07/17/13 19:17	1
<b>Calcium</b>	<b>110000</b>	<b>E</b>	1000	110	ug/L		07/16/13 14:16	07/17/13 19:17	1
<b>Calcium</b>	<b>140000</b>		5000	530	ug/L		07/16/13 14:16	07/17/13 20:24	5
<b>Chromium</b>	<b>19</b>		10	3.1	ug/L		07/16/13 14:16	07/17/13 19:17	1
<b>Cobalt</b>	<b>5.8</b>	<b>J</b>	50	4.0	ug/L		07/16/13 14:16	07/17/13 19:17	1
Copper	ND		25	4.6	ug/L		07/16/13 14:16	07/17/13 19:17	1
<b>Iron</b>	<b>13000</b>		100	28	ug/L		07/16/13 14:16	07/17/13 19:17	1
<b>Iron</b>	<b>14000</b>		500	140	ug/L		07/16/13 14:16	07/17/13 20:24	5
<b>Lead</b>	<b>1.6</b>	<b>J</b>	10	1.5	ug/L		07/16/13 14:16	07/17/13 19:17	1
<b>Magnesium</b>	<b>66000</b>	<b>E</b>	1000	130	ug/L		07/16/13 14:16	07/17/13 19:17	1
<b>Magnesium</b>	<b>71000</b>		5000	660	ug/L		07/16/13 14:16	07/17/13 20:24	5
<b>Manganese</b>	<b>160</b>		15	3.3	ug/L		07/16/13 14:16	07/17/13 19:17	1
<b>Nickel</b>	<b>36</b>	<b>J</b>	40	13	ug/L		07/16/13 14:16	07/17/13 19:17	1
<b>Potassium</b>	<b>23000</b>		5000	1700	ug/L		07/16/13 14:16	07/17/13 19:17	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:16	07/17/13 19:17	1
Silver	ND		10	6.0	ug/L		07/16/13 14:16	07/17/13 19:17	1
<b>Sodium</b>	<b>160000</b>	<b>E</b>	1000	320	ug/L		07/16/13 14:16	07/17/13 19:17	1
<b>Sodium</b>	<b>170000</b>		5000	1600	ug/L		07/16/13 14:16	07/17/13 20:24	5
Thallium	ND	^	20	4.0	ug/L		07/16/13 14:16	07/17/13 19:17	1
<b>Vanadium</b>	<b>16</b>	<b>J</b>	50	4.1	ug/L		07/16/13 14:16	07/17/13 19:17	1
Zinc	ND		20	5.2	ug/L		07/16/13 14:16	07/17/13 19:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:14	07/16/13 16:30	1

**Method: 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.16</b>	<b>J</b>	0.20	0.060	ug/L		07/16/13 12:21	07/17/13 11:19	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.020	0.0040	mg/L			07/12/13 15:43	1
<b>Bromide</b>	<b>0.64</b>		0.25	0.025	mg/L			07/12/13 15:43	1
<b>Iodide</b>	<b>0.45</b>	<b>J</b>	1.0	0.10	mg/L			07/16/13 18:04	1
<b>Alkalinity</b>	<b>580</b>	<b>B</b>	5.0	0.54	mg/L			07/25/13 12:49	1

**General Chemistry - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Sulfate</b>	<b>39</b>		10	1.0	mg/L			07/12/13 15:58	20

**General Chemistry - DL2**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>180</b>		20	2.0	mg/L			07/12/13 16:12	100

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: FB@P2-202-SS**

**Lab Sample ID: 160-2968-5**

**Date Collected: 07/11/13 12:00**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/16/13 04:23	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/16/13 04:23	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/16/13 04:23	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/16/13 04:23	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/16/13 04:23	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/16/13 04:23	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/16/13 04:23	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/16/13 04:23	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/16/13 04:23	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/16/13 04:23	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/16/13 04:23	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/16/13 04:23	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/16/13 04:23	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/16/13 04:23	1
2-Hexanone	ND	*	20	0.59	ug/L			07/16/13 04:23	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/16/13 04:23	1
Acetone	12	J	20	6.7	ug/L			07/16/13 04:23	1
Benzene	ND		5.0	0.25	ug/L			07/16/13 04:23	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/16/13 04:23	1
Bromoform	ND		5.0	0.37	ug/L			07/16/13 04:23	1
Bromomethane	ND		10	0.40	ug/L			07/16/13 04:23	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/16/13 04:23	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/16/13 04:23	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/16/13 04:23	1
Chloroethane	ND		10	0.38	ug/L			07/16/13 04:23	1
Chloroform	ND		5.0	0.15	ug/L			07/16/13 04:23	1
Chloromethane	ND		10	0.55	ug/L			07/16/13 04:23	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/16/13 04:23	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/16/13 04:23	1
Cyclohexane	ND		10	0.36	ug/L			07/16/13 04:23	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/16/13 04:23	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/16/13 04:23	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/16/13 04:23	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/16/13 04:23	1
Methyl acetate	ND		25	2.3	ug/L			07/16/13 04:23	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/16/13 04:23	1
Methylcyclohexane	ND		10	0.26	ug/L			07/16/13 04:23	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/16/13 04:23	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/16/13 04:23	1
o-Xylene	ND		5.0	0.32	ug/L			07/16/13 04:23	1
Styrene	ND		5.0	0.35	ug/L			07/16/13 04:23	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/16/13 04:23	1
Toluene	ND		5.0	1.0	ug/L			07/16/13 04:23	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/16/13 04:23	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/16/13 04:23	1
Trichloroethene	ND		5.0	0.29	ug/L			07/16/13 04:23	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/16/13 04:23	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/16/13 04:23	1
Xylenes, Total	ND		10	0.85	ug/L			07/16/13 04:23	1

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TestAmerica St. Louis

## Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: FB@P2-202-SS**

**Lab Sample ID: 160-2968-5**

**Date Collected: 07/11/13 12:00**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		82 - 132		07/16/13 04:23	1
4-Bromofluorobenzene (Surr)	102		82 - 121		07/16/13 04:23	1
Dibromofluoromethane (Surr)	98		85 - 119		07/16/13 04:23	1
Toluene-d8 (Surr)	101		85 - 115		07/16/13 04:23	1

**Client Sample ID: P2-202-SS**

**Lab Sample ID: 160-2968-6**

**Date Collected: 07/11/13 12:32**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/15/13 22:18	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/15/13 22:18	1
<b>1,1,2-Trichloroethane</b>	<b>37</b>		5.0	0.57	ug/L			07/15/13 22:18	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/15/13 22:18	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/15/13 22:18	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/15/13 22:18	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/15/13 22:18	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/15/13 22:18	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/15/13 22:18	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/15/13 22:18	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/15/13 22:18	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/15/13 22:18	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/15/13 22:18	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/15/13 22:18	1
2-Hexanone	ND *		20	0.59	ug/L			07/15/13 22:18	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/15/13 22:18	1
<b>Acetone</b>	<b>30</b>		20	6.7	ug/L			07/15/13 22:18	1
<b>Benzene</b>	<b>34</b>		5.0	0.25	ug/L			07/15/13 22:18	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/15/13 22:18	1
Bromoform	ND		5.0	0.37	ug/L			07/15/13 22:18	1
Bromomethane	ND		10	0.40	ug/L			07/15/13 22:18	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/15/13 22:18	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/15/13 22:18	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/15/13 22:18	1
Chloroethane	ND		10	0.38	ug/L			07/15/13 22:18	1
Chloroform	ND		5.0	0.15	ug/L			07/15/13 22:18	1
Chloromethane	ND		10	0.55	ug/L			07/15/13 22:18	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/15/13 22:18	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/15/13 22:18	1
Cyclohexane	ND		10	0.36	ug/L			07/15/13 22:18	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/15/13 22:18	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/15/13 22:18	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/15/13 22:18	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/15/13 22:18	1
Methyl acetate	ND		25	2.3	ug/L			07/15/13 22:18	1
<b>Methyl tert-butyl ether</b>	<b>4.3 J</b>		5.0	0.40	ug/L			07/15/13 22:18	1
Methylcyclohexane	ND		10	0.26	ug/L			07/15/13 22:18	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/15/13 22:18	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/15/13 22:18	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-202-SS**

**Lab Sample ID: 160-2968-6**

Date Collected: 07/11/13 12:32

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		5.0	0.32	ug/L			07/15/13 22:18	1
Styrene	ND		5.0	0.35	ug/L			07/15/13 22:18	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/15/13 22:18	1
Toluene	ND		5.0	1.0	ug/L			07/15/13 22:18	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/15/13 22:18	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/15/13 22:18	1
Trichloroethene	ND		5.0	0.29	ug/L			07/15/13 22:18	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/15/13 22:18	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/15/13 22:18	1
Xylenes, Total	ND		10	0.85	ug/L			07/15/13 22:18	1
<b>Surrogate</b>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		82 - 132					07/15/13 22:18	1
4-Bromofluorobenzene (Surr)	110		82 - 121					07/15/13 22:18	1
Dibromofluoromethane (Surr)	109		85 - 119					07/15/13 22:18	1
Toluene-d8 (Surr)	107		85 - 115					07/15/13 22:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	98	J	200	80	ug/L		07/16/13 14:20	07/18/13 15:49	1
Antimony	ND		10	4.0	ug/L		07/16/13 14:20	07/18/13 15:49	1
Arsenic	7.4	J	10	2.0	ug/L		07/16/13 14:20	07/18/13 15:49	1
Barium	580		50	4.0	ug/L		07/16/13 14:20	07/18/13 15:49	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:20	07/18/13 15:49	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:20	07/18/13 15:49	1
Calcium	180000	E	1000	110	ug/L		07/16/13 14:20	07/18/13 15:49	1
Calcium	200000		10000	1100	ug/L		07/16/13 14:20	07/18/13 17:05	10
Chromium	ND		10	3.1	ug/L		07/16/13 14:20	07/18/13 15:49	1
Cobalt	6.9	J	50	4.0	ug/L		07/16/13 14:20	07/18/13 15:49	1
Copper	ND		25	4.6	ug/L		07/16/13 14:20	07/18/13 15:49	1
Iron	4900		100	28	ug/L		07/16/13 14:20	07/18/13 15:49	1
Iron	5000		1000	280	ug/L		07/16/13 14:20	07/18/13 17:05	10
Lead	2.1	J	10	1.5	ug/L		07/16/13 14:20	07/18/13 15:49	1
Magnesium	78000	E	1000	130	ug/L		07/16/13 14:20	07/18/13 15:49	1
Magnesium	79000		10000	1300	ug/L		07/16/13 14:20	07/18/13 17:05	10
Manganese	940		15	3.3	ug/L		07/16/13 14:20	07/18/13 15:49	1
Nickel	21	J	40	13	ug/L		07/16/13 14:20	07/18/13 15:49	1
Potassium	3100	J	5000	1700	ug/L		07/16/13 14:20	07/18/13 15:49	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:20	07/18/13 15:49	1
Silver	ND		10	6.0	ug/L		07/16/13 14:20	07/18/13 15:49	1
Sodium	14000		1000	320	ug/L		07/16/13 14:20	07/18/13 15:49	1
Thallium	ND		20	4.0	ug/L		07/16/13 14:20	07/18/13 15:49	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:20	07/18/13 15:49	1
Zinc	7.0	J	20	5.2	ug/L		07/16/13 14:20	07/18/13 15:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:16	07/17/13 19:21	1
Antimony	ND		10	4.0	ug/L		07/16/13 14:16	07/17/13 19:21	1
Arsenic	6.8	J	10	2.0	ug/L		07/16/13 14:16	07/17/13 19:21	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-202-SS**

**Lab Sample ID: 160-2968-6**

Date Collected: 07/11/13 12:32

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	550		50	4.0	ug/L		07/16/13 14:16	07/17/13 19:21	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:16	07/17/13 19:21	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:16	07/17/13 19:21	1
Calcium	160000	E	1000	110	ug/L		07/16/13 14:16	07/17/13 19:21	1
Calcium	200000		5000	530	ug/L		07/16/13 14:16	07/17/13 20:27	5
Chromium	ND		10	3.1	ug/L		07/16/13 14:16	07/17/13 19:21	1
Cobalt	6.3	J	50	4.0	ug/L		07/16/13 14:16	07/17/13 19:21	1
Copper	ND		25	4.6	ug/L		07/16/13 14:16	07/17/13 19:21	1
Iron	4600		100	28	ug/L		07/16/13 14:16	07/17/13 19:21	1
Iron	4900		500	140	ug/L		07/16/13 14:16	07/17/13 20:27	5
Lead	2.9	J	10	1.5	ug/L		07/16/13 14:16	07/17/13 19:21	1
Magnesium	71000	E	1000	130	ug/L		07/16/13 14:16	07/17/13 19:21	1
Magnesium	76000		5000	660	ug/L		07/16/13 14:16	07/17/13 20:27	5
Manganese	870		15	3.3	ug/L		07/16/13 14:16	07/17/13 19:21	1
Nickel	20	J	40	13	ug/L		07/16/13 14:16	07/17/13 19:21	1
Potassium	3100	J	5000	1700	ug/L		07/16/13 14:16	07/17/13 19:21	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:16	07/17/13 19:21	1
Silver	ND		10	6.0	ug/L		07/16/13 14:16	07/17/13 19:21	1
Sodium	13000		1000	320	ug/L		07/16/13 14:16	07/17/13 19:21	1
Thallium	ND	^	20	4.0	ug/L		07/16/13 14:16	07/17/13 19:21	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:16	07/17/13 19:21	1
Zinc	6.1	J	20	5.2	ug/L		07/16/13 14:16	07/17/13 19:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14	J	0.20	0.060	ug/L		07/16/13 12:14	07/16/13 16:31	1

**Method: 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20		0.20	0.060	ug/L		07/16/13 12:21	07/17/13 11:24	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.020	0.0040	mg/L			07/12/13 16:26	1
Bromide	0.51		0.25	0.025	mg/L			07/12/13 16:26	1
Iodide	0.14	J	1.0	0.10	mg/L			07/16/13 18:34	1
Alkalinity	610	B	5.0	0.54	mg/L			07/25/13 12:49	1

**General Chemistry - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	58		10	1.0	mg/L			07/12/13 16:41	20

**General Chemistry - DL2**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	84		20	2.0	mg/L			07/12/13 16:55	100

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: D-83**

**Lab Sample ID: 160-2968-7**

**Date Collected: 07/11/13 13:05**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/16/13 00:02	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/16/13 00:02	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/16/13 00:02	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/16/13 00:02	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/16/13 00:02	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/16/13 00:02	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/16/13 00:02	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/16/13 00:02	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/16/13 00:02	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/16/13 00:02	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/16/13 00:02	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/16/13 00:02	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/16/13 00:02	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/16/13 00:02	1
2-Hexanone	ND	*	20	0.59	ug/L			07/16/13 00:02	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/16/13 00:02	1
Acetone	ND		20	6.7	ug/L			07/16/13 00:02	1
Benzene	ND		5.0	0.25	ug/L			07/16/13 00:02	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/16/13 00:02	1
Bromoform	ND		5.0	0.37	ug/L			07/16/13 00:02	1
Bromomethane	ND		10	0.40	ug/L			07/16/13 00:02	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/16/13 00:02	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/16/13 00:02	1
<b>Chlorobenzene</b>	<b>2.0</b>	<b>J</b>	5.0	0.38	ug/L			07/16/13 00:02	1
Chloroethane	ND		10	0.38	ug/L			07/16/13 00:02	1
Chloroform	ND		5.0	0.15	ug/L			07/16/13 00:02	1
Chloromethane	ND		10	0.55	ug/L			07/16/13 00:02	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/16/13 00:02	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/16/13 00:02	1
Cyclohexane	ND		10	0.36	ug/L			07/16/13 00:02	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/16/13 00:02	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/16/13 00:02	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/16/13 00:02	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/16/13 00:02	1
Methyl acetate	ND		25	2.3	ug/L			07/16/13 00:02	1
<b>Methyl tert-butyl ether</b>	<b>0.68</b>	<b>J</b>	5.0	0.40	ug/L			07/16/13 00:02	1
Methylcyclohexane	ND		10	0.26	ug/L			07/16/13 00:02	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/16/13 00:02	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/16/13 00:02	1
o-Xylene	ND		5.0	0.32	ug/L			07/16/13 00:02	1
Styrene	ND		5.0	0.35	ug/L			07/16/13 00:02	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/16/13 00:02	1
Toluene	ND		5.0	1.0	ug/L			07/16/13 00:02	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/16/13 00:02	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/16/13 00:02	1
Trichloroethene	ND		5.0	0.29	ug/L			07/16/13 00:02	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/16/13 00:02	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/16/13 00:02	1
Xylenes, Total	ND		10	0.85	ug/L			07/16/13 00:02	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: D-83**

**Lab Sample ID: 160-2968-7**

**Date Collected: 07/11/13 13:05**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		82 - 132		07/16/13 00:02	1
4-Bromofluorobenzene (Surr)	107		82 - 121		07/16/13 00:02	1
Dibromofluoromethane (Surr)	104		85 - 119		07/16/13 00:02	1
Toluene-d8 (Surr)	101		85 - 115		07/16/13 00:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:20	07/18/13 16:11	1
<b>Antimony</b>	<b>5.0</b>	<b>J</b>	10	4.0	ug/L		07/16/13 14:20	07/18/13 16:11	1
<b>Arsenic</b>	<b>2.8</b>	<b>J</b>	10	2.0	ug/L		07/16/13 14:20	07/18/13 16:11	1
<b>Barium</b>	<b>1800</b>		50	4.0	ug/L		07/16/13 14:20	07/18/13 16:11	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:20	07/18/13 16:11	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:20	07/18/13 16:11	1
<b>Calcium</b>	<b>110000</b>	<b>E</b>	1000	110	ug/L		07/16/13 14:20	07/18/13 16:11	1
<b>Calcium</b>	<b>120000</b>		10000	1100	ug/L		07/16/13 14:20	07/18/13 17:20	10
Chromium	ND		10	3.1	ug/L		07/16/13 14:20	07/18/13 16:11	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:20	07/18/13 16:11	1
Copper	ND		25	4.6	ug/L		07/16/13 14:20	07/18/13 16:11	1
<b>Iron</b>	<b>17000</b>		100	28	ug/L		07/16/13 14:20	07/18/13 16:11	1
<b>Lead</b>	<b>2.8</b>	<b>J</b>	10	1.5	ug/L		07/16/13 14:20	07/18/13 16:11	1
<b>Magnesium</b>	<b>42000</b>		1000	130	ug/L		07/16/13 14:20	07/18/13 16:11	1
<b>Manganese</b>	<b>410</b>		15	3.3	ug/L		07/16/13 14:20	07/18/13 16:11	1
Nickel	ND		40	13	ug/L		07/16/13 14:20	07/18/13 16:11	1
<b>Potassium</b>	<b>45000</b>		5000	1700	ug/L		07/16/13 14:20	07/18/13 16:11	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:20	07/18/13 16:11	1
Silver	ND		10	6.0	ug/L		07/16/13 14:20	07/18/13 16:11	1
<b>Sodium</b>	<b>57000</b>		1000	320	ug/L		07/16/13 14:20	07/18/13 16:11	1
Thallium	ND		20	4.0	ug/L		07/16/13 14:20	07/18/13 16:11	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:20	07/18/13 16:11	1
<b>Zinc</b>	<b>5.4</b>	<b>J</b>	20	5.2	ug/L		07/16/13 14:20	07/18/13 16:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:16	07/17/13 19:35	1
Antimony	ND		10	4.0	ug/L		07/16/13 14:16	07/17/13 19:35	1
Arsenic	ND		10	2.0	ug/L		07/16/13 14:16	07/17/13 19:35	1
<b>Barium</b>	<b>1700</b>		50	4.0	ug/L		07/16/13 14:16	07/17/13 19:35	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:16	07/17/13 19:35	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:16	07/17/13 19:35	1
<b>Calcium</b>	<b>98000</b>	<b>E</b>	1000	110	ug/L		07/16/13 14:16	07/17/13 19:35	1
<b>Calcium</b>	<b>110000</b>		5000	530	ug/L		07/16/13 14:16	07/17/13 20:49	5
Chromium	ND		10	3.1	ug/L		07/16/13 14:16	07/17/13 19:35	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:16	07/17/13 19:35	1
Copper	ND		25	4.6	ug/L		07/16/13 14:16	07/17/13 19:35	1
<b>Iron</b>	<b>16000</b>		100	28	ug/L		07/16/13 14:16	07/17/13 19:35	1
<b>Lead</b>	<b>2.9</b>	<b>J</b>	10	1.5	ug/L		07/16/13 14:16	07/17/13 19:35	1
<b>Magnesium</b>	<b>38000</b>		1000	130	ug/L		07/16/13 14:16	07/17/13 19:35	1
<b>Manganese</b>	<b>390</b>		15	3.3	ug/L		07/16/13 14:16	07/17/13 19:35	1
Nickel	ND		40	13	ug/L		07/16/13 14:16	07/17/13 19:35	1
<b>Potassium</b>	<b>44000</b>		5000	1700	ug/L		07/16/13 14:16	07/17/13 19:35	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: D-83**

**Lab Sample ID: 160-2968-7**

Date Collected: 07/11/13 13:05

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		15	2.7	ug/L		07/16/13 14:16	07/17/13 19:35	1
Silver	ND		10	6.0	ug/L		07/16/13 14:16	07/17/13 19:35	1
<b>Sodium</b>	<b>53000</b>		1000	320	ug/L		07/16/13 14:16	07/17/13 19:35	1
Thallium	ND	^	20	4.0	ug/L		07/16/13 14:16	07/17/13 19:35	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:16	07/17/13 19:35	1
Zinc	ND		20	5.2	ug/L		07/16/13 14:16	07/17/13 19:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.099</b>	<b>J</b>	0.20	0.060	ug/L		07/16/13 12:14	07/16/13 16:42	1

**Method: 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.29</b>		0.20	0.060	ug/L		07/16/13 12:21	07/17/13 11:31	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.020	0.0040	mg/L			07/12/13 19:05	1
<b>Bromide</b>	<b>0.88</b>		0.25	0.025	mg/L			07/12/13 19:05	1
<b>Sulfate</b>	<b>8.2</b>		0.50	0.050	mg/L			07/12/13 19:05	1
Iodide	ND		1.0	0.10	mg/L			07/16/13 19:48	1
<b>Alkalinity</b>	<b>690</b>	<b>B</b>	5.0	0.54	mg/L			07/25/13 12:49	1

**General Chemistry - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>54</b>		4.0	0.40	mg/L			07/12/13 19:19	20

**Client Sample ID: MW-1204**

**Lab Sample ID: 160-2968-8**

Date Collected: 07/11/13 14:12

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/18/13 04:02	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/18/13 04:02	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/18/13 04:02	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/18/13 04:02	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/18/13 04:02	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/18/13 04:02	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/18/13 04:02	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/18/13 04:02	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/18/13 04:02	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/18/13 04:02	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/18/13 04:02	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/18/13 04:02	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/18/13 04:02	1
<b>2-Butanone (MEK)</b>	<b>1900</b>		200	3.9	ug/L			07/16/13 00:28	1
<b>2-Hexanone</b>	<b>8.5</b>	<b>J</b>	20	0.59	ug/L			07/18/13 04:02	1
<b>4-Methyl-2-pentanone (MIBK)</b>	<b>22</b>		20	0.33	ug/L			07/18/13 04:02	1
<b>Acetone</b>	<b>3300</b>		1000	330	ug/L			07/17/13 19:48	1
<b>Benzene</b>	<b>1.1</b>	<b>J</b>	5.0	0.25	ug/L			07/18/13 04:02	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: MW-1204**

**Lab Sample ID: 160-2968-8**

**Date Collected: 07/11/13 14:12**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		5.0	0.25	ug/L			07/18/13 04:02	1
Bromoform	ND		5.0	0.37	ug/L			07/18/13 04:02	1
Bromomethane	ND		10	0.40	ug/L			07/18/13 04:02	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/18/13 04:02	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/18/13 04:02	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/18/13 04:02	1
Chloroethane	ND	*	10	0.38	ug/L			07/18/13 04:02	1
Chloroform	ND		5.0	0.15	ug/L			07/18/13 04:02	1
Chloromethane	ND		10	0.55	ug/L			07/18/13 04:02	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/18/13 04:02	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/18/13 04:02	1
Cyclohexane	ND		10	0.36	ug/L			07/18/13 04:02	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/18/13 04:02	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/18/13 04:02	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/18/13 04:02	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/18/13 04:02	1
Methyl acetate	ND		25	2.3	ug/L			07/18/13 04:02	1
<b>Methyl tert-butyl ether</b>	<b>1.9</b>	<b>J</b>	5.0	0.40	ug/L			07/18/13 04:02	1
Methylcyclohexane	ND		10	0.26	ug/L			07/18/13 04:02	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/18/13 04:02	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/18/13 04:02	1
o-Xylene	ND		5.0	0.32	ug/L			07/18/13 04:02	1
Styrene	ND		5.0	0.35	ug/L			07/18/13 04:02	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/18/13 04:02	1
<b>Toluene</b>	<b>1700</b>		50	10	ug/L			07/16/13 00:28	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/18/13 04:02	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/18/13 04:02	1
Trichloroethene	ND		5.0	0.29	ug/L			07/18/13 04:02	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/18/13 04:02	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/18/13 04:02	1
Xylenes, Total	ND		10	0.85	ug/L			07/18/13 04:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		82 - 132		07/16/13 00:28	1
1,2-Dichloroethane-d4 (Surr)	94		82 - 132		07/17/13 19:48	1
1,2-Dichloroethane-d4 (Surr)	97		82 - 132		07/18/13 04:02	1
4-Bromofluorobenzene (Surr)	98		82 - 121		07/16/13 00:28	1
4-Bromofluorobenzene (Surr)	83		82 - 121		07/17/13 19:48	1
4-Bromofluorobenzene (Surr)	95		82 - 121		07/18/13 04:02	1
Dibromofluoromethane (Surr)	98		85 - 119		07/16/13 00:28	1
Dibromofluoromethane (Surr)	92		85 - 119		07/17/13 19:48	1
Dibromofluoromethane (Surr)	98		85 - 119		07/18/13 04:02	1
Toluene-d8 (Surr)	98		85 - 115		07/16/13 00:28	1
Toluene-d8 (Surr)	96		85 - 115		07/17/13 19:48	1
Toluene-d8 (Surr)	100		85 - 115		07/18/13 04:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Aluminum</b>	<b>160</b>	<b>J</b>	200	80	ug/L		07/16/13 14:20	07/18/13 16:15	1
Antimony	ND		10	4.0	ug/L		07/16/13 14:20	07/18/13 16:15	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: MW-1204**

**Lab Sample ID: 160-2968-8**

Date Collected: 07/11/13 14:12

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.9	J	10	2.0	ug/L		07/16/13 14:20	07/18/13 16:15	1
Barium	1300		50	4.0	ug/L		07/16/13 14:20	07/18/13 16:15	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:20	07/18/13 16:15	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:20	07/18/13 16:15	1
Calcium	260000	E	1000	110	ug/L		07/16/13 14:20	07/18/13 16:15	1
Calcium	330000		10000	1100	ug/L		07/16/13 14:20	07/18/13 17:24	10
Chromium	40		10	3.1	ug/L		07/16/13 14:20	07/18/13 16:15	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:20	07/18/13 16:15	1
Copper	ND		25	4.6	ug/L		07/16/13 14:20	07/18/13 16:15	1
Iron	12000		100	28	ug/L		07/16/13 14:20	07/18/13 16:15	1
Iron	13000		1000	280	ug/L		07/16/13 14:20	07/18/13 17:24	10
Lead	2.4	J	10	1.5	ug/L		07/16/13 14:20	07/18/13 16:15	1
Magnesium	150000	E	1000	130	ug/L		07/16/13 14:20	07/18/13 16:15	1
Magnesium	150000		10000	1300	ug/L		07/16/13 14:20	07/18/13 17:24	10
Manganese	120		15	3.3	ug/L		07/16/13 14:20	07/18/13 16:15	1
Nickel	ND		40	13	ug/L		07/16/13 14:20	07/18/13 16:15	1
Potassium	7300		5000	1700	ug/L		07/16/13 14:20	07/18/13 16:15	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:20	07/18/13 16:15	1
Silver	ND		10	6.0	ug/L		07/16/13 14:20	07/18/13 16:15	1
Sodium	120000	E	1000	320	ug/L		07/16/13 14:20	07/18/13 16:15	1
Sodium	120000		10000	3200	ug/L		07/16/13 14:20	07/18/13 17:24	10
Thallium	ND		20	4.0	ug/L		07/16/13 14:20	07/18/13 16:15	1
Vanadium	7.0	J	50	4.1	ug/L		07/16/13 14:20	07/18/13 16:15	1
Zinc	14	J	20	5.2	ug/L		07/16/13 14:20	07/18/13 16:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	95	J	200	80	ug/L		07/16/13 14:16	07/17/13 19:38	1
Antimony	ND		10	4.0	ug/L		07/16/13 14:16	07/17/13 19:38	1
Arsenic	4.6	J	10	2.0	ug/L		07/16/13 14:16	07/17/13 19:38	1
Barium	1100		50	4.0	ug/L		07/16/13 14:16	07/17/13 19:38	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:16	07/17/13 19:38	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:16	07/17/13 19:38	1
Calcium	230000	E	1000	110	ug/L		07/16/13 14:16	07/17/13 19:38	1
Calcium	290000	E	5000	530	ug/L		07/16/13 14:16	07/17/13 20:53	5
Calcium	300000		10000	1100	ug/L		07/16/13 14:16	07/18/13 11:00	10
Chromium	32		10	3.1	ug/L		07/16/13 14:16	07/17/13 19:38	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:16	07/17/13 19:38	1
Copper	ND		25	4.6	ug/L		07/16/13 14:16	07/17/13 19:38	1
Iron	11000		100	28	ug/L		07/16/13 14:16	07/17/13 19:38	1
Iron	12000		500	140	ug/L		07/16/13 14:16	07/17/13 20:53	5
Lead	2.4	J	10	1.5	ug/L		07/16/13 14:16	07/17/13 19:38	1
Magnesium	130000	E	1000	130	ug/L		07/16/13 14:16	07/17/13 19:38	1
Magnesium	130000		5000	660	ug/L		07/16/13 14:16	07/17/13 20:53	5
Manganese	110		15	3.3	ug/L		07/16/13 14:16	07/17/13 19:38	1
Nickel	ND		40	13	ug/L		07/16/13 14:16	07/17/13 19:38	1
Potassium	6100		5000	1700	ug/L		07/16/13 14:16	07/17/13 19:38	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:16	07/17/13 19:38	1
Silver	ND		10	6.0	ug/L		07/16/13 14:16	07/17/13 19:38	1
Sodium	100000	E	1000	320	ug/L		07/16/13 14:16	07/17/13 19:38	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: MW-1204**

**Lab Sample ID: 160-2968-8**

Date Collected: 07/11/13 14:12

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	100000		5000	1600	ug/L		07/16/13 14:16	07/17/13 20:53	5
Thallium	ND	^	20	4.0	ug/L		07/16/13 14:16	07/17/13 19:38	1
Vanadium	6.6	J	50	4.1	ug/L		07/16/13 14:16	07/17/13 19:38	1
Zinc	ND		20	5.2	ug/L		07/16/13 14:16	07/17/13 19:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11	J	0.20	0.060	ug/L		07/16/13 12:14	07/16/13 16:43	1

**Method: 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.31		0.20	0.060	ug/L		07/16/13 12:21	07/17/13 11:32	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.020	0.0040	mg/L			07/12/13 19:48	1
Bromide	1.0		0.25	0.025	mg/L			07/12/13 19:48	1
Sulfate	6.1		0.50	0.050	mg/L			07/12/13 19:48	1
Iodide	0.20	J	1.0	0.10	mg/L			07/16/13 20:03	1

**General Chemistry - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	1100	B	10	1.1	mg/L			07/25/13 12:49	2

**General Chemistry - DL2**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	280		40	4.0	mg/L			07/12/13 20:17	200

**Client Sample ID: S-82**

**Lab Sample ID: 160-2968-9**

Date Collected: 07/11/13 14:32

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/16/13 00:55	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/16/13 00:55	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/16/13 00:55	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/16/13 00:55	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/16/13 00:55	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/16/13 00:55	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/16/13 00:55	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/16/13 00:55	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/16/13 00:55	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/16/13 00:55	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/16/13 00:55	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/16/13 00:55	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/16/13 00:55	1
2-Butanone (MEK)	7.8	J	20	0.39	ug/L			07/16/13 00:55	1
2-Hexanone	ND	*	20	0.59	ug/L			07/16/13 00:55	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/16/13 00:55	1
Acetone	23		20	6.7	ug/L			07/16/13 00:55	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: S-82**

**Lab Sample ID: 160-2968-9**

**Date Collected: 07/11/13 14:32**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.0	0.25	ug/L			07/16/13 00:55	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/16/13 00:55	1
Bromoform	ND		5.0	0.37	ug/L			07/16/13 00:55	1
Bromomethane	ND		10	0.40	ug/L			07/16/13 00:55	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/16/13 00:55	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/16/13 00:55	1
<b>Chlorobenzene</b>	<b>1.0</b>	<b>J</b>	5.0	0.38	ug/L			07/16/13 00:55	1
Chloroethane	ND		10	0.38	ug/L			07/16/13 00:55	1
Chloroform	ND		5.0	0.15	ug/L			07/16/13 00:55	1
Chloromethane	ND		10	0.55	ug/L			07/16/13 00:55	1
<b>cis-1,2-Dichloroethene</b>	<b>0.42</b>	<b>J</b>	5.0	0.16	ug/L			07/16/13 00:55	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/16/13 00:55	1
Cyclohexane	ND		10	0.36	ug/L			07/16/13 00:55	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/16/13 00:55	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/16/13 00:55	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/16/13 00:55	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/16/13 00:55	1
Methyl acetate	ND		25	2.3	ug/L			07/16/13 00:55	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/16/13 00:55	1
Methylcyclohexane	ND		10	0.26	ug/L			07/16/13 00:55	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/16/13 00:55	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/16/13 00:55	1
o-Xylene	ND		5.0	0.32	ug/L			07/16/13 00:55	1
Styrene	ND		5.0	0.35	ug/L			07/16/13 00:55	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/16/13 00:55	1
Toluene	ND		5.0	1.0	ug/L			07/16/13 00:55	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/16/13 00:55	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/16/13 00:55	1
Trichloroethene	ND		5.0	0.29	ug/L			07/16/13 00:55	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/16/13 00:55	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/16/13 00:55	1
Xylenes, Total	ND		10	0.85	ug/L			07/16/13 00:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		82 - 132		07/16/13 00:55	1
4-Bromofluorobenzene (Surr)	103		82 - 121		07/16/13 00:55	1
Dibromofluoromethane (Surr)	99		85 - 119		07/16/13 00:55	1
Toluene-d8 (Surr)	101		85 - 115		07/16/13 00:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:20	07/18/13 16:19	1
<b>Antimony</b>	<b>4.8</b>	<b>J</b>	10	4.0	ug/L		07/16/13 14:20	07/18/13 16:19	1
<b>Arsenic</b>	<b>200</b>		10	2.0	ug/L		07/16/13 14:20	07/18/13 16:19	1
<b>Barium</b>	<b>790</b>		50	4.0	ug/L		07/16/13 14:20	07/18/13 16:19	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:20	07/18/13 16:19	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:20	07/18/13 16:19	1
<b>Calcium</b>	<b>160000</b>	<b>E</b>	1000	110	ug/L		07/16/13 14:20	07/18/13 16:19	1
<b>Calcium</b>	<b>190000</b>		10000	1100	ug/L		07/16/13 14:20	07/18/13 17:28	10
Chromium	ND		10	3.1	ug/L		07/16/13 14:20	07/18/13 16:19	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: S-82**

**Lab Sample ID: 160-2968-9**

Date Collected: 07/11/13 14:32

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	11	J	50	4.0	ug/L		07/16/13 14:20	07/18/13 16:19	1
Copper	ND		25	4.6	ug/L		07/16/13 14:20	07/18/13 16:19	1
Iron	35000		100	28	ug/L		07/16/13 14:20	07/18/13 16:19	1
Iron	36000		1000	280	ug/L		07/16/13 14:20	07/18/13 17:28	10
Lead	5.3	J	10	1.5	ug/L		07/16/13 14:20	07/18/13 16:19	1
Magnesium	81000	E	1000	130	ug/L		07/16/13 14:20	07/18/13 16:19	1
Magnesium	83000		10000	1300	ug/L		07/16/13 14:20	07/18/13 17:28	10
Manganese	2200		15	3.3	ug/L		07/16/13 14:20	07/18/13 16:19	1
Nickel	26	J	40	13	ug/L		07/16/13 14:20	07/18/13 16:19	1
Potassium	12000		5000	1700	ug/L		07/16/13 14:20	07/18/13 16:19	1
Selenium	2.7	J	15	2.7	ug/L		07/16/13 14:20	07/18/13 16:19	1
Silver	ND		10	6.0	ug/L		07/16/13 14:20	07/18/13 16:19	1
Sodium	230000	E	1000	320	ug/L		07/16/13 14:20	07/18/13 16:19	1
Sodium	220000		10000	3200	ug/L		07/16/13 14:20	07/18/13 17:28	10
Thallium	ND		20	4.0	ug/L		07/16/13 14:20	07/18/13 16:19	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:20	07/18/13 16:19	1
Zinc	7.1	J	20	5.2	ug/L		07/16/13 14:20	07/18/13 16:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:16	07/17/13 19:42	1
Antimony	ND		10	4.0	ug/L		07/16/13 14:16	07/17/13 19:42	1
Arsenic	210		10	2.0	ug/L		07/16/13 14:16	07/17/13 19:42	1
Barium	790		50	4.0	ug/L		07/16/13 14:16	07/17/13 19:42	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:16	07/17/13 19:42	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:16	07/17/13 19:42	1
Calcium	160000	E	1000	110	ug/L		07/16/13 14:16	07/17/13 19:42	1
Calcium	200000		5000	530	ug/L		07/16/13 14:16	07/17/13 20:57	5
Chromium	ND		10	3.1	ug/L		07/16/13 14:16	07/17/13 19:42	1
Cobalt	9.9	J	50	4.0	ug/L		07/16/13 14:16	07/17/13 19:42	1
Copper	ND		25	4.6	ug/L		07/16/13 14:16	07/17/13 19:42	1
Iron	35000		100	28	ug/L		07/16/13 14:16	07/17/13 19:42	1
Iron	37000		500	140	ug/L		07/16/13 14:16	07/17/13 20:57	5
Lead	3.3	J	10	1.5	ug/L		07/16/13 14:16	07/17/13 19:42	1
Magnesium	77000	E	1000	130	ug/L		07/16/13 14:16	07/17/13 19:42	1
Magnesium	81000		5000	660	ug/L		07/16/13 14:16	07/17/13 20:57	5
Manganese	2100		15	3.3	ug/L		07/16/13 14:16	07/17/13 19:42	1
Nickel	25	J	40	13	ug/L		07/16/13 14:16	07/17/13 19:42	1
Potassium	12000		5000	1700	ug/L		07/16/13 14:16	07/17/13 19:42	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:16	07/17/13 19:42	1
Silver	ND		10	6.0	ug/L		07/16/13 14:16	07/17/13 19:42	1
Sodium	220000	E	1000	320	ug/L		07/16/13 14:16	07/17/13 19:42	1
Sodium	230000		5000	1600	ug/L		07/16/13 14:16	07/17/13 20:57	5
Thallium	ND	^	20	4.0	ug/L		07/16/13 14:16	07/17/13 19:42	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:16	07/17/13 19:42	1
Zinc	ND		20	5.2	ug/L		07/16/13 14:16	07/17/13 19:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.065	J	0.20	0.060	ug/L		07/16/13 12:14	07/16/13 16:45	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: S-82**

**Lab Sample ID: 160-2968-9**

Date Collected: 07/11/13 14:32

Matrix: Water

Date Received: 07/12/13 08:15

**Method: 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.23		0.20	0.060	ug/L		07/16/13 12:21	07/17/13 11:34	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0072	J	0.020	0.0040	mg/L			07/12/13 21:00	1
Bromide	2.9		0.25	0.025	mg/L			07/12/13 21:00	1
Sulfate	15		0.50	0.050	mg/L			07/12/13 21:00	1
Iodide	0.30	J	1.0	0.10	mg/L			07/16/13 20:33	1
Alkalinity	960	B	5.0	0.54	mg/L			07/25/13 12:49	1

**General Chemistry - DL2**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	220		40	4.0	mg/L			07/12/13 21:29	200

**Client Sample ID: P2-116-SS**

**Lab Sample ID: 160-2968-10**

Date Collected: 07/11/13 15:05

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/16/13 01:21	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/16/13 01:21	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/16/13 01:21	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/16/13 01:21	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/16/13 01:21	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/16/13 01:21	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/16/13 01:21	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/16/13 01:21	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/16/13 01:21	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/16/13 01:21	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/16/13 01:21	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/16/13 01:21	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/16/13 01:21	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/16/13 01:21	1
2-Hexanone	ND *		20	0.59	ug/L			07/16/13 01:21	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/16/13 01:21	1
Acetone	ND		20	6.7	ug/L			07/16/13 01:21	1
Benzene	ND		5.0	0.25	ug/L			07/16/13 01:21	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/16/13 01:21	1
Bromoform	ND		5.0	0.37	ug/L			07/16/13 01:21	1
Bromomethane	ND		10	0.40	ug/L			07/16/13 01:21	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/16/13 01:21	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/16/13 01:21	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/16/13 01:21	1
Chloroethane	ND		10	0.38	ug/L			07/16/13 01:21	1
Chloroform	ND		5.0	0.15	ug/L			07/16/13 01:21	1
Chloromethane	ND		10	0.55	ug/L			07/16/13 01:21	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/16/13 01:21	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/16/13 01:21	1
Cyclohexane	ND		10	0.36	ug/L			07/16/13 01:21	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-116-SS**

**Lab Sample ID: 160-2968-10**

**Date Collected: 07/11/13 15:05**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

**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			07/16/13 01:21	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/16/13 01:21	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/16/13 01:21	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/16/13 01:21	1
Methyl acetate	ND		25	2.3	ug/L			07/16/13 01:21	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/16/13 01:21	1
Methylcyclohexane	ND		10	0.26	ug/L			07/16/13 01:21	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/16/13 01:21	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/16/13 01:21	1
o-Xylene	ND		5.0	0.32	ug/L			07/16/13 01:21	1
Styrene	ND		5.0	0.35	ug/L			07/16/13 01:21	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/16/13 01:21	1
Toluene	ND		5.0	1.0	ug/L			07/16/13 01:21	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/16/13 01:21	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/16/13 01:21	1
Trichloroethene	ND		5.0	0.29	ug/L			07/16/13 01:21	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/16/13 01:21	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/16/13 01:21	1
Xylenes, Total	ND		10	0.85	ug/L			07/16/13 01:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		82 - 132		07/16/13 01:21	1
4-Bromofluorobenzene (Surr)	110		82 - 121		07/16/13 01:21	1
Dibromofluoromethane (Surr)	107		85 - 119		07/16/13 01:21	1
Toluene-d8 (Surr)	110		85 - 115		07/16/13 01:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:20	07/18/13 16:23	1
Antimony	ND		10	4.0	ug/L		07/16/13 14:20	07/18/13 16:23	1
Arsenic	ND		10	2.0	ug/L		07/16/13 14:20	07/18/13 16:23	1
<b>Barium</b>	<b>73</b>		50	4.0	ug/L		07/16/13 14:20	07/18/13 16:23	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:20	07/18/13 16:23	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:20	07/18/13 16:23	1
<b>Calcium</b>	<b>43000</b>		1000	110	ug/L		07/16/13 14:20	07/18/13 16:23	1
Chromium	ND		10	3.1	ug/L		07/16/13 14:20	07/18/13 16:23	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:20	07/18/13 16:23	1
<b>Copper</b>	<b>5.3</b>	<b>J</b>	25	4.6	ug/L		07/16/13 14:20	07/18/13 16:23	1
Iron	ND		100	28	ug/L		07/16/13 14:20	07/18/13 16:23	1
<b>Lead</b>	<b>1.6</b>	<b>J</b>	10	1.5	ug/L		07/16/13 14:20	07/18/13 16:23	1
<b>Magnesium</b>	<b>31000</b>		1000	130	ug/L		07/16/13 14:20	07/18/13 16:23	1
<b>Manganese</b>	<b>3.8</b>	<b>J</b>	15	3.3	ug/L		07/16/13 14:20	07/18/13 16:23	1
Nickel	ND		40	13	ug/L		07/16/13 14:20	07/18/13 16:23	1
<b>Potassium</b>	<b>3800</b>	<b>J</b>	5000	1700	ug/L		07/16/13 14:20	07/18/13 16:23	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:20	07/18/13 16:23	1
Silver	ND		10	6.0	ug/L		07/16/13 14:20	07/18/13 16:23	1
<b>Sodium</b>	<b>53000</b>		1000	320	ug/L		07/16/13 14:20	07/18/13 16:23	1
Thallium	ND		20	4.0	ug/L		07/16/13 14:20	07/18/13 16:23	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:20	07/18/13 16:23	1
<b>Zinc</b>	<b>24</b>		20	5.2	ug/L		07/16/13 14:20	07/18/13 16:23	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-116-SS**

**Lab Sample ID: 160-2968-10**

Date Collected: 07/11/13 15:05

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:16	07/17/13 19:46	1
Antimony	ND		10	4.0	ug/L		07/16/13 14:16	07/17/13 19:46	1
Arsenic	ND		10	2.0	ug/L		07/16/13 14:16	07/17/13 19:46	1
<b>Barium</b>	<b>69</b>		50	4.0	ug/L		07/16/13 14:16	07/17/13 19:46	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:16	07/17/13 19:46	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:16	07/17/13 19:46	1
<b>Calcium</b>	<b>40000</b>		1000	110	ug/L		07/16/13 14:16	07/17/13 19:46	1
Chromium	ND		10	3.1	ug/L		07/16/13 14:16	07/17/13 19:46	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:16	07/17/13 19:46	1
Copper	ND		25	4.6	ug/L		07/16/13 14:16	07/17/13 19:46	1
Iron	ND		100	28	ug/L		07/16/13 14:16	07/17/13 19:46	1
Lead	ND		10	1.5	ug/L		07/16/13 14:16	07/17/13 19:46	1
<b>Magnesium</b>	<b>29000</b>		1000	130	ug/L		07/16/13 14:16	07/17/13 19:46	1
Manganese	ND		15	3.3	ug/L		07/16/13 14:16	07/17/13 19:46	1
Nickel	ND		40	13	ug/L		07/16/13 14:16	07/17/13 19:46	1
<b>Potassium</b>	<b>3600</b>	<b>J</b>	5000	1700	ug/L		07/16/13 14:16	07/17/13 19:46	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:16	07/17/13 19:46	1
Silver	ND		10	6.0	ug/L		07/16/13 14:16	07/17/13 19:46	1
<b>Sodium</b>	<b>49000</b>		1000	320	ug/L		07/16/13 14:16	07/17/13 19:46	1
Thallium	ND	<sup>^</sup>	20	4.0	ug/L		07/16/13 14:16	07/17/13 19:46	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:16	07/17/13 19:46	1
<b>Zinc</b>	<b>24</b>		20	5.2	ug/L		07/16/13 14:16	07/17/13 19:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.13</b>	<b>J</b>	0.20	0.060	ug/L		07/16/13 12:14	07/16/13 16:46	1

**Method: 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.19</b>	<b>J</b>	0.20	0.060	ug/L		07/16/13 12:21	07/17/13 11:36	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Nitrate as N</b>	<b>0.17</b>		0.020	0.0040	mg/L			07/12/13 21:44	1
<b>Chloride</b>	<b>3.5</b>		0.20	0.020	mg/L			07/12/13 21:44	1
Bromide	ND		0.25	0.025	mg/L			07/12/13 21:44	1
Iodide	ND		1.0	0.10	mg/L			07/16/13 20:48	1
<b>Alkalinity</b>	<b>300</b>	<b>B</b>	5.0	0.54	mg/L			07/25/13 12:49	1

**General Chemistry - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Sulfate</b>	<b>34</b>		10	1.0	mg/L			07/12/13 21:58	20

**Client Sample ID: D-93**

**Lab Sample ID: 160-2968-11**

Date Collected: 07/11/13 15:40

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/16/13 01:47	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/16/13 01:47	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: D-93**

**Lab Sample ID: 160-2968-11**

**Date Collected: 07/11/13 15:40**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/16/13 01:47	1
<b>1,1-Dichloroethane</b>	<b>3.5</b>	<b>J</b>	5.0	0.39	ug/L			07/16/13 01:47	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/16/13 01:47	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/16/13 01:47	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/16/13 01:47	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/16/13 01:47	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/16/13 01:47	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/16/13 01:47	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/16/13 01:47	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/16/13 01:47	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/16/13 01:47	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/16/13 01:47	1
2-Hexanone	ND *		20	0.59	ug/L			07/16/13 01:47	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/16/13 01:47	1
Acetone	ND		20	6.7	ug/L			07/16/13 01:47	1
<b>Benzene</b>	<b>1.9</b>	<b>J</b>	5.0	0.25	ug/L			07/16/13 01:47	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/16/13 01:47	1
Bromoform	ND		5.0	0.37	ug/L			07/16/13 01:47	1
Bromomethane	ND		10	0.40	ug/L			07/16/13 01:47	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/16/13 01:47	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/16/13 01:47	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/16/13 01:47	1
Chloroethane	ND		10	0.38	ug/L			07/16/13 01:47	1
Chloroform	ND		5.0	0.15	ug/L			07/16/13 01:47	1
Chloromethane	ND		10	0.55	ug/L			07/16/13 01:47	1
<b>cis-1,2-Dichloroethene</b>	<b>29</b>		5.0	0.16	ug/L			07/16/13 01:47	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/16/13 01:47	1
Cyclohexane	ND		10	0.36	ug/L			07/16/13 01:47	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/16/13 01:47	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/16/13 01:47	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/16/13 01:47	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/16/13 01:47	1
Methyl acetate	ND		25	2.3	ug/L			07/16/13 01:47	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/16/13 01:47	1
Methylcyclohexane	ND		10	0.26	ug/L			07/16/13 01:47	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/16/13 01:47	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/16/13 01:47	1
o-Xylene	ND		5.0	0.32	ug/L			07/16/13 01:47	1
Styrene	ND		5.0	0.35	ug/L			07/16/13 01:47	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/16/13 01:47	1
Toluene	ND		5.0	1.0	ug/L			07/16/13 01:47	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/16/13 01:47	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/16/13 01:47	1
Trichloroethene	ND		5.0	0.29	ug/L			07/16/13 01:47	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/16/13 01:47	1
<b>Vinyl chloride</b>	<b>30</b>		5.0	0.43	ug/L			07/16/13 01:47	1
Xylenes, Total	ND		10	0.85	ug/L			07/16/13 01:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		82 - 132		07/16/13 01:47	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: D-93**

**Lab Sample ID: 160-2968-11**

**Date Collected: 07/11/13 15:40**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		82 - 121		07/16/13 01:47	1
Dibromofluoromethane (Surr)	101		85 - 119		07/16/13 01:47	1
Toluene-d8 (Surr)	102		85 - 115		07/16/13 01:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	200		200	80	ug/L		07/16/13 14:20	07/18/13 16:27	1
Antimony	4.3	J	10	4.0	ug/L		07/16/13 14:20	07/18/13 16:27	1
Arsenic	2.3	J	10	2.0	ug/L		07/16/13 14:20	07/18/13 16:27	1
Barium	1400		50	4.0	ug/L		07/16/13 14:20	07/18/13 16:27	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:20	07/18/13 16:27	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:20	07/18/13 16:27	1
Calcium	240000	E	1000	110	ug/L		07/16/13 14:20	07/18/13 16:27	1
Calcium	290000		10000	1100	ug/L		07/16/13 14:20	07/18/13 17:44	10
Chromium	ND		10	3.1	ug/L		07/16/13 14:20	07/18/13 16:27	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:20	07/18/13 16:27	1
Copper	ND		25	4.6	ug/L		07/16/13 14:20	07/18/13 16:27	1
Iron	21000		100	28	ug/L		07/16/13 14:20	07/18/13 16:27	1
Iron	21000		1000	280	ug/L		07/16/13 14:20	07/18/13 17:44	10
Lead	3.7	J	10	1.5	ug/L		07/16/13 14:20	07/18/13 16:27	1
Magnesium	80000	E	1000	130	ug/L		07/16/13 14:20	07/18/13 16:27	1
Magnesium	81000		10000	1300	ug/L		07/16/13 14:20	07/18/13 17:44	10
Manganese	420		15	3.3	ug/L		07/16/13 14:20	07/18/13 16:27	1
Nickel	ND		40	13	ug/L		07/16/13 14:20	07/18/13 16:27	1
Potassium	17000		5000	1700	ug/L		07/16/13 14:20	07/18/13 16:27	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:20	07/18/13 16:27	1
Silver	ND		10	6.0	ug/L		07/16/13 14:20	07/18/13 16:27	1
Sodium	210000	E	1000	320	ug/L		07/16/13 14:20	07/18/13 16:27	1
Sodium	200000		10000	3200	ug/L		07/16/13 14:20	07/18/13 17:44	10
Thallium	ND		20	4.0	ug/L		07/16/13 14:20	07/18/13 16:27	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:20	07/18/13 16:27	1
Zinc	ND		20	5.2	ug/L		07/16/13 14:20	07/18/13 16:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:16	07/17/13 19:57	1
Antimony	ND		10	4.0	ug/L		07/16/13 14:16	07/17/13 19:57	1
Arsenic	2.8	J	10	2.0	ug/L		07/16/13 14:16	07/17/13 19:57	1
Barium	1300		50	4.0	ug/L		07/16/13 14:16	07/17/13 19:57	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:16	07/17/13 19:57	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:16	07/17/13 19:57	1
Calcium	230000	E	1000	110	ug/L		07/16/13 14:16	07/17/13 19:57	1
Calcium	280000	E	5000	530	ug/L		07/16/13 14:16	07/17/13 21:04	5
Calcium	290000		10000	1100	ug/L		07/16/13 14:16	07/18/13 11:04	10
Chromium	ND		10	3.1	ug/L		07/16/13 14:16	07/17/13 19:57	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:16	07/17/13 19:57	1
Copper	ND		25	4.6	ug/L		07/16/13 14:16	07/17/13 19:57	1
Iron	20000		100	28	ug/L		07/16/13 14:16	07/17/13 19:57	1
Iron	20000		500	140	ug/L		07/16/13 14:16	07/17/13 21:04	5

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: D-93**

**Lab Sample ID: 160-2968-11**

Date Collected: 07/11/13 15:40

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.5	J	10	1.5	ug/L		07/16/13 14:16	07/17/13 19:57	1
Magnesium	76000	E	1000	130	ug/L		07/16/13 14:16	07/17/13 19:57	1
Magnesium	75000		5000	660	ug/L		07/16/13 14:16	07/17/13 21:04	5
Manganese	400		15	3.3	ug/L		07/16/13 14:16	07/17/13 19:57	1
Nickel	ND		40	13	ug/L		07/16/13 14:16	07/17/13 19:57	1
Potassium	17000		5000	1700	ug/L		07/16/13 14:16	07/17/13 19:57	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:16	07/17/13 19:57	1
Silver	ND		10	6.0	ug/L		07/16/13 14:16	07/17/13 19:57	1
Sodium	200000	E	1000	320	ug/L		07/16/13 14:16	07/17/13 19:57	1
Sodium	190000		5000	1600	ug/L		07/16/13 14:16	07/17/13 21:04	5
Thallium	ND	^	20	4.0	ug/L		07/16/13 14:16	07/17/13 19:57	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:16	07/17/13 19:57	1
Zinc	5.4	J	20	5.2	ug/L		07/16/13 14:16	07/17/13 19:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	J	0.20	0.060	ug/L		07/16/13 12:14	07/16/13 16:48	1

**Method: 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19	J	0.20	0.060	ug/L		07/16/13 12:21	07/17/13 11:37	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0072	J	0.020	0.0040	mg/L			07/12/13 22:41	1
Bromide	4.1		0.25	0.025	mg/L			07/12/13 22:41	1
Sulfate	12		0.50	0.050	mg/L			07/12/13 22:41	1
Iodide	0.36	J	1.0	0.10	mg/L			07/16/13 21:03	1

**General Chemistry - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	1000	B	10	1.1	mg/L			07/25/13 12:49	2

**General Chemistry - DL2**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	330		40	4.0	mg/L			07/12/13 23:10	200

**Client Sample ID: I-9**

**Lab Sample ID: 160-2968-12**

Date Collected: 07/11/13 16:26

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/16/13 02:13	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/16/13 02:13	1
1,1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/16/13 02:13	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/16/13 02:13	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/16/13 02:13	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/16/13 02:13	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/16/13 02:13	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/16/13 02:13	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: I-9**

**Lab Sample ID: 160-2968-12**

**Date Collected: 07/11/13 16:26**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/16/13 02:13	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/16/13 02:13	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/16/13 02:13	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/16/13 02:13	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/16/13 02:13	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/16/13 02:13	1
2-Hexanone	ND	*	20	0.59	ug/L			07/16/13 02:13	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/16/13 02:13	1
<b>Acetone</b>	<b>18</b>	<b>J</b>	20	6.7	ug/L			07/16/13 02:13	1
Benzene	ND		5.0	0.25	ug/L			07/16/13 02:13	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/16/13 02:13	1
Bromoform	ND		5.0	0.37	ug/L			07/16/13 02:13	1
Bromomethane	ND		10	0.40	ug/L			07/16/13 02:13	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/16/13 02:13	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/16/13 02:13	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/16/13 02:13	1
Chloroethane	ND		10	0.38	ug/L			07/16/13 02:13	1
Chloroform	ND		5.0	0.15	ug/L			07/16/13 02:13	1
Chloromethane	ND		10	0.55	ug/L			07/16/13 02:13	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/16/13 02:13	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/16/13 02:13	1
Cyclohexane	ND		10	0.36	ug/L			07/16/13 02:13	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/16/13 02:13	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/16/13 02:13	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/16/13 02:13	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/16/13 02:13	1
Methyl acetate	ND		25	2.3	ug/L			07/16/13 02:13	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/16/13 02:13	1
Methylcyclohexane	ND		10	0.26	ug/L			07/16/13 02:13	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/16/13 02:13	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/16/13 02:13	1
o-Xylene	ND		5.0	0.32	ug/L			07/16/13 02:13	1
Styrene	ND		5.0	0.35	ug/L			07/16/13 02:13	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/16/13 02:13	1
Toluene	ND		5.0	1.0	ug/L			07/16/13 02:13	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/16/13 02:13	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/16/13 02:13	1
Trichloroethene	ND		5.0	0.29	ug/L			07/16/13 02:13	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/16/13 02:13	1
<b>Vinyl chloride</b>	<b>2.5</b>	<b>J</b>	5.0	0.43	ug/L			07/16/13 02:13	1
Xylenes, Total	ND		10	0.85	ug/L			07/16/13 02:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		82 - 132		07/16/13 02:13	1
4-Bromofluorobenzene (Surr)	101		82 - 121		07/16/13 02:13	1
Dibromofluoromethane (Surr)	104		85 - 119		07/16/13 02:13	1
Toluene-d8 (Surr)	99		85 - 115		07/16/13 02:13	1

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TestAmerica St. Louis

# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: I-9**

**Lab Sample ID: 160-2968-12**

Date Collected: 07/11/13 16:26

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	190	J	200	80	ug/L		07/16/13 14:20	07/18/13 16:31	1
Antimony	5.6	J	10	4.0	ug/L		07/16/13 14:20	07/18/13 16:31	1
Arsenic	26		10	2.0	ug/L		07/16/13 14:20	07/18/13 16:31	1
Barium	1500		50	4.0	ug/L		07/16/13 14:20	07/18/13 16:31	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:20	07/18/13 16:31	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:20	07/18/13 16:31	1
Calcium	220000	E	1000	110	ug/L		07/16/13 14:20	07/18/13 16:31	1
Calcium	270000		10000	1100	ug/L		07/16/13 14:20	07/18/13 17:47	10
Chromium	ND		10	3.1	ug/L		07/16/13 14:20	07/18/13 16:31	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:20	07/18/13 16:31	1
Copper	ND		25	4.6	ug/L		07/16/13 14:20	07/18/13 16:31	1
Iron	35000		100	28	ug/L		07/16/13 14:20	07/18/13 16:31	1
Iron	36000		1000	280	ug/L		07/16/13 14:20	07/18/13 17:47	10
Lead	4.1	J	10	1.5	ug/L		07/16/13 14:20	07/18/13 16:31	1
Magnesium	73000	E	1000	130	ug/L		07/16/13 14:20	07/18/13 16:31	1
Magnesium	74000		10000	1300	ug/L		07/16/13 14:20	07/18/13 17:47	10
Manganese	1300		15	3.3	ug/L		07/16/13 14:20	07/18/13 16:31	1
Nickel	14	J	40	13	ug/L		07/16/13 14:20	07/18/13 16:31	1
Potassium	21000		5000	1700	ug/L		07/16/13 14:20	07/18/13 16:31	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:20	07/18/13 16:31	1
Silver	ND		10	6.0	ug/L		07/16/13 14:20	07/18/13 16:31	1
Sodium	230000	E	1000	320	ug/L		07/16/13 14:20	07/18/13 16:31	1
Sodium	220000		10000	3200	ug/L		07/16/13 14:20	07/18/13 17:47	10
Thallium	ND		20	4.0	ug/L		07/16/13 14:20	07/18/13 16:31	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:20	07/18/13 16:31	1
Zinc	6.2	J	20	5.2	ug/L		07/16/13 14:20	07/18/13 16:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:16	07/17/13 20:01	1
Antimony	4.2	J	10	4.0	ug/L		07/16/13 14:16	07/17/13 20:01	1
Arsenic	24		10	2.0	ug/L		07/16/13 14:16	07/17/13 20:01	1
Barium	1500		50	4.0	ug/L		07/16/13 14:16	07/17/13 20:01	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:16	07/17/13 20:01	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:16	07/17/13 20:01	1
Calcium	210000	E	1000	110	ug/L		07/16/13 14:16	07/17/13 20:01	1
Calcium	260000	E	5000	530	ug/L		07/16/13 14:16	07/17/13 21:08	5
Calcium	270000		10000	1100	ug/L		07/16/13 14:16	07/18/13 11:08	10
Chromium	ND		10	3.1	ug/L		07/16/13 14:16	07/17/13 20:01	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:16	07/17/13 20:01	1
Copper	ND		25	4.6	ug/L		07/16/13 14:16	07/17/13 20:01	1
Iron	33000		100	28	ug/L		07/16/13 14:16	07/17/13 20:01	1
Iron	34000		500	140	ug/L		07/16/13 14:16	07/17/13 21:08	5
Lead	2.9	J	10	1.5	ug/L		07/16/13 14:16	07/17/13 20:01	1
Magnesium	68000	E	1000	130	ug/L		07/16/13 14:16	07/17/13 20:01	1
Magnesium	69000		5000	660	ug/L		07/16/13 14:16	07/17/13 21:08	5
Manganese	1200		15	3.3	ug/L		07/16/13 14:16	07/17/13 20:01	1
Nickel	13	J	40	13	ug/L		07/16/13 14:16	07/17/13 20:01	1
Potassium	21000		5000	1700	ug/L		07/16/13 14:16	07/17/13 20:01	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:16	07/17/13 20:01	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: I-9**

**Lab Sample ID: 160-2968-12**

Date Collected: 07/11/13 16:26

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		10	6.0	ug/L		07/16/13 14:16	07/17/13 20:01	1
<b>Sodium</b>	<b>220000</b>	<b>E</b>	1000	320	ug/L		07/16/13 14:16	07/17/13 20:01	1
<b>Sodium</b>	<b>220000</b>		5000	1600	ug/L		07/16/13 14:16	07/17/13 21:08	5
Thallium	ND	^	20	4.0	ug/L		07/16/13 14:16	07/17/13 20:01	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:16	07/17/13 20:01	1
<b>Zinc</b>	<b>5.4</b>	<b>J</b>	20	5.2	ug/L		07/16/13 14:16	07/17/13 20:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.10</b>	<b>J</b>	0.20	0.060	ug/L		07/16/13 12:14	07/16/13 16:50	1

**Method: 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.18</b>	<b>J</b>	0.20	0.060	ug/L		07/16/13 12:21	07/17/13 11:39	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Nitrate as N</b>	<b>0.0080</b>	<b>J</b>	0.020	0.0040	mg/L			07/12/13 23:53	1
<b>Bromide</b>	<b>3.5</b>		0.25	0.025	mg/L			07/12/13 23:53	1
<b>Sulfate</b>	<b>0.58</b>		0.50	0.050	mg/L			07/12/13 23:53	1
<b>Iodide</b>	<b>0.36</b>	<b>J</b>	1.0	0.10	mg/L			07/16/13 21:18	1

**General Chemistry - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Alkalinity</b>	<b>1100</b>	<b>B</b>	10	1.1	mg/L			07/25/13 12:51	2

**General Chemistry - DL2**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>300</b>		40	4.0	mg/L			07/13/13 00:22	200

**Client Sample ID: P2-115-SS**

**Lab Sample ID: 160-2968-13**

Date Collected: 07/11/13 16:36

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/16/13 02:39	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/16/13 02:39	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/16/13 02:39	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/16/13 02:39	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/16/13 02:39	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/16/13 02:39	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/16/13 02:39	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/16/13 02:39	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/16/13 02:39	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/16/13 02:39	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/16/13 02:39	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/16/13 02:39	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/16/13 02:39	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/16/13 02:39	1
2-Hexanone	ND	*	20	0.59	ug/L			07/16/13 02:39	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-115-SS**

**Lab Sample ID: 160-2968-13**

**Date Collected: 07/11/13 16:36**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/16/13 02:39	1
<b>Acetone</b>	<b>16</b>	<b>J</b>	20	6.7	ug/L			07/16/13 02:39	1
Benzene	ND		5.0	0.25	ug/L			07/16/13 02:39	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/16/13 02:39	1
Bromoform	ND		5.0	0.37	ug/L			07/16/13 02:39	1
Bromomethane	ND		10	0.40	ug/L			07/16/13 02:39	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/16/13 02:39	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/16/13 02:39	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/16/13 02:39	1
Chloroethane	ND		10	0.38	ug/L			07/16/13 02:39	1
Chloroform	ND		5.0	0.15	ug/L			07/16/13 02:39	1
Chloromethane	ND		10	0.55	ug/L			07/16/13 02:39	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/16/13 02:39	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/16/13 02:39	1
Cyclohexane	ND		10	0.36	ug/L			07/16/13 02:39	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/16/13 02:39	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/16/13 02:39	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/16/13 02:39	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/16/13 02:39	1
Methyl acetate	ND		25	2.3	ug/L			07/16/13 02:39	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/16/13 02:39	1
Methylcyclohexane	ND		10	0.26	ug/L			07/16/13 02:39	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/16/13 02:39	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/16/13 02:39	1
o-Xylene	ND		5.0	0.32	ug/L			07/16/13 02:39	1
Styrene	ND		5.0	0.35	ug/L			07/16/13 02:39	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/16/13 02:39	1
Toluene	ND		5.0	1.0	ug/L			07/16/13 02:39	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/16/13 02:39	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/16/13 02:39	1
Trichloroethene	ND		5.0	0.29	ug/L			07/16/13 02:39	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/16/13 02:39	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/16/13 02:39	1
Xylenes, Total	ND		10	0.85	ug/L			07/16/13 02:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		82 - 132		07/16/13 02:39	1
4-Bromofluorobenzene (Surr)	104		82 - 121		07/16/13 02:39	1
Dibromofluoromethane (Surr)	103		85 - 119		07/16/13 02:39	1
Toluene-d8 (Surr)	104		85 - 115		07/16/13 02:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:20	07/18/13 16:35	1
<b>Antimony</b>	<b>4.3</b>	<b>J</b>	10	4.0	ug/L		07/16/13 14:20	07/18/13 16:35	1
<b>Arsenic</b>	<b>6.0</b>	<b>J</b>	10	2.0	ug/L		07/16/13 14:20	07/18/13 16:35	1
<b>Barium</b>	<b>330</b>		50	4.0	ug/L		07/16/13 14:20	07/18/13 16:35	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:20	07/18/13 16:35	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:20	07/18/13 16:35	1
<b>Calcium</b>	<b>160000</b>	<b>E</b>	1000	110	ug/L		07/16/13 14:20	07/18/13 16:35	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-115-SS**

**Lab Sample ID: 160-2968-13**

**Date Collected: 07/11/13 16:36**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	180000		10000	1100	ug/L		07/16/13 14:20	07/18/13 17:51	10
Chromium	ND		10	3.1	ug/L		07/16/13 14:20	07/18/13 16:35	1
Cobalt	15	J	50	4.0	ug/L		07/16/13 14:20	07/18/13 16:35	1
Copper	ND		25	4.6	ug/L		07/16/13 14:20	07/18/13 16:35	1
Iron	1500		100	28	ug/L		07/16/13 14:20	07/18/13 16:35	1
Iron	1500		1000	280	ug/L		07/16/13 14:20	07/18/13 17:51	10
Lead	2.8	J	10	1.5	ug/L		07/16/13 14:20	07/18/13 16:35	1
Magnesium	82000	E	1000	130	ug/L		07/16/13 14:20	07/18/13 16:35	1
Magnesium	84000		10000	1300	ug/L		07/16/13 14:20	07/18/13 17:51	10
Manganese	52		15	3.3	ug/L		07/16/13 14:20	07/18/13 16:35	1
Nickel	43		40	13	ug/L		07/16/13 14:20	07/18/13 16:35	1
Potassium	2800	J	5000	1700	ug/L		07/16/13 14:20	07/18/13 16:35	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:20	07/18/13 16:35	1
Silver	ND		10	6.0	ug/L		07/16/13 14:20	07/18/13 16:35	1
Sodium	62000		1000	320	ug/L		07/16/13 14:20	07/18/13 16:35	1
Thallium	ND		20	4.0	ug/L		07/16/13 14:20	07/18/13 16:35	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:20	07/18/13 16:35	1
Zinc	7.1	J	20	5.2	ug/L		07/16/13 14:20	07/18/13 16:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:16	07/17/13 20:05	1
Antimony	ND		10	4.0	ug/L		07/16/13 14:16	07/17/13 20:05	1
Arsenic	5.1	J	10	2.0	ug/L		07/16/13 14:16	07/17/13 20:05	1
Barium	320		50	4.0	ug/L		07/16/13 14:16	07/17/13 20:05	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:16	07/17/13 20:05	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:16	07/17/13 20:05	1
Calcium	160000	E	1000	110	ug/L		07/16/13 14:16	07/17/13 20:05	1
Calcium	180000		5000	530	ug/L		07/16/13 14:16	07/17/13 21:12	5
Chromium	ND		10	3.1	ug/L		07/16/13 14:16	07/17/13 20:05	1
Cobalt	20	J	50	4.0	ug/L		07/16/13 14:16	07/17/13 20:05	1
Copper	ND		25	4.6	ug/L		07/16/13 14:16	07/17/13 20:05	1
Iron	1500		100	28	ug/L		07/16/13 14:16	07/17/13 20:05	1
Iron	1600		500	140	ug/L		07/16/13 14:16	07/17/13 21:12	5
Lead	1.8	J	10	1.5	ug/L		07/16/13 14:16	07/17/13 20:05	1
Magnesium	78000	E	1000	130	ug/L		07/16/13 14:16	07/17/13 20:05	1
Magnesium	79000		5000	660	ug/L		07/16/13 14:16	07/17/13 21:12	5
Manganese	51		15	3.3	ug/L		07/16/13 14:16	07/17/13 20:05	1
Nickel	44		40	13	ug/L		07/16/13 14:16	07/17/13 20:05	1
Potassium	3000	J	5000	1700	ug/L		07/16/13 14:16	07/17/13 20:05	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:16	07/17/13 20:05	1
Silver	ND		10	6.0	ug/L		07/16/13 14:16	07/17/13 20:05	1
Sodium	60000		1000	320	ug/L		07/16/13 14:16	07/17/13 20:05	1
Thallium	ND	^	20	4.0	ug/L		07/16/13 14:16	07/17/13 20:05	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:16	07/17/13 20:05	1
Zinc	ND		20	5.2	ug/L		07/16/13 14:16	07/17/13 20:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.083	J	0.20	0.060	ug/L		07/16/13 12:14	07/16/13 16:51	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: P2-115-SS**

**Lab Sample ID: 160-2968-13**

Date Collected: 07/11/13 16:36

Matrix: Water

Date Received: 07/12/13 08:15

**Method: 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16	J	0.20	0.060	ug/L		07/16/13 12:21	07/17/13 11:44	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.020	0.0040	mg/L			07/13/13 00:37	1
Bromide	1.2		0.25	0.025	mg/L			07/13/13 00:37	1
Sulfate	17		0.50	0.050	mg/L			07/13/13 00:37	1
Iodide	0.13	J	1.0	0.10	mg/L			07/16/13 21:33	1
Alkalinity	560	B	5.0	0.54	mg/L			07/25/13 12:51	1

**General Chemistry - DL2**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	220		20	2.0	mg/L			07/13/13 01:06	100

**Client Sample ID: DUPLICATE 03**

**Lab Sample ID: 160-2968-14**

Date Collected: 07/11/13 00:00

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/16/13 03:05	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/16/13 03:05	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/16/13 03:05	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/16/13 03:05	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/16/13 03:05	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/16/13 03:05	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/16/13 03:05	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/16/13 03:05	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/16/13 03:05	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/16/13 03:05	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/16/13 03:05	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/16/13 03:05	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/16/13 03:05	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/16/13 03:05	1
2-Hexanone	ND *		20	0.59	ug/L			07/16/13 03:05	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/16/13 03:05	1
Acetone	9.7	J	20	6.7	ug/L			07/16/13 03:05	1
Benzene	ND		5.0	0.25	ug/L			07/16/13 03:05	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/16/13 03:05	1
Bromoform	ND		5.0	0.37	ug/L			07/16/13 03:05	1
Bromomethane	ND		10	0.40	ug/L			07/16/13 03:05	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/16/13 03:05	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/16/13 03:05	1
Chlorobenzene	2.0	J	5.0	0.38	ug/L			07/16/13 03:05	1
Chloroethane	ND		10	0.38	ug/L			07/16/13 03:05	1
Chloroform	ND		5.0	0.15	ug/L			07/16/13 03:05	1
Chloromethane	ND		10	0.55	ug/L			07/16/13 03:05	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/16/13 03:05	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/16/13 03:05	1
Cyclohexane	ND		10	0.36	ug/L			07/16/13 03:05	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: DUPLICATE 03**

**Lab Sample ID: 160-2968-14**

**Date Collected: 07/11/13 00:00**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

**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			07/16/13 03:05	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/16/13 03:05	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/16/13 03:05	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/16/13 03:05	1
Methyl acetate	ND		25	2.3	ug/L			07/16/13 03:05	1
<b>Methyl tert-butyl ether</b>	<b>0.71</b>	<b>J</b>	5.0	0.40	ug/L			07/16/13 03:05	1
Methylcyclohexane	ND		10	0.26	ug/L			07/16/13 03:05	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/16/13 03:05	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/16/13 03:05	1
o-Xylene	ND		5.0	0.32	ug/L			07/16/13 03:05	1
Styrene	ND		5.0	0.35	ug/L			07/16/13 03:05	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/16/13 03:05	1
Toluene	ND		5.0	1.0	ug/L			07/16/13 03:05	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/16/13 03:05	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/16/13 03:05	1
Trichloroethene	ND		5.0	0.29	ug/L			07/16/13 03:05	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/16/13 03:05	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/16/13 03:05	1
Xylenes, Total	ND		10	0.85	ug/L			07/16/13 03:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		82 - 132		07/16/13 03:05	1
4-Bromofluorobenzene (Surr)	98		82 - 121		07/16/13 03:05	1
Dibromofluoromethane (Surr)	101		85 - 119		07/16/13 03:05	1
Toluene-d8 (Surr)	95		85 - 115		07/16/13 03:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:20	07/18/13 16:39	1
<b>Antimony</b>	<b>4.5</b>	<b>J</b>	10	4.0	ug/L		07/16/13 14:20	07/18/13 16:39	1
<b>Arsenic</b>	<b>3.2</b>	<b>J</b>	10	2.0	ug/L		07/16/13 14:20	07/18/13 16:39	1
<b>Barium</b>	<b>1700</b>		50	4.0	ug/L		07/16/13 14:20	07/18/13 16:39	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:20	07/18/13 16:39	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:20	07/18/13 16:39	1
<b>Calcium</b>	<b>100000</b>	<b>E</b>	1000	110	ug/L		07/16/13 14:20	07/18/13 16:39	1
<b>Calcium</b>	<b>110000</b>		10000	1100	ug/L		07/16/13 14:20	07/18/13 17:55	10
Chromium	ND		10	3.1	ug/L		07/16/13 14:20	07/18/13 16:39	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:20	07/18/13 16:39	1
Copper	ND		25	4.6	ug/L		07/16/13 14:20	07/18/13 16:39	1
<b>Iron</b>	<b>16000</b>		100	28	ug/L		07/16/13 14:20	07/18/13 16:39	1
<b>Lead</b>	<b>2.4</b>	<b>J</b>	10	1.5	ug/L		07/16/13 14:20	07/18/13 16:39	1
<b>Magnesium</b>	<b>41000</b>		1000	130	ug/L		07/16/13 14:20	07/18/13 16:39	1
<b>Manganese</b>	<b>400</b>		15	3.3	ug/L		07/16/13 14:20	07/18/13 16:39	1
Nickel	ND		40	13	ug/L		07/16/13 14:20	07/18/13 16:39	1
<b>Potassium</b>	<b>43000</b>		5000	1700	ug/L		07/16/13 14:20	07/18/13 16:39	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:20	07/18/13 16:39	1
Silver	ND		10	6.0	ug/L		07/16/13 14:20	07/18/13 16:39	1
<b>Sodium</b>	<b>54000</b>		1000	320	ug/L		07/16/13 14:20	07/18/13 16:39	1
Thallium	ND		20	4.0	ug/L		07/16/13 14:20	07/18/13 16:39	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:20	07/18/13 16:39	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: DUPLICATE 03**

**Lab Sample ID: 160-2968-14**

Date Collected: 07/11/13 00:00

Matrix: Water

Date Received: 07/12/13 08:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		20	5.2	ug/L		07/16/13 14:20	07/18/13 16:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:16	07/17/13 20:09	1
Antimony	ND		10	4.0	ug/L		07/16/13 14:16	07/17/13 20:09	1
<b>Arsenic</b>	<b>2.2</b>	<b>J</b>	10	2.0	ug/L		07/16/13 14:16	07/17/13 20:09	1
<b>Barium</b>	<b>1700</b>		50	4.0	ug/L		07/16/13 14:16	07/17/13 20:09	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:16	07/17/13 20:09	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:16	07/17/13 20:09	1
<b>Calcium</b>	<b>99000</b>	<b>E</b>	1000	110	ug/L		07/16/13 14:16	07/17/13 20:09	1
<b>Calcium</b>	<b>110000</b>		5000	530	ug/L		07/16/13 14:16	07/17/13 21:15	5
Chromium	ND		10	3.1	ug/L		07/16/13 14:16	07/17/13 20:09	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:16	07/17/13 20:09	1
Copper	ND		25	4.6	ug/L		07/16/13 14:16	07/17/13 20:09	1
<b>Iron</b>	<b>16000</b>		100	28	ug/L		07/16/13 14:16	07/17/13 20:09	1
<b>Lead</b>	<b>2.4</b>	<b>J</b>	10	1.5	ug/L		07/16/13 14:16	07/17/13 20:09	1
<b>Magnesium</b>	<b>38000</b>		1000	130	ug/L		07/16/13 14:16	07/17/13 20:09	1
<b>Manganese</b>	<b>380</b>		15	3.3	ug/L		07/16/13 14:16	07/17/13 20:09	1
Nickel	ND		40	13	ug/L		07/16/13 14:16	07/17/13 20:09	1
<b>Potassium</b>	<b>44000</b>		5000	1700	ug/L		07/16/13 14:16	07/17/13 20:09	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:16	07/17/13 20:09	1
Silver	ND		10	6.0	ug/L		07/16/13 14:16	07/17/13 20:09	1
<b>Sodium</b>	<b>52000</b>		1000	320	ug/L		07/16/13 14:16	07/17/13 20:09	1
Thallium	ND ^		20	4.0	ug/L		07/16/13 14:16	07/17/13 20:09	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:16	07/17/13 20:09	1
<b>Zinc</b>	<b>6.4</b>	<b>J</b>	20	5.2	ug/L		07/16/13 14:16	07/17/13 20:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.075	J	0.20	0.060	ug/L		07/16/13 12:14	07/16/13 16:53	1

**Method: 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13	J	0.20	0.060	ug/L		07/16/13 12:21	07/17/13 11:45	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0040	J	0.020	0.0040	mg/L			07/13/13 01:20	1
Bromide	0.87		0.25	0.025	mg/L			07/13/13 01:20	1
Sulfate	8.2		0.50	0.050	mg/L			07/13/13 01:20	1
Iodide	ND		1.0	0.10	mg/L			07/16/13 21:48	1
Alkalinity	710	B	5.0	0.54	mg/L			07/25/13 12:51	1

**General Chemistry - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55		4.0	0.40	mg/L			07/13/13 01:34	20

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 160-2968-15**

**Date Collected: 07/11/13 00:00**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			07/15/13 19:41	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/15/13 19:41	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/15/13 19:41	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/15/13 19:41	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/15/13 19:41	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/15/13 19:41	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/15/13 19:41	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/15/13 19:41	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/15/13 19:41	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/15/13 19:41	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/15/13 19:41	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/15/13 19:41	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/15/13 19:41	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/15/13 19:41	1
2-Hexanone	ND	*	20	0.59	ug/L			07/15/13 19:41	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/15/13 19:41	1
Acetone	8.0	J	20	6.7	ug/L			07/15/13 19:41	1
Benzene	ND		5.0	0.25	ug/L			07/15/13 19:41	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/15/13 19:41	1
Bromoform	ND		5.0	0.37	ug/L			07/15/13 19:41	1
Bromomethane	ND		10	0.40	ug/L			07/15/13 19:41	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/15/13 19:41	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/15/13 19:41	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/15/13 19:41	1
Chloroethane	ND		10	0.38	ug/L			07/15/13 19:41	1
Chloroform	ND		5.0	0.15	ug/L			07/15/13 19:41	1
Chloromethane	ND		10	0.55	ug/L			07/15/13 19:41	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/15/13 19:41	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/15/13 19:41	1
Cyclohexane	ND		10	0.36	ug/L			07/15/13 19:41	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/15/13 19:41	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/15/13 19:41	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/15/13 19:41	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/15/13 19:41	1
Methyl acetate	ND		25	2.3	ug/L			07/15/13 19:41	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/15/13 19:41	1
Methylcyclohexane	ND		10	0.26	ug/L			07/15/13 19:41	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/15/13 19:41	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/15/13 19:41	1
o-Xylene	ND		5.0	0.32	ug/L			07/15/13 19:41	1
Styrene	ND		5.0	0.35	ug/L			07/15/13 19:41	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/15/13 19:41	1
Toluene	ND		5.0	1.0	ug/L			07/15/13 19:41	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/15/13 19:41	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/15/13 19:41	1
Trichloroethene	ND		5.0	0.29	ug/L			07/15/13 19:41	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/15/13 19:41	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/15/13 19:41	1
Xylenes, Total	ND		10	0.85	ug/L			07/15/13 19:41	1

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# Client Sample Results

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

TestAmerica Job ID: 160-2968-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 160-2968-15**

**Date Collected: 07/11/13 00:00**

**Matrix: Water**

**Date Received: 07/12/13 08:15**

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	106		82 - 132		07/15/13 19:41	1
4-Bromofluorobenzene (Surr)	98		82 - 121		07/15/13 19:41	1
Dibromofluoromethane (Surr)	99		85 - 119		07/15/13 19:41	1
Toluene-d8 (Surr)	99		85 - 115		07/15/13 19:41	1

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# QC Sample Results

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

TestAmerica Job ID: 160-2968-1

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

**Lab Sample ID: MB 160-60813/3-A**

**Matrix: Water**

**Analysis Batch: 60813**

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

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TestAmerica St. Louis

## QC Sample Results

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

TestAmerica Job ID: 160-2968-1

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

Lab Sample ID: MB 160-60813/3-A

Matrix: Water

Analysis Batch: 60813

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			07/15/13 18:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		82 - 132		07/15/13 18:23	1
4-Bromofluorobenzene (Surr)	99		82 - 121		07/15/13 18:23	1
Dibromofluoromethane (Surr)	103		85 - 119		07/15/13 18:23	1
Toluene-d8 (Surr)	104		85 - 115		07/15/13 18:23	1

Lab Sample ID: LCS 160-60813/4-A

Matrix: Water

Analysis Batch: 60813

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	51.6		ug/L		103	85 - 115
1,1,2,2-Tetrachloroethane	50.0	54.6		ug/L		109	84 - 115
1,1,2-Trichloroethane	50.0	51.8		ug/L		104	85 - 115
1,1-Dichloroethane	50.0	50.4		ug/L		101	85 - 115
1,1-Dichloroethene	50.0	49.7		ug/L		99	85 - 118
1,2,4-Trichlorobenzene	50.0	52.4		ug/L		105	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	54.5		ug/L		109	71 - 123
1,2-Dibromoethane (EDB)	50.0	51.4		ug/L		103	85 - 115
1,2-Dichlorobenzene	50.0	52.9		ug/L		106	85 - 115
1,2-Dichloroethane	50.0	53.0		ug/L		106	79 - 122
1,2-Dichloropropane	50.0	49.9		ug/L		100	85 - 115
1,3-Dichlorobenzene	50.0	51.5		ug/L		103	85 - 115
1,4-Dichlorobenzene	50.0	49.2		ug/L		98	85 - 115
2-Butanone (MEK)	50.0	58.4		ug/L		117	71 - 123
2-Hexanone	50.0	61.9	*	ug/L		124	66 - 121
4-Methyl-2-pentanone (MIBK)	50.0	60.5		ug/L		121	74 - 123
Acetone	50.0	62.2		ug/L		124	51 - 140
Benzene	50.0	49.2		ug/L		98	85 - 115
Bromodichloromethane	50.0	53.1		ug/L		106	85 - 117
Bromoform	50.0	54.0		ug/L		108	85 - 115
Bromomethane	50.0	56.0		ug/L		112	70 - 135
Carbon disulfide	50.0	50.6		ug/L		101	85 - 123
Carbon tetrachloride	50.0	51.3		ug/L		103	85 - 118
Chlorobenzene	50.0	49.6		ug/L		99	85 - 115
Chloroethane	50.0	59.0		ug/L		118	75 - 125
Chloroform	50.0	50.2		ug/L		100	85 - 115
Chloromethane	50.0	50.3		ug/L		101	73 - 132
cis-1,2-Dichloroethene	50.0	48.7		ug/L		97	85 - 115
cis-1,3-Dichloropropene	50.0	50.8		ug/L		102	85 - 127
Cyclohexane	50.0	50.8		ug/L		102	73 - 115
Dibromochloromethane	50.0	50.5		ug/L		101	85 - 115
Dichlorodifluoromethane	50.0	54.4		ug/L		109	62 - 115
Ethylbenzene	50.0	51.5		ug/L		103	85 - 115
Isopropylbenzene	50.0	52.8		ug/L		106	85 - 124
Methyl acetate	250	269		ug/L		108	73 - 135

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## QC Sample Results

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

TestAmerica Job ID: 160-2968-1

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

Lab Sample ID: LCS 160-60813/4-A

Matrix: Water

Analysis Batch: 60813

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	54.7		ug/L		109	73 - 115
Methylcyclohexane	50.0	52.8		ug/L		106	85 - 134
Methylene Chloride	50.0	50.0		ug/L		100	84 - 115
m-Xylene & p-Xylene	50.0	51.3		ug/L		103	85 - 115
o-Xylene	50.0	49.8		ug/L		100	85 - 115
Styrene	50.0	51.4		ug/L		103	85 - 115
Tetrachloroethene	50.0	50.6		ug/L		101	85 - 115
Toluene	50.0	49.3		ug/L		99	85 - 115
trans-1,2-Dichloroethene	50.0	47.2		ug/L		94	85 - 115
trans-1,3-Dichloropropene	50.0	50.0		ug/L		100	85 - 123
Trichloroethene	50.0	49.0		ug/L		98	85 - 115
Trichlorofluoromethane	50.0	53.9		ug/L		108	85 - 116
Vinyl chloride	50.0	48.5		ug/L		97	68 - 133
Xylenes, Total	100	101		ug/L		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		82 - 132
4-Bromofluorobenzene (Surr)	100		82 - 121
Dibromofluoromethane (Surr)	99		85 - 119
Toluene-d8 (Surr)	99		85 - 115

Lab Sample ID: 160-2968-6 MS

Matrix: Water

Analysis Batch: 60813

Client Sample ID: P2-202-SS

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		50.0	53.3		ug/L		107	85 - 118
1,1,1,2-Tetrachloroethane	ND		50.0	53.9		ug/L		108	85 - 116
1,1,2-Trichloroethane	37		50.0	90.8		ug/L		108	85 - 115
1,1-Dichloroethane	ND		50.0	51.2		ug/L		102	85 - 115
1,1-Dichloroethene	ND		50.0	51.8		ug/L		104	85 - 118
1,2,4-Trichlorobenzene	ND		50.0	51.7		ug/L		103	75 - 124
1,2-Dibromo-3-Chloropropane	ND		50.0	55.5		ug/L		111	71 - 123
1,2-Dibromoethane (EDB)	ND		50.0	52.0		ug/L		104	85 - 115
1,2-Dichlorobenzene	ND		50.0	52.5		ug/L		105	84 - 115
1,2-Dichloroethane	ND		50.0	56.7		ug/L		113	80 - 125
1,2-Dichloropropane	ND		50.0	52.6		ug/L		105	85 - 117
1,3-Dichlorobenzene	ND		50.0	51.9		ug/L		104	84 - 115
1,4-Dichlorobenzene	ND		50.0	50.6		ug/L		101	85 - 115
2-Butanone (MEK)	ND		50.0	54.7		ug/L		109	73 - 133
2-Hexanone	ND *		50.0	56.6		ug/L		113	66 - 121
4-Methyl-2-pentanone (MIBK)	ND		50.0	54.9		ug/L		110	77 - 134
Acetone	30		50.0	86.4		ug/L		112	38 - 150
Benzene	34		50.0	83.6		ug/L		100	85 - 115
Bromodichloromethane	ND		50.0	52.3		ug/L		105	56 - 119
Bromoform	ND		50.0	54.2		ug/L		108	84 - 116
Bromomethane	ND		50.0	57.6		ug/L		115	70 - 135
Carbon disulfide	ND		50.0	53.4		ug/L		107	85 - 127

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## QC Sample Results

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

TestAmerica Job ID: 160-2968-1

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

Lab Sample ID: 160-2968-6 MS

Matrix: Water

Analysis Batch: 60813

Client Sample ID: P2-202-SS

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Carbon tetrachloride	ND		50.0	53.4		ug/L		107	85 - 121
Chlorobenzene	ND		50.0	51.9		ug/L		104	85 - 115
Chloroethane	ND		50.0	63.6	F	ug/L		127	73 - 123
Chloroform	ND		50.0	50.8		ug/L		102	85 - 115
Chloromethane	ND		50.0	55.1		ug/L		110	67 - 130
cis-1,2-Dichloroethene	ND		50.0	50.6		ug/L		101	80 - 116
cis-1,3-Dichloropropene	ND		50.0	50.5		ug/L		101	85 - 124
Cyclohexane	ND		50.0	51.7		ug/L		103	73 - 115
Dibromochloromethane	ND		50.0	51.3		ug/L		103	85 - 115
Dichlorodifluoromethane	ND		50.0	57.5		ug/L		115	85 - 119
Ethylbenzene	ND		50.0	54.2		ug/L		108	85 - 115
Isopropylbenzene	ND		50.0	52.9		ug/L		106	85 - 124
Methyl acetate	ND		250	288		ug/L		115	49 - 150
Methyl tert-butyl ether	4.3	J	50.0	60.8		ug/L		113	75 - 115
Methylcyclohexane	ND		50.0	53.8		ug/L		108	85 - 137
Methylene Chloride	ND		50.0	50.7		ug/L		101	85 - 115
m-Xylene & p-Xylene	ND		50.0	52.9		ug/L		106	85 - 115
o-Xylene	ND		50.0	51.3		ug/L		103	85 - 118
Styrene	ND		50.0	52.8		ug/L		106	85 - 115
Tetrachloroethene	ND		50.0	49.8		ug/L		100	85 - 118
Toluene	ND		50.0	50.8		ug/L		102	85 - 118
trans-1,2-Dichloroethene	ND		50.0	48.7		ug/L		97	84 - 115
trans-1,3-Dichloropropene	ND		50.0	50.9		ug/L		102	85 - 127
Trichloroethene	ND		50.0	48.7		ug/L		97	85 - 115
Trichlorofluoromethane	ND		50.0	57.4		ug/L		115	85 - 115
Vinyl chloride	ND		50.0	55.5		ug/L		111	63 - 129
Xylenes, Total	ND		100	104		ug/L		104	70 - 130

  

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	110		82 - 132
4-Bromofluorobenzene (Surr)	102		82 - 121
Dibromofluoromethane (Surr)	100		85 - 119
Toluene-d8 (Surr)	101		85 - 115

Lab Sample ID: 160-2968-6 MSD

Matrix: Water

Analysis Batch: 60813

Client Sample ID: P2-202-SS

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
1,1,1-Trichloroethane	ND		50.0	53.5		ug/L		107	85 - 118	1	20
1,1,1,2-Tetrachloroethane	ND		50.0	54.2		ug/L		108	85 - 116	1	20
1,1,2-Trichloroethane	37		50.0	88.8		ug/L		104	85 - 115	2	20
1,1-Dichloroethane	ND		50.0	52.7		ug/L		105	85 - 115	3	20
1,1-Dichloroethene	ND		50.0	51.6		ug/L		103	85 - 118	0	20
1,2,4-Trichlorobenzene	ND		50.0	48.7		ug/L		97	75 - 124	6	20
1,2-Dibromo-3-Chloropropane	ND		50.0	56.7		ug/L		113	71 - 123	2	20
1,2-Dibromoethane (EDB)	ND		50.0	52.3		ug/L		105	85 - 115	1	20
1,2-Dichlorobenzene	ND		50.0	52.6		ug/L		105	84 - 115	0	20

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## QC Sample Results

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

TestAmerica Job ID: 160-2968-1

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

Lab Sample ID: 160-2968-6 MSD

Client Sample ID: P2-202-SS

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 60813

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
1,2-Dichloroethane	ND		50.0	57.0		ug/L		114	80 - 125	0	20
1,2-Dichloropropane	ND		50.0	52.0		ug/L		104	85 - 117	1	20
1,3-Dichlorobenzene	ND		50.0	51.0		ug/L		102	84 - 115	2	20
1,4-Dichlorobenzene	ND		50.0	50.3		ug/L		101	85 - 115	1	20
2-Butanone (MEK)	ND		50.0	56.3		ug/L		113	73 - 133	3	20
2-Hexanone	ND	*	50.0	62.3	F	ug/L		125	66 - 121	10	20
4-Methyl-2-pentanone (MIBK)	ND		50.0	60.5		ug/L		121	77 - 134	10	20
Acetone	30		50.0	95.0		ug/L		129	38 - 150	10	20
Benzene	34		50.0	85.1		ug/L		103	85 - 115	2	20
Bromodichloromethane	ND		50.0	54.3		ug/L		109	56 - 119	4	20
Bromoform	ND		50.0	53.0		ug/L		106	84 - 116	2	20
Bromomethane	ND		50.0	62.5		ug/L		125	70 - 135	8	20
Carbon disulfide	ND		50.0	52.3		ug/L		105	85 - 127	2	20
Carbon tetrachloride	ND		50.0	52.7		ug/L		105	85 - 121	1	20
Chlorobenzene	ND		50.0	50.8		ug/L		102	85 - 115	2	20
Chloroethane	ND		50.0	65.5	F	ug/L		131	73 - 123	3	20
Chloroform	ND		50.0	53.7		ug/L		107	85 - 115	5	20
Chloromethane	ND		50.0	55.1		ug/L		110	67 - 130	0	20
cis-1,2-Dichloroethene	ND		50.0	50.4		ug/L		101	80 - 116	0	20
cis-1,3-Dichloropropene	ND		50.0	52.1		ug/L		104	85 - 124	3	20
Cyclohexane	ND		50.0	51.9		ug/L		104	73 - 115	0	20
Dibromochloromethane	ND		50.0	49.8		ug/L		100	85 - 115	3	20
Dichlorodifluoromethane	ND		50.0	59.3		ug/L		119	85 - 119	3	20
Ethylbenzene	ND		50.0	52.7		ug/L		105	85 - 115	3	20
Isopropylbenzene	ND		50.0	52.6		ug/L		105	85 - 124	1	20
Methyl acetate	ND		250	294		ug/L		118	49 - 150	2	20
Methyl tert-butyl ether	4.3	J	50.0	60.7		ug/L		113	75 - 115	0	20
Methylcyclohexane	ND		50.0	53.1		ug/L		106	85 - 137	1	20
Methylene Chloride	ND		50.0	52.8		ug/L		106	85 - 115	4	20
m-Xylene & p-Xylene	ND		50.0	51.6		ug/L		103	85 - 115	3	20
o-Xylene	ND		50.0	51.6		ug/L		103	85 - 118	1	20
Styrene	ND		50.0	52.9		ug/L		106	85 - 115	0	20
Tetrachloroethene	ND		50.0	49.4		ug/L		99	85 - 118	1	20
Toluene	ND		50.0	49.0		ug/L		98	85 - 118	4	20
trans-1,2-Dichloroethene	ND		50.0	49.1		ug/L		98	84 - 115	1	20
trans-1,3-Dichloropropene	ND		50.0	49.2		ug/L		98	85 - 127	3	20
Trichloroethene	ND		50.0	49.1		ug/L		98	85 - 115	1	20
Trichlorofluoromethane	ND		50.0	57.7		ug/L		115	85 - 115	0	20
Vinyl chloride	ND		50.0	55.1		ug/L		110	63 - 129	1	20
Xylenes, Total	ND		100	103		ug/L		103	70 - 130	1	20

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	112		82 - 132
4-Bromofluorobenzene (Surr)	102		82 - 121
Dibromofluoromethane (Surr)	105		85 - 119
Toluene-d8 (Surr)	100		85 - 115

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# QC Sample Results

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

TestAmerica Job ID: 160-2968-1

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

**Lab Sample ID: MB 160-61806/3-A**

**Matrix: Water**

**Analysis Batch: 61806**

**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 18:59	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			07/17/13 18:59	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			07/17/13 18:59	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			07/17/13 18:59	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			07/17/13 18:59	1
1,2,4-Trichlorobenzene	ND		5.0	0.55	ug/L			07/17/13 18:59	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			07/17/13 18:59	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			07/17/13 18:59	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			07/17/13 18:59	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			07/17/13 18:59	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			07/17/13 18:59	1
1,3-Dichlorobenzene	ND		5.0	0.23	ug/L			07/17/13 18:59	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			07/17/13 18:59	1
2-Butanone (MEK)	ND		20	0.39	ug/L			07/17/13 18:59	1
2-Hexanone	ND		20	0.59	ug/L			07/17/13 18:59	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			07/17/13 18:59	1
Acetone	ND		20	6.7	ug/L			07/17/13 18:59	1
Benzene	ND		5.0	0.25	ug/L			07/17/13 18:59	1
Bromodichloromethane	ND		5.0	0.25	ug/L			07/17/13 18:59	1
Bromoform	ND		5.0	0.37	ug/L			07/17/13 18:59	1
Bromomethane	ND		10	0.40	ug/L			07/17/13 18:59	1
Carbon disulfide	ND		5.0	0.37	ug/L			07/17/13 18:59	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			07/17/13 18:59	1
Chlorobenzene	ND		5.0	0.38	ug/L			07/17/13 18:59	1
Chloroethane	ND		10	0.38	ug/L			07/17/13 18:59	1
Chloroform	ND		5.0	0.15	ug/L			07/17/13 18:59	1
Chloromethane	ND		10	0.55	ug/L			07/17/13 18:59	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			07/17/13 18:59	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			07/17/13 18:59	1
Cyclohexane	ND		10	0.36	ug/L			07/17/13 18:59	1
Dibromochloromethane	ND		5.0	0.33	ug/L			07/17/13 18:59	1
Dichlorodifluoromethane	ND		10	0.45	ug/L			07/17/13 18:59	1
Ethylbenzene	ND		5.0	0.30	ug/L			07/17/13 18:59	1
Isopropylbenzene	ND		5.0	0.26	ug/L			07/17/13 18:59	1
Methyl acetate	ND		25	2.3	ug/L			07/17/13 18:59	1
Methyl tert-butyl ether	ND		5.0	0.40	ug/L			07/17/13 18:59	1
Methylcyclohexane	ND		10	0.26	ug/L			07/17/13 18:59	1
Methylene Chloride	ND		5.0	1.7	ug/L			07/17/13 18:59	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/L			07/17/13 18:59	1
o-Xylene	ND		5.0	0.32	ug/L			07/17/13 18:59	1
Styrene	ND		5.0	0.35	ug/L			07/17/13 18:59	1
Tetrachloroethene	ND		5.0	0.28	ug/L			07/17/13 18:59	1
Toluene	ND		5.0	1.0	ug/L			07/17/13 18:59	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			07/17/13 18:59	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			07/17/13 18:59	1
Trichloroethene	ND		5.0	0.29	ug/L			07/17/13 18:59	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			07/17/13 18:59	1
Vinyl chloride	ND		5.0	0.43	ug/L			07/17/13 18:59	1

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## QC Sample Results

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

TestAmerica Job ID: 160-2968-1

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

Lab Sample ID: MB 160-61806/3-A

Matrix: Water

Analysis Batch: 61806

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 18:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		82 - 132		07/17/13 18:59	1
4-Bromofluorobenzene (Surr)	87		82 - 121		07/17/13 18:59	1
Dibromofluoromethane (Surr)	97		85 - 119		07/17/13 18:59	1
Toluene-d8 (Surr)	100		85 - 115		07/17/13 18:59	1

Lab Sample ID: LCS 160-61806/4-A

Matrix: Water

Analysis Batch: 61806

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	45.5		ug/L		91	85 - 115
1,1,2,2-Tetrachloroethane	50.0	50.7		ug/L		101	84 - 115
1,1,2-Trichloroethane	50.0	52.3		ug/L		105	85 - 115
1,1-Dichloroethane	50.0	51.9		ug/L		104	85 - 115
1,1-Dichloroethene	50.0	46.0		ug/L		92	85 - 118
1,2,4-Trichlorobenzene	50.0	44.4		ug/L		89	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	52.0		ug/L		104	71 - 123
1,2-Dibromoethane (EDB)	50.0	49.9		ug/L		100	85 - 115
1,2-Dichlorobenzene	50.0	50.1		ug/L		100	85 - 115
1,2-Dichloroethane	50.0	47.1		ug/L		94	79 - 122
1,2-Dichloropropane	50.0	52.8		ug/L		106	85 - 115
1,3-Dichlorobenzene	50.0	50.8		ug/L		102	85 - 115
1,4-Dichlorobenzene	50.0	51.0		ug/L		102	85 - 115
2-Butanone (MEK)	50.0	52.6		ug/L		105	71 - 123
2-Hexanone	50.0	52.9		ug/L		106	66 - 121
4-Methyl-2-pentanone (MIBK)	50.0	51.9		ug/L		104	74 - 123
Acetone	50.0	47.5		ug/L		95	51 - 140
Benzene	50.0	50.2		ug/L		100	85 - 115
Bromodichloromethane	50.0	48.2		ug/L		96	85 - 117
Bromoform	50.0	43.5		ug/L		87	85 - 115
Bromomethane	50.0	56.2		ug/L		112	70 - 135
Carbon disulfide	50.0	47.4		ug/L		95	85 - 123
Carbon tetrachloride	50.0	46.9		ug/L		94	85 - 118
Chlorobenzene	50.0	52.6		ug/L		105	85 - 115
Chloroethane	50.0	75.0	*	ug/L		150	75 - 125
Chloroform	50.0	46.6		ug/L		93	85 - 115
Chloromethane	50.0	50.1		ug/L		100	73 - 132
cis-1,2-Dichloroethene	50.0	48.1		ug/L		96	85 - 115
cis-1,3-Dichloropropene	50.0	54.0		ug/L		108	85 - 127
Cyclohexane	50.0	49.5		ug/L		99	73 - 115
Dibromochloromethane	50.0	48.4		ug/L		97	85 - 115
Dichlorodifluoromethane	50.0	44.1		ug/L		88	62 - 115
Ethylbenzene	50.0	47.3		ug/L		95	85 - 115
Isopropylbenzene	50.0	51.4		ug/L		103	85 - 124
Methyl acetate	250	256		ug/L		103	73 - 135

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## QC Sample Results

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

TestAmerica Job ID: 160-2968-1

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

Lab Sample ID: LCS 160-61806/4-A

Matrix: Water

Analysis Batch: 61806

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	48.2		ug/L		96	73 - 115
Methylcyclohexane	50.0	51.5		ug/L		103	85 - 134
Methylene Chloride	50.0	47.3		ug/L		95	84 - 115
m-Xylene & p-Xylene	50.0	51.4		ug/L		103	85 - 115
o-Xylene	50.0	51.0		ug/L		102	85 - 115
Styrene	50.0	51.4		ug/L		103	85 - 115
Tetrachloroethene	50.0	50.8		ug/L		102	85 - 115
Toluene	50.0	52.0		ug/L		104	85 - 115
trans-1,2-Dichloroethene	50.0	47.3		ug/L		95	85 - 115
trans-1,3-Dichloropropene	50.0	56.1		ug/L		112	85 - 123
Trichloroethene	50.0	49.4		ug/L		99	85 - 115
Trichlorofluoromethane	50.0	45.5		ug/L		91	85 - 116
Vinyl chloride	50.0	54.0		ug/L		108	68 - 133
Xylenes, Total	100	102		ug/L		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		82 - 132
4-Bromofluorobenzene (Surr)	92		82 - 121
Dibromofluoromethane (Surr)	92		85 - 119
Toluene-d8 (Surr)	99		85 - 115

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

Lab Sample ID: MB 160-60808/1-A

Matrix: Water

Analysis Batch: 61388

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 60808

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:16	07/17/13 18:51	1
Antimony	ND		10	4.0	ug/L		07/16/13 14:16	07/17/13 18:51	1
Arsenic	ND		10	2.0	ug/L		07/16/13 14:16	07/17/13 18:51	1
Barium	ND		50	4.0	ug/L		07/16/13 14:16	07/17/13 18:51	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:16	07/17/13 18:51	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:16	07/17/13 18:51	1
Calcium	ND		1000	110	ug/L		07/16/13 14:16	07/17/13 18:51	1
Chromium	ND		10	3.1	ug/L		07/16/13 14:16	07/17/13 18:51	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:16	07/17/13 18:51	1
Copper	ND		25	4.6	ug/L		07/16/13 14:16	07/17/13 18:51	1
Iron	ND		100	28	ug/L		07/16/13 14:16	07/17/13 18:51	1
Lead	ND		10	1.5	ug/L		07/16/13 14:16	07/17/13 18:51	1
Magnesium	ND		1000	130	ug/L		07/16/13 14:16	07/17/13 18:51	1
Manganese	ND		15	3.3	ug/L		07/16/13 14:16	07/17/13 18:51	1
Nickel	ND		40	13	ug/L		07/16/13 14:16	07/17/13 18:51	1
Potassium	ND		5000	1700	ug/L		07/16/13 14:16	07/17/13 18:51	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:16	07/17/13 18:51	1
Silver	ND		10	6.0	ug/L		07/16/13 14:16	07/17/13 18:51	1
Sodium	ND		1000	320	ug/L		07/16/13 14:16	07/17/13 18:51	1
Thallium	ND	^	20	4.0	ug/L		07/16/13 14:16	07/17/13 18:51	1

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# QC Sample Results

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

TestAmerica Job ID: 160-2968-1

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

Lab Sample ID: MB 160-60808/1-A

Matrix: Water

Analysis Batch: 61388

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 60808

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	ND		50	4.1	ug/L		07/16/13 14:16	07/17/13 18:51	1
Zinc	ND		20	5.2	ug/L		07/16/13 14:16	07/17/13 18:51	1

Lab Sample ID: LCS 160-60808/2-A

Matrix: Water

Analysis Batch: 61388

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 60808

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9660		ug/L		97	80 - 120
Antimony	500	518		ug/L		104	80 - 120
Arsenic	1000	1040		ug/L		104	80 - 120
Barium	1000	1020		ug/L		102	80 - 120
Beryllium	1000	994		ug/L		99	80 - 120
Cadmium	1000	1040		ug/L		104	80 - 120
Calcium	10000	10100		ug/L		101	80 - 120
Chromium	1000	1070		ug/L		107	80 - 120
Cobalt	1000	1070		ug/L		107	80 - 120
Copper	1000	1040		ug/L		104	80 - 120
Iron	10000	10300		ug/L		103	80 - 120
Lead	1000	1110		ug/L		111	80 - 120
Magnesium	10000	9920		ug/L		99	80 - 120
Manganese	1000	1010		ug/L		101	80 - 120
Nickel	1000	1080		ug/L		108	80 - 120
Potassium	10000	10300		ug/L		103	80 - 120
Selenium	1000	1050		ug/L		105	80 - 120
Silver	100	88.8		ug/L		89	80 - 120
Sodium	10000	9610		ug/L		96	80 - 120
Thallium	200	226 ^		ug/L		113	80 - 120
Vanadium	1000	959		ug/L		96	80 - 120
Zinc	1000	1050		ug/L		105	80 - 120

Lab Sample ID: MB 160-60810/1-A

Matrix: Water

Analysis Batch: 61576

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 60810

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	80	ug/L		07/16/13 14:20	07/18/13 15:26	1
Antimony	ND		10	4.0	ug/L		07/16/13 14:20	07/18/13 15:26	1
Arsenic	ND		10	2.0	ug/L		07/16/13 14:20	07/18/13 15:26	1
Barium	ND		50	4.0	ug/L		07/16/13 14:20	07/18/13 15:26	1
Beryllium	ND		5.0	0.61	ug/L		07/16/13 14:20	07/18/13 15:26	1
Cadmium	ND		5.0	0.91	ug/L		07/16/13 14:20	07/18/13 15:26	1
Calcium	ND		1000	110	ug/L		07/16/13 14:20	07/18/13 15:26	1
Chromium	ND		10	3.1	ug/L		07/16/13 14:20	07/18/13 15:26	1
Cobalt	ND		50	4.0	ug/L		07/16/13 14:20	07/18/13 15:26	1
Copper	ND		25	4.6	ug/L		07/16/13 14:20	07/18/13 15:26	1
Iron	ND		100	28	ug/L		07/16/13 14:20	07/18/13 15:26	1
Lead	ND		10	1.5	ug/L		07/16/13 14:20	07/18/13 15:26	1
Magnesium	ND		1000	130	ug/L		07/16/13 14:20	07/18/13 15:26	1

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# QC Sample Results

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

TestAmerica Job ID: 160-2968-1

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

Lab Sample ID: MB 160-60810/1-A

Matrix: Water

Analysis Batch: 61576

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 60810

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		15	3.3	ug/L		07/16/13 14:20	07/18/13 15:26	1
Nickel	ND		40	13	ug/L		07/16/13 14:20	07/18/13 15:26	1
Potassium	ND		5000	1700	ug/L		07/16/13 14:20	07/18/13 15:26	1
Selenium	ND		15	2.7	ug/L		07/16/13 14:20	07/18/13 15:26	1
Silver	ND		10	6.0	ug/L		07/16/13 14:20	07/18/13 15:26	1
Sodium	ND		1000	320	ug/L		07/16/13 14:20	07/18/13 15:26	1
Thallium	ND		20	4.0	ug/L		07/16/13 14:20	07/18/13 15:26	1
Vanadium	ND		50	4.1	ug/L		07/16/13 14:20	07/18/13 15:26	1
Zinc	ND		20	5.2	ug/L		07/16/13 14:20	07/18/13 15:26	1

Lab Sample ID: LCS 160-60810/2-A

Matrix: Water

Analysis Batch: 61576

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 60810

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	10300		ug/L		103	80 - 120
Antimony	500	532		ug/L		106	80 - 120
Arsenic	1000	1050		ug/L		105	80 - 120
Barium	1000	1070		ug/L		107	80 - 120
Beryllium	1000	1070		ug/L		107	80 - 120
Cadmium	1000	1070		ug/L		107	80 - 120
Calcium	10000	10900		ug/L		109	80 - 120
Chromium	1000	1090		ug/L		109	80 - 120
Cobalt	1000	1110		ug/L		111	80 - 120
Copper	1000	1070		ug/L		107	80 - 120
Iron	10000	10700		ug/L		107	80 - 120
Lead	1000	1110		ug/L		111	80 - 120
Magnesium	10000	10700		ug/L		107	80 - 120
Manganese	1000	1080		ug/L		108	80 - 120
Nickel	1000	1110		ug/L		111	80 - 120
Potassium	10000	10400		ug/L		104	80 - 120
Selenium	1000	1060		ug/L		106	80 - 120
Silver	100	91.2		ug/L		91	80 - 120
Sodium	10000	10400		ug/L		104	80 - 120
Thallium	200	238		ug/L		119	80 - 120
Vanadium	1000	1060		ug/L		106	80 - 120
Zinc	1000	1070		ug/L		107	80 - 120

Lab Sample ID: 160-2968-6 MS

Matrix: Water

Analysis Batch: 61576

Client Sample ID: P2-202-SS

Prep Type: Total/NA

Prep Batch: 60810

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	98	J	10000	10700		ug/L		106	75 - 125
Antimony	ND		500	541		ug/L		108	75 - 125
Arsenic	7.4	J	1000	1080		ug/L		107	75 - 125
Barium	580		1000	1650		ug/L		107	75 - 125
Beryllium	ND		1000	1080		ug/L		108	75 - 125
Cadmium	ND		1000	1070		ug/L		107	75 - 125

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# QC Sample Results

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

TestAmerica Job ID: 160-2968-1

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

Lab Sample ID: 160-2968-6 MS

Matrix: Water

Analysis Batch: 61576

Client Sample ID: P2-202-SS

Prep Type: Total/NA

Prep Batch: 60810

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Calcium	180000	E	10000	187000	E 4	ug/L		121	75 - 125
Chromium	ND		1000	1070		ug/L		107	75 - 125
Cobalt	6.9	J	1000	1060		ug/L		106	75 - 125
Copper	ND		1000	1060		ug/L		106	75 - 125
Iron	4900		10000	15500		ug/L		106	75 - 125
Lead	2.1	J	1000	1060		ug/L		106	75 - 125
Magnesium	78000	E	10000	90100	E 4	ug/L		118	75 - 125
Manganese	940		1000	2000		ug/L		106	75 - 125
Nickel	21	J	1000	1070		ug/L		105	75 - 125
Potassium	3100	J	10000	13900		ug/L		108	75 - 125
Selenium	ND		1000	1070		ug/L		107	75 - 125
Silver	ND		100	91.1		ug/L		91	75 - 125
Sodium	14000		10000	24600		ug/L		107	75 - 125
Thallium	ND		200	222		ug/L		111	75 - 125
Vanadium	ND		1000	1050		ug/L		105	75 - 125
Zinc	7.0	J	1000	1080		ug/L		107	75 - 125

Lab Sample ID: 160-2968-6 MS

Matrix: Water

Analysis Batch: 61576

Client Sample ID: P2-202-SS

Prep Type: Total/NA

Prep Batch: 60810

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Calcium	200000		10000	211000	4	ug/L		90	75 - 125
Iron	5000		10000	15800		ug/L		108	75 - 125
Magnesium	79000		10000	89500	4	ug/L		103	75 - 125

Lab Sample ID: 160-2968-6 MSD

Matrix: Water

Analysis Batch: 61576

Client Sample ID: P2-202-SS

Prep Type: Total/NA

Prep Batch: 60810

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Aluminum	98	J	10000	10800		ug/L		107	75 - 125	1	20
Antimony	ND		500	526		ug/L		105	75 - 125	3	20
Arsenic	7.4	J	1000	1050		ug/L		104	75 - 125	3	20
Barium	580		1000	1660		ug/L		108	75 - 125	1	20
Beryllium	ND		1000	1080		ug/L		108	75 - 125	0	20
Cadmium	ND		1000	1040		ug/L		104	75 - 125	3	20
Calcium	180000	E	10000	180000	E 4	ug/L		46	75 - 125	4	20
Chromium	ND		1000	1040		ug/L		104	75 - 125	3	20
Cobalt	6.9	J	1000	1030		ug/L		102	75 - 125	3	20
Copper	ND		1000	1030		ug/L		103	75 - 125	2	20
Iron	4900		10000	15500		ug/L		106	75 - 125	0	20
Lead	2.1	J	1000	1030		ug/L		103	75 - 125	3	20
Magnesium	78000	E	10000	88900	E 4	ug/L		107	75 - 125	1	20
Manganese	940		1000	2000		ug/L		106	75 - 125	0	20
Nickel	21	J	1000	1040		ug/L		102	75 - 125	3	20
Potassium	3100	J	10000	14000		ug/L		108	75 - 125	1	20
Selenium	ND		1000	1050		ug/L		105	75 - 125	3	20
Silver	ND		100	89.4		ug/L		89	75 - 125	2	20

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# QC Sample Results

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

TestAmerica Job ID: 160-2968-1

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

Lab Sample ID: 160-2968-6 MSD

Matrix: Water

Analysis Batch: 61576

Client Sample ID: P2-202-SS

Prep Type: Total/NA

Prep Batch: 60810

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD		
Sodium	14000		10000	24700		ug/L		108	75 - 125	0	20	
Thallium	ND		200	217		ug/L		108	75 - 125	2	20	
Vanadium	ND		1000	1050		ug/L		105	75 - 125	1	20	
Zinc	7.0	J	1000	1050		ug/L		104	75 - 125	3	20	

Lab Sample ID: 160-2968-6 MSD

Matrix: Water

Analysis Batch: 61576

Client Sample ID: P2-202-SS

Prep Type: Total/NA

Prep Batch: 60810

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD		
Calcium	200000		10000	214000	4	ug/L		123	75 - 125	2	20	
Iron	5000		10000	15900		ug/L		109	75 - 125	1	20	
Magnesium	79000		10000	89900	4	ug/L		106	75 - 125	0	20	

Lab Sample ID: 160-2968-6 MS

Matrix: Water

Analysis Batch: 61388

Client Sample ID: P2-202-SS

Prep Type: Dissolved

Prep Batch: 60808

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD		
Aluminum	ND		10000	9960		ug/L		100	75 - 125			
Antimony	ND		500	522		ug/L		104	75 - 125			
Arsenic	6.8	J	1000	1050		ug/L		104	75 - 125			
Barium	550		1000	1620		ug/L		107	75 - 125			
Beryllium	ND		1000	1020		ug/L		102	75 - 125			
Cadmium	ND		1000	1030		ug/L		103	75 - 125			
Calcium	160000	E	10000	176000	E 4	ug/L		147	75 - 125			
Chromium	ND		1000	1040		ug/L		104	75 - 125			
Cobalt	6.3	J	1000	1020		ug/L		101	75 - 125			
Copper	ND		1000	1020		ug/L		102	75 - 125			
Iron	4600		10000	15100		ug/L		105	75 - 125			
Lead	2.9	J	1000	1040		ug/L		104	75 - 125			
Magnesium	71000	E	10000	84000	E 4	ug/L		127	75 - 125			
Manganese	870		1000	1920		ug/L		105	75 - 125			
Nickel	20	J	1000	1030		ug/L		101	75 - 125			
Potassium	3100	J	10000	13800		ug/L		107	75 - 125			
Selenium	ND		1000	1060		ug/L		106	75 - 125			
Silver	ND		100	89.6		ug/L		90	75 - 125			
Sodium	13000		10000	23400		ug/L		105	75 - 125			
Thallium	ND	^	200	209	^	ug/L		104	75 - 125			
Vanadium	ND		1000	973		ug/L		97	75 - 125			
Zinc	6.1	J	1000	1040		ug/L		103	75 - 125			

Lab Sample ID: 160-2968-6 MS

Matrix: Water

Analysis Batch: 61388

Client Sample ID: P2-202-SS

Prep Type: Dissolved

Prep Batch: 60808

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD		
Calcium	200000		10000	194000	4	ug/L		-49	75 - 125			
Iron	4900		10000	14900		ug/L		100	75 - 125			

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# QC Sample Results

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

TestAmerica Job ID: 160-2968-1

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

Lab Sample ID: 160-2968-6 MS  
Matrix: Water  
Analysis Batch: 61388

Client Sample ID: P2-202-SS  
Prep Type: Dissolved  
Prep Batch: 60808

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Magnesium	76000		10000	82000	4	ug/L		60	75 - 125

Lab Sample ID: 160-2968-6 MSD  
Matrix: Water  
Analysis Batch: 61388

Client Sample ID: P2-202-SS  
Prep Type: Dissolved  
Prep Batch: 60808

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Aluminum	ND		10000	9430		ug/L		94	75 - 125	5	20
Antimony	ND		500	495		ug/L		99	75 - 125	5	20
Arsenic	6.8	J	1000	996		ug/L		99	75 - 125	5	20
Barium	550		1000	1530		ug/L		98	75 - 125	6	20
Beryllium	ND		1000	961		ug/L		96	75 - 125	6	20
Cadmium	ND		1000	977		ug/L		98	75 - 125	5	20
Calcium	160000	E	10000	169000	E 4	ug/L		81	75 - 125	4	20
Chromium	ND		1000	983		ug/L		98	75 - 125	6	20
Cobalt	6.3	J	1000	965		ug/L		96	75 - 125	5	20
Copper	ND		1000	960		ug/L		96	75 - 125	6	20
Iron	4600		10000	14200		ug/L		96	75 - 125	6	20
Lead	2.9	J	1000	992		ug/L		99	75 - 125	5	20
Magnesium	71000	E	10000	79700	E 4	ug/L		83	75 - 125	5	20
Manganese	870		1000	1820		ug/L		94	75 - 125	5	20
Nickel	20	J	1000	983		ug/L		96	75 - 125	5	20
Potassium	3100	J	10000	13100		ug/L		100	75 - 125	6	20
Selenium	ND		1000	1000		ug/L		100	75 - 125	5	20
Silver	ND		100	85.1		ug/L		85	75 - 125	5	20
Sodium	13000		10000	22200		ug/L		93	75 - 125	5	20
Thallium	ND	^	200	199	^	ug/L		100	75 - 125	5	20
Vanadium	ND		1000	923		ug/L		92	75 - 125	5	20
Zinc	6.1	J	1000	984		ug/L		98	75 - 125	5	20

Lab Sample ID: 160-2968-6 MSD  
Matrix: Water  
Analysis Batch: 61388

Client Sample ID: P2-202-SS  
Prep Type: Dissolved  
Prep Batch: 60808

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Calcium	200000		10000	201000	4	ug/L		22	75 - 125	4	20
Iron	4900		10000	15100		ug/L		102	75 - 125	1	20
Magnesium	76000		10000	83100	4	ug/L		71	75 - 125	1	20

## Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 160-60787/1-A  
Matrix: Water  
Analysis Batch: 60965

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 60787

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:14	07/16/13 16:21	1

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# QC Sample Results

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

TestAmerica Job ID: 160-2968-1

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

**Lab Sample ID: LCS 160-60787/2-A**  
**Matrix: Water**  
**Analysis Batch: 60965**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 60787**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.90		ug/L		118	80 - 120

**Lab Sample ID: 160-2968-6 MS**  
**Matrix: Water**  
**Analysis Batch: 60965**

**Client Sample ID: P2-202-SS**  
**Prep Type: Total/NA**  
**Prep Batch: 60787**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.14	J	5.00	5.28		ug/L		103	80 - 120

**Lab Sample ID: 160-2968-6 MSD**  
**Matrix: Water**  
**Analysis Batch: 60965**

**Client Sample ID: P2-202-SS**  
**Prep Type: Total/NA**  
**Prep Batch: 60787**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.14	J	5.00	5.48		ug/L		107	80 - 120	4	20

**Lab Sample ID: MB 160-60792/1-A**  
**Matrix: Water**  
**Analysis Batch: 61008**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 60792**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
Mercury	ND		0.20	0.060	ug/L		07/16/13 12:21	07/17/13 11:11		1

**Lab Sample ID: LCS 160-60792/2-A**  
**Matrix: Water**  
**Analysis Batch: 61008**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 60792**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.46		ug/L		109	80 - 120

**Lab Sample ID: 160-2968-6 MS**  
**Matrix: Water**  
**Analysis Batch: 61008**

**Client Sample ID: P2-202-SS**  
**Prep Type: Dissolved**  
**Prep Batch: 60792**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.20		5.00	5.46		ug/L		105	80 - 120

**Lab Sample ID: 160-2968-6 MSD**  
**Matrix: Water**  
**Analysis Batch: 61008**

**Client Sample ID: P2-202-SS**  
**Prep Type: Dissolved**  
**Prep Batch: 60792**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.20		5.00	5.39		ug/L		104	80 - 120	1	20

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# QC Sample Results

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

TestAmerica Job ID: 160-2968-1

## Method: 300.0 - Anions, Ion Chromatography

**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: 160-2968-6 MS**

**Matrix: Water**

**Analysis Batch: 61027**

**Client Sample ID: P2-202-SS**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iodide	0.14	J	4.00	3.98		mg/L		96	90 - 110

**Lab Sample ID: 160-2968-14 MS**

**Matrix: Water**

**Analysis Batch: 61027**

**Client Sample ID: DUPLICATE 03**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iodide	ND		4.00	3.85		mg/L		96	90 - 110

**Lab Sample ID: 160-2968-6 DU**

**Matrix: Water**

**Analysis Batch: 61027**

**Client Sample ID: P2-202-SS**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Iodide	0.14	J		0.134	J	mg/L		2	20

**Lab Sample ID: MB 160-62158/3**

**Matrix: Water**

**Analysis Batch: 62158**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

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

**Lab Sample ID: LCS 160-62158/4**

**Matrix: Water**

**Analysis Batch: 62158**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

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

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# QC Sample Results

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

TestAmerica Job ID: 160-2968-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: 160-2968-6 MS**  
**Matrix: Water**  
**Analysis Batch: 62158**

**Client Sample ID: P2-202-SS**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	ND		0.400	0.365		mg/L		91	90 - 110
Bromide	0.51		2.00	2.72	F	mg/L		111	90 - 110

**Lab Sample ID: 160-2968-10 MS**  
**Matrix: Water**  
**Analysis Batch: 62158**

**Client Sample ID: P2-116-SS**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.17		0.400	0.538		mg/L		93	90 - 110
Chloride	3.5		2.00	5.56		mg/L		101	90 - 110
Bromide	ND		2.00	1.78	F	mg/L		89	90 - 110

**Lab Sample ID: 160-2968-6 DU**  
**Matrix: Water**  
**Analysis Batch: 62158**

**Client Sample ID: P2-202-SS**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	ND		ND		mg/L		NC	20
Bromide	0.51		0.501		mg/L		2	20

## Method: 300.0 - Anions, Ion Chromatography - DL

**Lab Sample ID: 160-2968-6 MS**  
**Matrix: Water**  
**Analysis Batch: 62158**

**Client Sample ID: P2-202-SS**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate - DL	58		80.0	138		mg/L		100	90 - 110

**Lab Sample ID: 160-2968-10 MS**  
**Matrix: Water**  
**Analysis Batch: 62158**

**Client Sample ID: P2-116-SS**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate - DL	34		80.0	112		mg/L		99	90 - 110

**Lab Sample ID: 160-2968-6 DU**  
**Matrix: Water**  
**Analysis Batch: 62158**

**Client Sample ID: P2-202-SS**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate - DL	58		57.9		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: 160-2968-1

## Method: 300.0 - Anions, Ion Chromatography - DL2

**Lab Sample ID: 160-2968-6 MS**  
**Matrix: Water**  
**Analysis Batch: 62158**

**Client Sample ID: P2-202-SS**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL2	84		200	281		mg/L		98	90 - 110

**Lab Sample ID: 160-2968-6 DU**  
**Matrix: Water**  
**Analysis Batch: 62158**

**Client Sample ID: P2-202-SS**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL2	84		82.8		mg/L		2	20

## Method: 310.1 - Alkalinity

**Lab Sample ID: MB 160-62899/1**  
**Matrix: Water**  
**Analysis Batch: 62899**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	0.350	J	1.3	0.14	mg/L			07/25/13 12:49	1

**Lab Sample ID: LCS 160-62899/3**  
**Matrix: Water**  
**Analysis Batch: 62899**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	400	374		mg/L		94	90 - 110

**Lab Sample ID: LLCS 160-62899/2**  
**Matrix: Water**  
**Analysis Batch: 62899**

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	187		mg/L		94	90 - 110

**Lab Sample ID: 160-2968-6 MS**  
**Matrix: Water**  
**Analysis Batch: 62899**

**Client Sample ID: P2-202-SS**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	610	B	20.0	622	4	mg/L		85	80 - 120

**Lab Sample ID: 160-2968-6 DU**  
**Matrix: Water**  
**Analysis Batch: 62899**

**Client Sample ID: P2-202-SS**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	610	B	599		mg/L		1	20

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# QC Association Summary

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

TestAmerica Job ID: 160-2968-1

## GC/MS VOA

### Analysis Batch: 60813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2968-1	P2-113-SS	Total/NA	Water	8260C	
160-2968-2	P2-104-SS	Total/NA	Water	8260C	
160-2968-3	P2-101-SS	Total/NA	Water	8260C	
160-2968-4	P2-104-SD	Total/NA	Water	8260C	
160-2968-4	P2-104-SD	Total/NA	Water	8260C	
160-2968-5	FB@P2-202-SS	Total/NA	Water	8260C	
160-2968-6	P2-202-SS	Total/NA	Water	8260C	
160-2968-6 MS	P2-202-SS	Total/NA	Water	8260C	
160-2968-6 MSD	P2-202-SS	Total/NA	Water	8260C	
160-2968-7	D-83	Total/NA	Water	8260C	
160-2968-8	MW-1204	Total/NA	Water	8260C	
160-2968-9	S-82	Total/NA	Water	8260C	
160-2968-10	P2-116-SS	Total/NA	Water	8260C	
160-2968-11	D-93	Total/NA	Water	8260C	
160-2968-12	I-9	Total/NA	Water	8260C	
160-2968-13	P2-115-SS	Total/NA	Water	8260C	
160-2968-14	DUPLICATE 03	Total/NA	Water	8260C	
160-2968-15	TRIP BLANK	Total/NA	Water	8260C	
LCS 160-60813/4-A	Lab Control Sample	Total/NA	Water	8260C	
MB 160-60813/3-A	Method Blank	Total/NA	Water	8260C	

### Analysis Batch: 61806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2968-2	P2-104-SS	Total/NA	Water	8260C	
160-2968-4	P2-104-SD	Total/NA	Water	8260C	
160-2968-8	MW-1204	Total/NA	Water	8260C	
160-2968-8	MW-1204	Total/NA	Water	8260C	
LCS 160-61806/4-A	Lab Control Sample	Total/NA	Water	8260C	
MB 160-61806/3-A	Method Blank	Total/NA	Water	8260C	

## Metals

### Prep Batch: 60787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2968-1	P2-113-SS	Total/NA	Water	7470A	
160-2968-2	P2-104-SS	Total/NA	Water	7470A	
160-2968-3	P2-101-SS	Total/NA	Water	7470A	
160-2968-4	P2-104-SD	Total/NA	Water	7470A	
160-2968-6	P2-202-SS	Total/NA	Water	7470A	
160-2968-6 MS	P2-202-SS	Total/NA	Water	7470A	
160-2968-6 MSD	P2-202-SS	Total/NA	Water	7470A	
160-2968-7	D-83	Total/NA	Water	7470A	
160-2968-8	MW-1204	Total/NA	Water	7470A	
160-2968-9	S-82	Total/NA	Water	7470A	
160-2968-10	P2-116-SS	Total/NA	Water	7470A	
160-2968-11	D-93	Total/NA	Water	7470A	
160-2968-12	I-9	Total/NA	Water	7470A	
160-2968-13	P2-115-SS	Total/NA	Water	7470A	
160-2968-14	DUPLICATE 03	Total/NA	Water	7470A	
LCS 160-60787/2-A	Lab Control Sample	Total/NA	Water	7470A	

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# QC Association Summary

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

TestAmerica Job ID: 160-2968-1

## Metals (Continued)

### Prep Batch: 60787 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 160-60787/1-A	Method Blank	Total/NA	Water	7470A	

### Prep Batch: 60792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2968-1	P2-113-SS	Dissolved	Water	7470A	
160-2968-2	P2-104-SS	Dissolved	Water	7470A	
160-2968-3	P2-101-SS	Dissolved	Water	7470A	
160-2968-4	P2-104-SD	Dissolved	Water	7470A	
160-2968-6	P2-202-SS	Dissolved	Water	7470A	
160-2968-6 MS	P2-202-SS	Dissolved	Water	7470A	
160-2968-6 MSD	P2-202-SS	Dissolved	Water	7470A	
160-2968-7	D-83	Dissolved	Water	7470A	
160-2968-8	MW-1204	Dissolved	Water	7470A	
160-2968-9	S-82	Dissolved	Water	7470A	
160-2968-10	P2-116-SS	Dissolved	Water	7470A	
160-2968-11	D-93	Dissolved	Water	7470A	
160-2968-12	I-9	Dissolved	Water	7470A	
160-2968-13	P2-115-SS	Dissolved	Water	7470A	
160-2968-14	DUPLICATE 03	Dissolved	Water	7470A	
LCS 160-60792/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 160-60792/1-A	Method Blank	Total/NA	Water	7470A	

### Prep Batch: 60808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2968-1	P2-113-SS	Dissolved	Water	3010A	
160-2968-2	P2-104-SS	Dissolved	Water	3010A	
160-2968-3	P2-101-SS	Dissolved	Water	3010A	
160-2968-4	P2-104-SD	Dissolved	Water	3010A	
160-2968-6	P2-202-SS	Dissolved	Water	3010A	
160-2968-6 MS	P2-202-SS	Dissolved	Water	3010A	
160-2968-6 MSD	P2-202-SS	Dissolved	Water	3010A	
160-2968-7	D-83	Dissolved	Water	3010A	
160-2968-8	MW-1204	Dissolved	Water	3010A	
160-2968-9	S-82	Dissolved	Water	3010A	
160-2968-10	P2-116-SS	Dissolved	Water	3010A	
160-2968-11	D-93	Dissolved	Water	3010A	
160-2968-12	I-9	Dissolved	Water	3010A	
160-2968-13	P2-115-SS	Dissolved	Water	3010A	
160-2968-14	DUPLICATE 03	Dissolved	Water	3010A	
LCS 160-60808/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 160-60808/1-A	Method Blank	Total/NA	Water	3010A	

### Prep Batch: 60810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2968-1	P2-113-SS	Total/NA	Water	3010A	
160-2968-2	P2-104-SS	Total/NA	Water	3010A	
160-2968-3	P2-101-SS	Total/NA	Water	3010A	
160-2968-4	P2-104-SD	Total/NA	Water	3010A	
160-2968-6	P2-202-SS	Total/NA	Water	3010A	
160-2968-6 MS	P2-202-SS	Total/NA	Water	3010A	
160-2968-6 MSD	P2-202-SS	Total/NA	Water	3010A	

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# QC Association Summary

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

TestAmerica Job ID: 160-2968-1

## Metals (Continued)

### Prep Batch: 60810 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2968-7	D-83	Total/NA	Water	3010A	
160-2968-8	MW-1204	Total/NA	Water	3010A	
160-2968-9	S-82	Total/NA	Water	3010A	
160-2968-10	P2-116-SS	Total/NA	Water	3010A	
160-2968-11	D-93	Total/NA	Water	3010A	
160-2968-12	I-9	Total/NA	Water	3010A	
160-2968-13	P2-115-SS	Total/NA	Water	3010A	
160-2968-14	DUPLICATE 03	Total/NA	Water	3010A	
LCS 160-60810/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 160-60810/1-A	Method Blank	Total/NA	Water	3010A	

### Analysis Batch: 60965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2968-1	P2-113-SS	Total/NA	Water	7470A	60787
160-2968-2	P2-104-SS	Total/NA	Water	7470A	60787
160-2968-3	P2-101-SS	Total/NA	Water	7470A	60787
160-2968-4	P2-104-SD	Total/NA	Water	7470A	60787
160-2968-6	P2-202-SS	Total/NA	Water	7470A	60787
160-2968-6 MS	P2-202-SS	Total/NA	Water	7470A	60787
160-2968-6 MSD	P2-202-SS	Total/NA	Water	7470A	60787
160-2968-7	D-83	Total/NA	Water	7470A	60787
160-2968-8	MW-1204	Total/NA	Water	7470A	60787
160-2968-9	S-82	Total/NA	Water	7470A	60787
160-2968-10	P2-116-SS	Total/NA	Water	7470A	60787
160-2968-11	D-93	Total/NA	Water	7470A	60787
160-2968-12	I-9	Total/NA	Water	7470A	60787
160-2968-13	P2-115-SS	Total/NA	Water	7470A	60787
160-2968-14	DUPLICATE 03	Total/NA	Water	7470A	60787
LCS 160-60787/2-A	Lab Control Sample	Total/NA	Water	7470A	60787
MB 160-60787/1-A	Method Blank	Total/NA	Water	7470A	60787

### Analysis Batch: 61008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2968-1	P2-113-SS	Dissolved	Water	7470A	60792
160-2968-2	P2-104-SS	Dissolved	Water	7470A	60792
160-2968-3	P2-101-SS	Dissolved	Water	7470A	60792
160-2968-4	P2-104-SD	Dissolved	Water	7470A	60792
160-2968-6	P2-202-SS	Dissolved	Water	7470A	60792
160-2968-6 MS	P2-202-SS	Dissolved	Water	7470A	60792
160-2968-6 MSD	P2-202-SS	Dissolved	Water	7470A	60792
160-2968-7	D-83	Dissolved	Water	7470A	60792
160-2968-8	MW-1204	Dissolved	Water	7470A	60792
160-2968-9	S-82	Dissolved	Water	7470A	60792
160-2968-10	P2-116-SS	Dissolved	Water	7470A	60792
160-2968-11	D-93	Dissolved	Water	7470A	60792
160-2968-12	I-9	Dissolved	Water	7470A	60792
160-2968-13	P2-115-SS	Dissolved	Water	7470A	60792
160-2968-14	DUPLICATE 03	Dissolved	Water	7470A	60792
LCS 160-60792/2-A	Lab Control Sample	Total/NA	Water	7470A	60792
MB 160-60792/1-A	Method Blank	Total/NA	Water	7470A	60792

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# QC Association Summary

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

TestAmerica Job ID: 160-2968-1

## Metals (Continued)

### Analysis Batch: 61388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2968-1	P2-113-SS	Dissolved	Water	6010C	60808
160-2968-1	P2-113-SS	Dissolved	Water	6010C	60808
160-2968-2	P2-104-SS	Dissolved	Water	6010C	60808
160-2968-2	P2-104-SS	Dissolved	Water	6010C	60808
160-2968-3	P2-101-SS	Dissolved	Water	6010C	60808
160-2968-3	P2-101-SS	Dissolved	Water	6010C	60808
160-2968-4	P2-104-SD	Dissolved	Water	6010C	60808
160-2968-4	P2-104-SD	Dissolved	Water	6010C	60808
160-2968-6	P2-202-SS	Dissolved	Water	6010C	60808
160-2968-6	P2-202-SS	Dissolved	Water	6010C	60808
160-2968-6 MS	P2-202-SS	Dissolved	Water	6010C	60808
160-2968-6 MS	P2-202-SS	Dissolved	Water	6010C	60808
160-2968-6 MSD	P2-202-SS	Dissolved	Water	6010C	60808
160-2968-6 MSD	P2-202-SS	Dissolved	Water	6010C	60808
160-2968-7	D-83	Dissolved	Water	6010C	60808
160-2968-7	D-83	Dissolved	Water	6010C	60808
160-2968-8	MW-1204	Dissolved	Water	6010C	60808
160-2968-8	MW-1204	Dissolved	Water	6010C	60808
160-2968-9	S-82	Dissolved	Water	6010C	60808
160-2968-9	S-82	Dissolved	Water	6010C	60808
160-2968-10	P2-116-SS	Dissolved	Water	6010C	60808
160-2968-11	D-93	Dissolved	Water	6010C	60808
160-2968-11	D-93	Dissolved	Water	6010C	60808
160-2968-12	I-9	Dissolved	Water	6010C	60808
160-2968-12	I-9	Dissolved	Water	6010C	60808
160-2968-13	P2-115-SS	Dissolved	Water	6010C	60808
160-2968-13	P2-115-SS	Dissolved	Water	6010C	60808
160-2968-14	DUPLICATE 03	Dissolved	Water	6010C	60808
160-2968-14	DUPLICATE 03	Dissolved	Water	6010C	60808
LCS 160-60808/2-A	Lab Control Sample	Total/NA	Water	6010C	60808
MB 160-60808/1-A	Method Blank	Total/NA	Water	6010C	60808

### Analysis Batch: 61428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2968-8	MW-1204	Dissolved	Water	6010C	60808
160-2968-11	D-93	Dissolved	Water	6010C	60808
160-2968-12	I-9	Dissolved	Water	6010C	60808

### Analysis Batch: 61576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2968-1	P2-113-SS	Total/NA	Water	6010C	60810
160-2968-1	P2-113-SS	Total/NA	Water	6010C	60810
160-2968-2	P2-104-SS	Total/NA	Water	6010C	60810
160-2968-2	P2-104-SS	Total/NA	Water	6010C	60810
160-2968-3	P2-101-SS	Total/NA	Water	6010C	60810
160-2968-3	P2-101-SS	Total/NA	Water	6010C	60810
160-2968-4	P2-104-SD	Total/NA	Water	6010C	60810
160-2968-4	P2-104-SD	Total/NA	Water	6010C	60810
160-2968-6	P2-202-SS	Total/NA	Water	6010C	60810
160-2968-6	P2-202-SS	Total/NA	Water	6010C	60810
160-2968-6 MS	P2-202-SS	Total/NA	Water	6010C	60810

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# QC Association Summary

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

TestAmerica Job ID: 160-2968-1

## Metals (Continued)

### Analysis Batch: 61576 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2968-6 MS	P2-202-SS	Total/NA	Water	6010C	60810
160-2968-6 MSD	P2-202-SS	Total/NA	Water	6010C	60810
160-2968-6 MSD	P2-202-SS	Total/NA	Water	6010C	60810
160-2968-7	D-83	Total/NA	Water	6010C	60810
160-2968-7	D-83	Total/NA	Water	6010C	60810
160-2968-8	MW-1204	Total/NA	Water	6010C	60810
160-2968-8	MW-1204	Total/NA	Water	6010C	60810
160-2968-9	S-82	Total/NA	Water	6010C	60810
160-2968-9	S-82	Total/NA	Water	6010C	60810
160-2968-10	P2-116-SS	Total/NA	Water	6010C	60810
160-2968-11	D-93	Total/NA	Water	6010C	60810
160-2968-11	D-93	Total/NA	Water	6010C	60810
160-2968-12	I-9	Total/NA	Water	6010C	60810
160-2968-12	I-9	Total/NA	Water	6010C	60810
160-2968-13	P2-115-SS	Total/NA	Water	6010C	60810
160-2968-13	P2-115-SS	Total/NA	Water	6010C	60810
160-2968-14	DUPLICATE 03	Total/NA	Water	6010C	60810
160-2968-14	DUPLICATE 03	Total/NA	Water	6010C	60810
LCS 160-60810/2-A	Lab Control Sample	Total/NA	Water	6010C	60810
MB 160-60810/1-A	Method Blank	Total/NA	Water	6010C	60810

## General Chemistry

### Analysis Batch: 61027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2968-1	P2-113-SS	Total/NA	Water	300.0	
160-2968-2	P2-104-SS	Total/NA	Water	300.0	
160-2968-3	P2-101-SS	Total/NA	Water	300.0	
160-2968-4	P2-104-SD	Total/NA	Water	300.0	
160-2968-6	P2-202-SS	Total/NA	Water	300.0	
160-2968-6 DU	P2-202-SS	Total/NA	Water	300.0	
160-2968-6 MS	P2-202-SS	Total/NA	Water	300.0	
160-2968-7	D-83	Total/NA	Water	300.0	
160-2968-8	MW-1204	Total/NA	Water	300.0	
160-2968-9	S-82	Total/NA	Water	300.0	
160-2968-10	P2-116-SS	Total/NA	Water	300.0	
160-2968-11	D-93	Total/NA	Water	300.0	
160-2968-12	I-9	Total/NA	Water	300.0	
160-2968-13	P2-115-SS	Total/NA	Water	300.0	
160-2968-14	DUPLICATE 03	Total/NA	Water	300.0	
160-2968-14 MS	DUPLICATE 03	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: 62158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2968-1	P2-113-SS	Total/NA	Water	300.0	
160-2968-1 - DL	P2-113-SS	Total/NA	Water	300.0	
160-2968-2	P2-104-SS	Total/NA	Water	300.0	
160-2968-3	P2-101-SS	Total/NA	Water	300.0	

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# QC Association Summary

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

TestAmerica Job ID: 160-2968-1

## General Chemistry (Continued)

### Analysis Batch: 62158 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2968-3 - DL2	P2-101-SS	Total/NA	Water	300.0	
160-2968-4	P2-104-SD	Total/NA	Water	300.0	
160-2968-4 - DL	P2-104-SD	Total/NA	Water	300.0	
160-2968-4 - DL2	P2-104-SD	Total/NA	Water	300.0	
160-2968-6	P2-202-SS	Total/NA	Water	300.0	
160-2968-6 - DL	P2-202-SS	Total/NA	Water	300.0	
160-2968-6 - DL2	P2-202-SS	Total/NA	Water	300.0	
160-2968-6 DU	P2-202-SS	Total/NA	Water	300.0	
160-2968-6 DU - DL	P2-202-SS	Total/NA	Water	300.0	
160-2968-6 DU - DL2	P2-202-SS	Total/NA	Water	300.0	
160-2968-6 MS	P2-202-SS	Total/NA	Water	300.0	
160-2968-6 MS - DL	P2-202-SS	Total/NA	Water	300.0	
160-2968-6 MS - DL2	P2-202-SS	Total/NA	Water	300.0	
160-2968-7	D-83	Total/NA	Water	300.0	
160-2968-7 - DL	D-83	Total/NA	Water	300.0	
160-2968-8	MW-1204	Total/NA	Water	300.0	
160-2968-8 - DL2	MW-1204	Total/NA	Water	300.0	
160-2968-9	S-82	Total/NA	Water	300.0	
160-2968-9 - DL2	S-82	Total/NA	Water	300.0	
160-2968-10	P2-116-SS	Total/NA	Water	300.0	
160-2968-10 - DL	P2-116-SS	Total/NA	Water	300.0	
160-2968-10 MS	P2-116-SS	Total/NA	Water	300.0	
160-2968-10 MS - DL	P2-116-SS	Total/NA	Water	300.0	
160-2968-11	D-93	Total/NA	Water	300.0	
160-2968-11 - DL2	D-93	Total/NA	Water	300.0	
160-2968-12	I-9	Total/NA	Water	300.0	
160-2968-12 - DL2	I-9	Total/NA	Water	300.0	
160-2968-13	P2-115-SS	Total/NA	Water	300.0	
160-2968-13 - DL2	P2-115-SS	Total/NA	Water	300.0	
160-2968-14	DUPLICATE 03	Total/NA	Water	300.0	
160-2968-14 - DL	DUPLICATE 03	Total/NA	Water	300.0	
LCS 160-62158/4	Lab Control Sample	Total/NA	Water	300.0	
MB 160-62158/3	Method Blank	Total/NA	Water	300.0	

### Analysis Batch: 62899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-2968-1	P2-113-SS	Total/NA	Water	310.1	
160-2968-2	P2-104-SS	Total/NA	Water	310.1	
160-2968-3	P2-101-SS	Total/NA	Water	310.1	
160-2968-4	P2-104-SD	Total/NA	Water	310.1	
160-2968-6	P2-202-SS	Total/NA	Water	310.1	
160-2968-6 DU	P2-202-SS	Total/NA	Water	310.1	
160-2968-6 MS	P2-202-SS	Total/NA	Water	310.1	
160-2968-7	D-83	Total/NA	Water	310.1	
160-2968-8 - DL	MW-1204	Total/NA	Water	310.1	
160-2968-9	S-82	Total/NA	Water	310.1	
160-2968-10	P2-116-SS	Total/NA	Water	310.1	
160-2968-11 - DL	D-93	Total/NA	Water	310.1	
160-2968-12 - DL	I-9	Total/NA	Water	310.1	
160-2968-13	P2-115-SS	Total/NA	Water	310.1	
160-2968-14	DUPLICATE 03	Total/NA	Water	310.1	

TestAmerica St. Louis

## QC Association Summary

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

TestAmerica Job ID: 160-2968-1

### General Chemistry (Continued)

#### Analysis Batch: 62899 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 160-62899/3	Lab Control Sample	Total/NA	Water	310.1	
LLCS 160-62899/2	Lab Control Sample	Total/NA	Water	310.1	
MB 160-62899/1	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: 160-2968-1

## 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)
160-2968-1	P2-113-SS	115	100	106	103
160-2968-2	P2-104-SS	108	98	99	97
160-2968-2	P2-104-SS	94	89	95	96
160-2968-3	P2-101-SS	109	103	101	100
160-2968-4	P2-104-SD	110	105	102	103
160-2968-4	P2-104-SD	118	102	102	101
160-2968-4	P2-104-SD	98	94	98	101
160-2968-5	FB@P2-202-SS	109	102	98	101
160-2968-6	P2-202-SS	118	110	109	107
160-2968-6 MS	P2-202-SS	110	102	100	101
160-2968-6 MSD	P2-202-SS	112	102	105	100
160-2968-7	D-83	119	107	104	101
160-2968-8	MW-1204	109	98	98	98
160-2968-8	MW-1204	97	95	98	100
160-2968-8	MW-1204	94	83	92	96
160-2968-9	S-82	111	103	99	101
160-2968-10	P2-116-SS	121	110	107	110
160-2968-11	D-93	113	103	101	102
160-2968-12	I-9	114	101	104	99
160-2968-13	P2-115-SS	113	104	103	104
160-2968-14	DUPLICATE 03	117	98	101	95
160-2968-15	TRIP BLANK	106	98	99	99
LCS 160-60813/4-A	Lab Control Sample	107	100	99	99
LCS 160-61806/4-A	Lab Control Sample	92	92	92	99
MB 160-60813/3-A	Method Blank	106	99	103	104
MB 160-61806/3-A	Method Blank	100	87	97	100

### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

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