



January 4, 2012

Mr. Carl Hoffman, P.E.
Environmental Engineer II
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7013

Subject: Town of Ramapo Landfill
2011 4th Quarter Analytical Results for Downgradient Drinking Water Supply Wells
STERLING File #20010 (Task 404)

Dear Mr. Hoffman,

This report provides analytical results for samples collected from sentinel monitoring wells and drinking water supply wells located downgradient from the Town of Ramapo Landfill (Landfill), Rockland County, New York. The samples were collected by Sterling Environmental Engineering, P.C. (STERLING) in response to a recommendation by the United States Environmental Protection Agency (USEPA) in the December 2009 5-Year Report for the Ramapo Landfill that drinking water supply wells be sampled on a quarterly basis. In addition, three (3) downgradient sentinel monitoring wells were sampled.

Groundwater samples were collected on November 29, 2011 by STERLING from sentinel monitoring wells 9-OS, 9-I and 9-R, private water supply wells PW-1 and PW-2, and municipal water supply wells SVWC-93, SVWC-94 and SVWC-96 (United Water wells). United Water well SVWC-95 is currently out of service and no sample was collected for this event. Sample locations are shown on Figure 1.

Results for the 2011 4th quarter sampling event are summarized below.

GROUNDWATER MONITORING

Water Level (for monitoring wells only), Specific Conductivity, Temperature, pH and Oxidation Reduction Potential (ORP) were measured in the field and are presented on Table 1, "Field Parameter Measurements". All samples were analyzed for Total Kjeldhal Nitrogen (TKN), Chemical Oxygen Demand (COD), Alkalinity, Hardness, Total Analyte List Metals (TAL Metals), full VOC analysis by USEPA Method 624. Samples were analyzed by TestAmerica, Inc. laboratory, located in Amherst, New York, according to USEPA methodologies and protocols and New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) Category A reporting requirements. A copy of the laboratory report is attached.

The 2011 4th Quarter analytical results are summarized on Table 2, "Quarterly Groundwater Quality Analytical Results."

A duplicate sample was collected from United Water well SVWC-96 and labeled DUPLICATE.

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The reported parameter concentrations for monitoring wells 9-OS, 9-I and 9-R are compared with the NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1, Ambient Water Quality Standards and Guidance Values (June 1998) (TOGS 1.1.1) and the USEPA National Primary Drinking Water Maximum Contaminant Levels (USEPA MCLs). The reported concentrations for drinking water supply wells PW-1, PW-2, SVWC-93, SVWC-94 and SVWC-96 are compared with the 10 NYCRR Part 5, Subpart 5-1 maximum contaminant levels (Part 5 MCLs) and the USEPA MCLs:

Well 9-OS:

Reported concentrations for Chromium and Iron exceed the applicable TOGS 1.1.1 groundwater standards. Chromium also exceeds the USEPA MCL. No detected VOCs are reported for this sample.

Well 9-I:

Reported concentrations for Chromium, Iron and Manganese exceed the TOGS 1.1.1 groundwater standards. Chromium also exceeds the USEPA MCL. No detected VOCs are reported for this sample.

Well 9-R:

Reported concentrations for Iron, Manganese and Sodium exceed the applicable TOGS 1.1.1 groundwater standards. No detected VOCs are reported for this sample.

Well PW-1:

Parameters reported at detectable concentrations do not exceed the USEPA MCLs or the Part 5 MCLs. No detected VOCs are reported for this sample. While there is no USEPA or Part 5 MCL for Sodium, the reported Sodium levels for this well should be considered with regards to guidelines provided in Part 5 for people following restricted Sodium diets.

Well PW-2:

Parameters reported at detectable concentrations do not exceed the USEPA or Part 5 MCLs. No detected VOCs are reported for this sample.

Wells SVWC-93, SVWC-94, SVWC-96:

Parameters reported at detectable concentrations for the United Water wells do not exceed the USEPA or Part 5 MCLs. While there is no USEPA or Part 5 MCL for Sodium, the reported Sodium levels for these wells should be considered with regards to guidelines provided in Part 5 for people following restricted Sodium diets. No detected VOCs are reported for these wells.

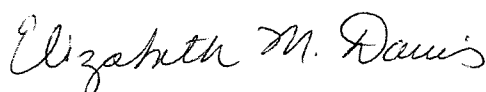
Conclusions:

The reported Sodium concentrations for the United Water wells and PW-1 should be reviewed by the County Health Department with regards to recommendations made in Part 5 for people on Sodium restricted diets.

Please contact me should you have any questions or comments.

Very truly yours,

STERLING ENVIRONMENTAL ENGINEERING, P.C.



Elizabeth M. Davis, CPG

Hydrogeologist

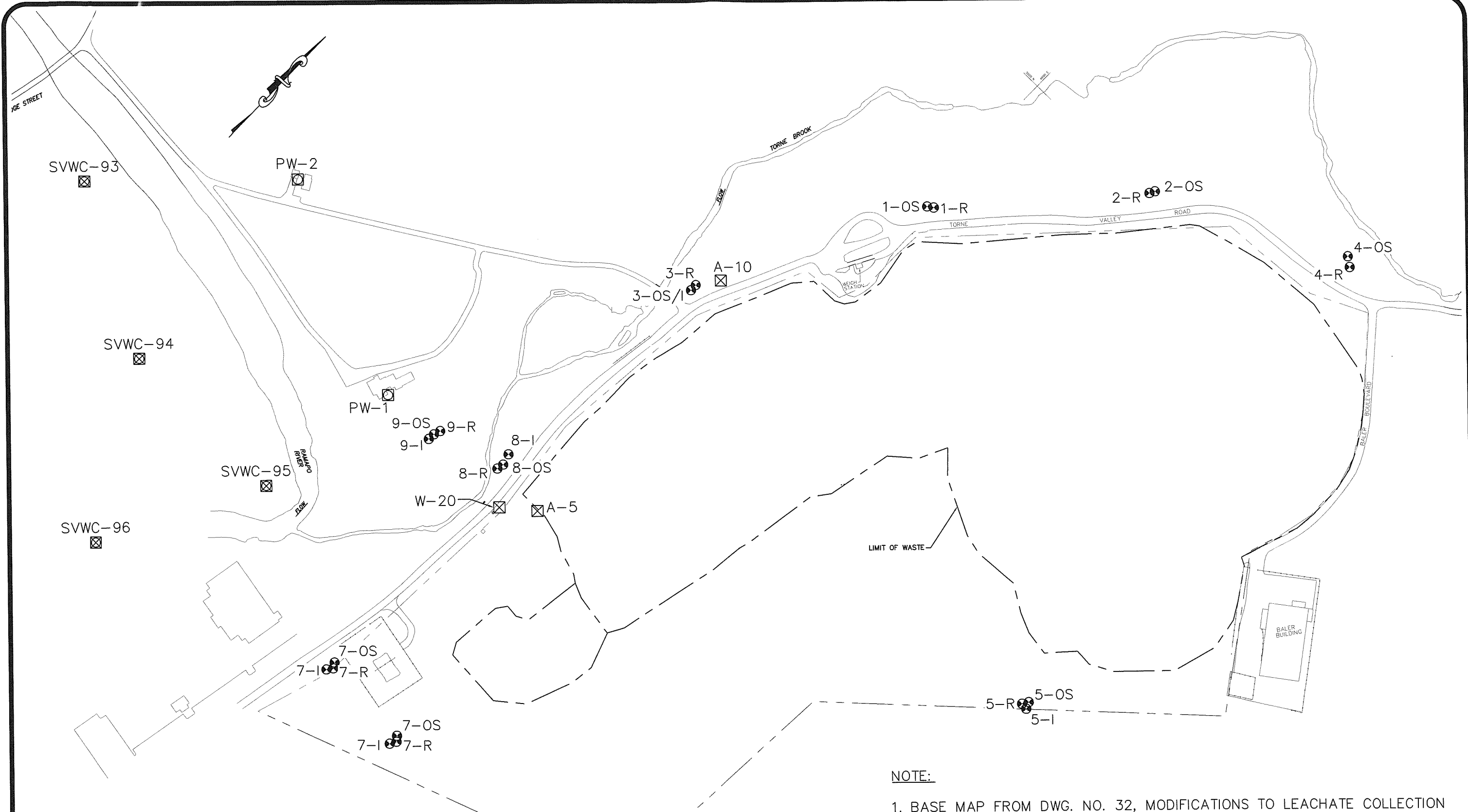
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EMD/bc

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Attachments (Figure 1, Tables 1 & 2, Laboratory Report)

cc: George Jacob, USEPA Region 2
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NOTE:

1. BASE MAP FROM DWG. NO. 32, MODIFICATIONS TO LEACHATE COLLECTION SYSTEM PLAN, BY URS CONSULTANTS, INC., BUFFALO, NY, JUNE 1994.

LEGEND:

- 5-OS ● MONITORING WELL
- PW-1 ◻ EXISTING PRIVATE WELL
- SVWC-93 ◻◻ EXISTING UNITED WATER NEW YORK WELL
- A-10 ◻◻ ON-SITE RECEPTOR STRUCTURE

STERLING

Sterling Environmental Engineering, P.C.

24 Wade Road • Latham, New York 12110

GROUNDWATER MONITORING LOCATIONS
TOWN OF RAMAPO
LANDFILL

TOWN OF RAMAPO

ROCKLAND CO., N.Y.

PROJ. No.: 20010	DATE: 10-3-11	SCALE: N.T.S.	DWG. NO. 20010021	FIGURE 1
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TABLE 1
 POST - CLOSURE WATER QUALITY MONITORING
 FIELD PARAMETER MEASUREMENTS FOR 11/29/11
 TOWN OF RAMAPO LANDFILL
 November 29, 2011 (Quarterly Event)

Parameter	Title 6 Part 703.5 Groundwater Standards	Units	9-OS	9-I	9-R	PW-1	PW-2	SVWC-93	SVWC-94	SVWC-96
Static Water Level [1]	---	feet	4.93	9.47	10.58	---	---	---	---	---
Specific Conductivity	---	mS/cm ^c	0.111	0.100	0.684	0.525	0.256	0.302	0.287	0.372
Temperature	---	degrees C	16.87	15.58	12.58	13.42	12.69	13.97	14.32	13.27
pH	6.5<pH< 8.5	pH Units	6.13	6.50	6.63	6.26	7.00	7.36	7.09	6.70
ORP	---	mV	228.6	220.1	-32.6	183.0	222.6	228.3	235.7	238.2

NOTES :

[1] Measured from the top of the PVC well casing to water surface.

Value in **BOLD** indicates an exceedance of applicable water quality standard or guidance value.

--- Denotes no standard or not measured.

Table 2
Quarterly Groundwater Quality Analytical Results
Town of Ramapo Landfill
11/29/2011

Analyte	CAS Number	Units	Specific Method	Reports To	Reg 1	Reg 2	Reg 4	9-R	9-I	9-OS	Reg 3	Reg 4	PW-1	PW-2	SVWC-93	SVWC-94	SVWC-96	DUPLICATE	TRIP BLANK
1,1,1-Trichloroethane	71-55-6	ug/L	Volatile Organic Compounds (GC/MS)	MDL	5	---	200	ND	ND	ND	5	200	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	79-34-5	ug/L	Volatile Organic Compounds (GC/MS)	MDL	5	---	---	ND	ND	ND	5	---	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	79-00-5	ug/L	Volatile Organic Compounds (GC/MS)	MDL	1	---	5	ND	ND	ND	5	5	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	75-34-3	ug/L	Volatile Organic Compounds (GC/MS)	MDL	5	---	---	ND	ND	ND	5	---	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	75-35-4	ug/L	Volatile Organic Compounds (GC/MS)	MDL	5	---	7	ND	ND	ND	5	7	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1	ug/L	Volatile Organic Compounds (GC/MS)	MDL	3	---	600	ND	ND	ND	5	600	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	107-06-2	ug/L	Volatile Organic Compounds (GC/MS)	MDL	0.6	---	5	ND	ND	ND	5	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene, Total	540-59-0	ug/L	Volatile Organic Compounds (GC/MS)	MDL	---	---	---	ND	ND	ND	---	---	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	78-87-5	ug/L	Volatile Organic Compounds (GC/MS)	MDL	5	---	5	ND	ND	ND	5	5	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	541-73-1	ug/L	Volatile Organic Compounds (GC/MS)	MDL	3	---	---	ND	ND	ND	5	---	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	106-46-7	ug/L	Volatile Organic Compounds (GC/MS)	MDL	3	---	75	ND	ND	ND	5	75	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	110-75-8	ug/L	Volatile Organic Compounds (GC/MS)	MDL	---	---	---	ND	ND	ND	---	---	ND	ND	ND	ND	ND	ND	ND
Acrolein	107-02-8	ug/L	Volatile Organic Compounds (GC/MS)	MDL	5*	---	---	ND	ND	ND	---	---	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	107-13-1	ug/L	Volatile Organic Compounds (GC/MS)	MDL	5	---	---	ND	ND	ND	---	---	ND	ND	ND	ND	ND	ND	ND
Alkalinity, Total	N/A	mg/L	Alkalinity	MRL	---	---	---	229	36.8 B	26.2 B	---	---	30.9 B	154	67.8 B	57.8 B	74.2 B	73.5 B	---
Aluminum	7429-90-5	mg/L	Metals (ICP)	MDL	---	---	---	ND	9.4	3.6	---	---	ND	ND	ND	ND	ND	ND	---
Antimony	7440-36-0	ug/L	Metals (ICP/MS)	MDL	3	---	6	ND	0.18 J	0.17 J	6	6	ND	ND	ND	0.40 J	ND	ND	---
Arsenic	7440-38-2	mg/L	Metals (ICP)	MDL	0.025	---	0.01	0.0060 J	ND L	ND L	0.01	0.01	ND	ND	ND	ND	ND	ND	---
Barium	7440-39-3	mg/L	Metals (ICP)	MRL	1	---	2	0.028	0.099	0.033	2	2	0.025	0.0019 J	0.0059	0.009	0.0076	0.0078	---
Benzene	71-43-2	ug/L	Volatile Organic Compounds (GC/MS)	MDL	1	---	5	ND	ND	ND	5	5	ND	ND	ND	ND	ND	ND	ND
Beryllium	7440-41-7	mg/L	Metals (ICP)	MDL	---	0.003	0.004	ND	0.00059 J	ND	0.004	0.004	ND	ND	ND	ND	ND	ND	---
Bromoform	75-25-2	ug/L	Volatile Organic Compounds (GC/MS)	MDL	---	50	---	ND	ND	ND	---	---	ND	ND	ND	ND	ND	ND	ND
Bromomethane	74-83-9	ug/L	Volatile Organic Compounds (GC/MS)	MDL	5	---	---	ND	ND	ND	---	---	ND	ND	ND	ND	ND	ND	ND
Cadmium	7440-43-9	mg/L	Metals (ICP)	MDL	0.005	---	0.005	ND	ND	ND	0.005	0.005	ND	ND	ND	ND	ND	ND	---
Calcium	7440-70-2	mg/L	Metals (ICP)	MRL	---	---	---	39.9	5.4	8.1	---	---	21.2	34.9	14	13.9	16.3	16.6	---
Carbon tetrachloride	56-23-5	ug/L	Volatile Organic Compounds (GC/MS)	MDL	5	---	5	ND	ND	ND	5	5	ND	ND	ND	ND	ND	ND	ND
Chemical Oxygen Demand	N/A	mg/L	COD	MRL	---	---	---	30.1	ND	6.7 J	---	---	6.4 J	5.4 J	ND	ND	ND	6.4 J	---
Chlorobenzene	108-90-7	ug/L	Volatile Organic Compounds (GC/MS)	MDL	5	---	100	ND	ND	ND	5	100	ND	ND	ND	ND	ND	ND	ND
Chlorodibromomethane	124-48-1	ug/L	Volatile Organic Compounds (GC/MS)	MDL	---	50	---	ND	ND	ND	---	---	ND	ND	ND	ND	ND	ND	ND
Chloroethane	75-00-3	ug/L	Volatile Organic Compounds (GC/MS)	MDL	5	---	---	ND	ND	ND	5	---	ND	ND	ND	ND	ND	ND	ND
Chloroform	67-66-3	ug/L	Volatile Organic Compounds (GC/MS)	MDL	7	---	---	ND	ND	ND	---	---	ND	ND	ND	ND	ND	ND	ND
Chloromethane	74-87-3	ug/L	Volatile Organic Compounds (GC/MS)	MDL	5	---	---	ND	ND	ND	5	---	ND	ND	ND	ND	ND	ND	ND
Chromium	7440-47-3	mg/L	Metals (ICP)	MDL	0.05	---	0.1	ND	0.92	0.64	0.1	0.1	ND	ND	0.00089 J	ND	ND	ND	---
cis-1,3-Dichloropropene	10061-01-5	ug/L	Volatile Organic Compounds (GC/MS)	MDL	---	---	---	ND	ND	ND	5	---	ND	ND	ND	ND	ND	ND	ND
Cobalt	7440-48-4	mg/L	Metals (ICP)	MDL	---	---	---	0.0025 J	0.013	0.0015 J	---	---	ND	ND	ND	ND	ND	ND	---
Copper	7440-50-8	mg/L	Metals (ICP)	MRL	0.2	---	1.3	ND	0.024	0.012	---	1.3	0.079	0.014	0.0065 J	0.0050 J	0.0084 J	0.0036 J	---
Dichlorobromomethane	75-27-4	ug/L	Volatile Organic Compounds (GC/MS)	MDL	---	50	---	ND	ND	ND	---	---	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	100-41-4	ug/L	Volatile Organic Compounds (GC/MS)	MDL	5	---	700	ND	ND	ND	5	700	ND	ND	ND	ND	ND	ND	ND
Hardness as calcium carbonate	N/A	mg/L	Hardness, Total	MRL	---	---	---	160	40	60	---	---	80	120	40	80	100	60	---
Iron	7439-89-6	mg/L	Metals (ICP)	MDL	0.3	---	---	8.1	22.6	8.9	0.3*	---	0.039 J	0.087	ND	ND	ND	ND	---
Lead	7439-92-1	mg/L	Metals (ICP)	MDL	0.025	---	0.015	ND	ND	ND	---	0.015	ND	ND	ND	ND	ND	ND	---
Magnesium	7439-95-4	mg/L	Metals (ICP)	MRL	---	35	---	11.4	3.4	2.5	---	---	5.8	4.1	3.5	3.6	4.5	4.5	---
Manganese	7439-96-5	mg/L	Metals (ICP)	MDL	0.3	---	---	2.9	0.31	0.12	0.3*	---	0.0014 J	0.0013 J	ND	ND	ND	ND	---
Mercury	7439-97-6	mg/L	Mercury (CVAA)	MDL	0.0007	---	0.002	ND	ND	ND	0.002	0.002	ND	ND	ND	ND	ND	ND	---
Methylene Chloride	75-09-2	ug/L	Volatile Organic Compounds (GC/MS)	MDL	5	---	5	ND	ND	ND	5	5	ND	ND	ND	ND	ND	ND	ND
Nickel	7440-02-0	mg/L	Metals (ICP)	MDL	0.1	---	---	0.0032 J	0.027	0.023	---	---	ND	0.0016 J	ND	ND	ND	ND	---
Potassium	7440-09-7	mg/L	Metals (ICP)	MRL	---	---	---	11.2	3.3	1.9	---	---	2.4	1.2	1.4	1.4	1.4	1.5	---
Selenium	7782-49-2	mg/L	Metals (ICP)	MDL	0.01	---	0.05	ND	ND	ND	0.05	0.05	ND	ND	ND	ND	ND	ND	---
Silver	7440-22-4	mg/L	Metals (ICP)	MDL	0.05	---	---	ND	ND	ND	0.1	---	ND	ND	ND	ND	ND	ND	---
Sodium	7440-23-5	mg/L	Metals (ICP)	MRL	20	---	---	58	17.9	9.5	---	---	64.8	9.9	39.1	37.6	49.6	51.5	---
Tetrachloroethene	127-18-4	ug/L	Volatile Organic Compounds (GC/MS)	MDL	5	---	5	ND	ND	ND	5	5	ND	ND	ND	ND	ND	ND	ND
Thallium	7440-28-0	ug/L	Metals (ICP/MS)	MDL	---	0.5	2	ND	0.094 J	0.029 J	2	2	ND	ND	ND	ND	ND	ND	---
Toluene	108-88-3	ug/L	Volatile Organic Compounds (GC/MS)	MDL	5	---	1000	ND	ND	ND	5	1000	ND	ND	ND	ND	ND	ND	ND
Total Kjeldahl Nitrogen	N/A	mg/L	Nitrogen, Total Kjeldahl	MDL	---	---	---	5.3	ND	ND	---	---	ND	ND	ND	ND	ND	ND	---
trans-1,2-Dichloroethene	156-60-5	ug/L	Volatile Organic Compounds (GC/MS)	MDL	5	---	100	ND	ND	ND	5	100	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	10061-02-6	ug/L	Volatile Organic Compounds (GC/MS)	MDL	---	---	---	ND	ND	ND	---	---	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	79-01-6	ug/L	Volatile Organic Compounds (GC/MS)	MDL	5	---	5	ND	ND	ND	5	5	ND	ND	ND	ND	ND	ND	ND
Vanadium	7440-62-2	mg/L	Metals (ICP)	MDL	---	---	---	0.0028 J	0.026	0.012	---	---	ND	ND	ND	ND	ND	ND	---
Vinyl chloride	75-01-4	ug/L	Volatile Organic Compounds (GC/MS)	MDL	2	---	2	ND	ND	ND	2	2	ND	ND	ND	ND	ND	ND	ND
Zinc	7440-66-6	mg/L	Metals (ICP)	MRL	---	2	---	0.0023 J	0.03	0.012	---	---	0.076	0.024	0.039	0.0081 J	0.018	0.0097 J	---

Reg 1 NY-TOGs_GA-WtrClass_StdValues_June2004NY TOGs 1.1.1: Water Quality Stdts & Guidance Values: GA Water Class for Standard Values; Eff. June 2004

Reg 2 NY-TOGs_GA-WtrClass_GuidValues_June2004 NY TOGs 1.1.1: Water Quality Stdts & Guidance Values: GA Water Class for Guidance Values; Eff. June 2004

Reg 3 NY-DOH_PWS-Pt5-Tbls1-7_MCLs_Oct2007 NY DOH Part 5-SubPart5-1 Public Water Supply Stdts.: MCLs Tables 1-7; Eff. 1 October 2007

Reg 4 USEPA - Primary Drinking Water Standards USEPA - Primary Drinking Water Standards.xls

B = Compound was found in the blank and sample.

J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

L = A negative instrument reading had an absolute value greater than the reporting limit.

* = If Iron and Manganese are present, the total concentration of both should not exceed 0.5 mg/L.

Duplicate Sample was collected from SVWC-96

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-13301-1

Client Project/Site: Ramapo Landfill

Revision: 1

For:

Sterling Environmental Engineering PC

24 Wade Road

Latham, New York 12110

Attn: Ms. Elizabeth Davis



Authorized for release by:

12/15/2011 9:34:51 AM

Denise Giglia

Project Manager I

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LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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Definitions/Glossary

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
L	A negative instrument reading had an absolute value greater than the reporting limit
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F	RPD of the MS and MSD exceeds the control limits

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
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Job ID: 480-13301-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-13301-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

Metals

Method 6010B: Samples 9-I (480-13301-4), 9-OS (480-13301-5) had negative instrument readings with absolute values that were greater than the reporting limits for the analyte total arsenic. Matrix interference is suspected. The sample was analyzed at a five-fold dilution, and the results for total arsenic were still non-detects, therefore the original results have been reported.

No other analytical or quality issues were noted.

General Chemistry

Method 310.2: The method blank for batch 43664 contained alkalinity above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. 9-I (480-13301-4), 9-OS (480-13301-5), DUP (480-13301-2), PW-1 (480-13301-6), SVWC-93 (480-13301-10), SVWC-94 (480-13301-9)

Method 310.2: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 43664 was outside control limits. The individual MS/MSD recoveries were acceptable, therefore no further actions were taken. SVWC-96 (480-13301-8 MSD)

No other analytical or quality issues were noted.

This report was revised to add priority pollutant list for the 624 volatiles.

Detection Summary

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-13301-1

No Detections

Client Sample ID: DUP

Lab Sample ID: 480-13301-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0078		0.0020	0.00050	mg/L	1		6010B	Total/NA
Calcium	16.6		0.50	0.10	mg/L	1		6010B	Total/NA
Copper	0.0036	J	0.010	0.0015	mg/L	1		6010B	Total/NA
Magnesium	4.5		0.20	0.043	mg/L	1		6010B	Total/NA
Potassium	1.5		0.50	0.20	mg/L	1		6010B	Total/NA
Sodium	51.5		1.0	0.32	mg/L	1		6010B	Total/NA
Zinc	0.0097	J	0.010	0.0017	mg/L	1		6010B	Total/NA
Alkalinity, Total	73.5	B	10.0	4.0	mg/L	1		310.2	Total/NA
Chemical Oxygen Demand	6.4	J	10.0	5.0	mg/L	1		410.4	Total/NA
Hardness as calcium carbonate	60.0		20.0	5.3	mg/L	1		SM 2340C	Total/NA

Client Sample ID: 9-R

Lab Sample ID: 480-13301-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0060	J	0.010	0.0056	mg/L	1		6010B	Total/NA
Barium	0.028		0.0020	0.00050	mg/L	1		6010B	Total/NA
Calcium	39.9		0.50	0.10	mg/L	1		6010B	Total/NA
Cobalt	0.0025	J	0.0040	0.00063	mg/L	1		6010B	Total/NA
Iron	8.1		0.050	0.019	mg/L	1		6010B	Total/NA
Magnesium	11.4		0.20	0.043	mg/L	1		6010B	Total/NA
Manganese	2.9		0.0030	0.00030	mg/L	1		6010B	Total/NA
Nickel	0.0032	J	0.010	0.0013	mg/L	1		6010B	Total/NA
Potassium	11.2		0.50	0.20	mg/L	1		6010B	Total/NA
Sodium	58.0		1.0	0.32	mg/L	1		6010B	Total/NA
Vanadium	0.0028	J	0.0050	0.0011	mg/L	1		6010B	Total/NA
Zinc	0.0023	J	0.010	0.0017	mg/L	1		6010B	Total/NA
Alkalinity, Total	229		100	40.0	mg/L	10		310.2	Total/NA
Total Kjeldahl Nitrogen	5.3		0.60	0.45	mg/L	3		351.2	Total/NA
Chemical Oxygen Demand	30.1		10.0	5.0	mg/L	1		410.4	Total/NA
Hardness as calcium carbonate	160		20.0	5.3	mg/L	1		SM 2340C	Total/NA

Client Sample ID: 9-I

Lab Sample ID: 480-13301-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.18	J	3.0	0.15	ug/L	1		200.8	Total/NA
Thallium	0.094	J	0.50	0.0080	ug/L	1		200.8	Total/NA
Aluminum	9.4		0.20	0.060	mg/L	1		6010B	Total/NA
Barium	0.099		0.0020	0.00050	mg/L	1		6010B	Total/NA
Beryllium	0.00059	J	0.0020	0.00030	mg/L	1		6010B	Total/NA
Calcium	5.4		0.50	0.10	mg/L	1		6010B	Total/NA
Chromium	0.92		0.0040	0.00087	mg/L	1		6010B	Total/NA
Cobalt	0.013		0.0040	0.00063	mg/L	1		6010B	Total/NA
Copper	0.024		0.010	0.0015	mg/L	1		6010B	Total/NA
Iron	22.6		0.050	0.019	mg/L	1		6010B	Total/NA
Magnesium	3.4		0.20	0.043	mg/L	1		6010B	Total/NA
Manganese	0.31		0.0030	0.00030	mg/L	1		6010B	Total/NA
Nickel	0.027		0.010	0.0013	mg/L	1		6010B	Total/NA
Potassium	3.3		0.50	0.20	mg/L	1		6010B	Total/NA
Sodium	17.9		1.0	0.32	mg/L	1		6010B	Total/NA
Vanadium	0.026		0.0050	0.0011	mg/L	1		6010B	Total/NA

Detection Summary

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: 9-I (Continued)

Lab Sample ID: 480-13301-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	0.030		0.010	0.0017	mg/L	1		6010B	Total/NA
Alkalinity, Total	36.8	B	10.0	4.0	mg/L	1		310.2	Total/NA
Hardness as calcium carbonate	40.0		20.0	5.3	mg/L	1		SM 2340C	Total/NA

Client Sample ID: 9-OS

Lab Sample ID: 480-13301-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.17	J	3.0	0.15	ug/L	1		200.8	Total/NA
Thallium	0.029	J	0.50	0.0080	ug/L	1		200.8	Total/NA
Aluminum	3.6		0.20	0.060	mg/L	1		6010B	Total/NA
Barium	0.033		0.0020	0.00050	mg/L	1		6010B	Total/NA
Calcium	8.1		0.50	0.10	mg/L	1		6010B	Total/NA
Chromium	0.64		0.0040	0.00087	mg/L	1		6010B	Total/NA
Cobalt	0.0015	J	0.0040	0.00063	mg/L	1		6010B	Total/NA
Copper	0.012		0.010	0.0015	mg/L	1		6010B	Total/NA
Iron	8.9		0.050	0.019	mg/L	1		6010B	Total/NA
Magnesium	2.5		0.20	0.043	mg/L	1		6010B	Total/NA
Manganese	0.12		0.0030	0.00030	mg/L	1		6010B	Total/NA
Nickel	0.023		0.010	0.0013	mg/L	1		6010B	Total/NA
Potassium	1.9		0.50	0.20	mg/L	1		6010B	Total/NA
Sodium	9.5		1.0	0.32	mg/L	1		6010B	Total/NA
Vanadium	0.012		0.0050	0.0011	mg/L	1		6010B	Total/NA
Zinc	0.012		0.010	0.0017	mg/L	1		6010B	Total/NA
Alkalinity, Total	26.2	B	10.0	4.0	mg/L	1		310.2	Total/NA
Chemical Oxygen Demand	6.7	J	10.0	5.0	mg/L	1		410.4	Total/NA
Hardness as calcium carbonate	60.0		20.0	5.3	mg/L	1		SM 2340C	Total/NA

Client Sample ID: PW-1

Lab Sample ID: 480-13301-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.025		0.0020	0.00050	mg/L	1		6010B	Total/NA
Calcium	21.2		0.50	0.10	mg/L	1		6010B	Total/NA
Copper	0.079		0.010	0.0015	mg/L	1		6010B	Total/NA
Iron	0.039	J	0.050	0.019	mg/L	1		6010B	Total/NA
Magnesium	5.8		0.20	0.043	mg/L	1		6010B	Total/NA
Manganese	0.0014	J	0.0030	0.00030	mg/L	1		6010B	Total/NA
Potassium	2.4		0.50	0.20	mg/L	1		6010B	Total/NA
Sodium	64.8		1.0	0.32	mg/L	1		6010B	Total/NA
Zinc	0.076		0.010	0.0017	mg/L	1		6010B	Total/NA
Alkalinity, Total	30.9	B	10.0	4.0	mg/L	1		310.2	Total/NA
Chemical Oxygen Demand	6.4	J	10.0	5.0	mg/L	1		410.4	Total/NA
Hardness as calcium carbonate	80.0		20.0	5.3	mg/L	1		SM 2340C	Total/NA

Client Sample ID: PW-2

Lab Sample ID: 480-13301-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0019	J	0.0020	0.00050	mg/L	1		6010B	Total/NA
Calcium	34.9		0.50	0.10	mg/L	1		6010B	Total/NA
Copper	0.014		0.010	0.0015	mg/L	1		6010B	Total/NA
Iron	0.087		0.050	0.019	mg/L	1		6010B	Total/NA
Magnesium	4.1		0.20	0.043	mg/L	1		6010B	Total/NA
Manganese	0.0013	J	0.0030	0.00030	mg/L	1		6010B	Total/NA
Nickel	0.0016	J	0.010	0.0013	mg/L	1		6010B	Total/NA
Potassium	1.2		0.50	0.20	mg/L	1		6010B	Total/NA

Detection Summary

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: PW-2 (Continued)

Lab Sample ID: 480-13301-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	9.9		1.0	0.32	mg/L	1		6010B	Total/NA
Zinc	0.024		0.010	0.0017	mg/L	1		6010B	Total/NA
Alkalinity, Total	154		100	40.0	mg/L	10		310.2	Total/NA
Chemical Oxygen Demand	5.4	J	10.0	5.0	mg/L	1		410.4	Total/NA
Hardness as calcium carbonate	120		20.0	5.3	mg/L	1		SM 2340C	Total/NA

Client Sample ID: SVWC-96

Lab Sample ID: 480-13301-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0076		0.0020	0.00050	mg/L	1		6010B	Total/NA
Calcium	16.3		0.50	0.10	mg/L	1		6010B	Total/NA
Copper	0.0084	J	0.010	0.0015	mg/L	1		6010B	Total/NA
Magnesium	4.5		0.20	0.043	mg/L	1		6010B	Total/NA
Potassium	1.4		0.50	0.20	mg/L	1		6010B	Total/NA
Sodium	49.6		1.0	0.32	mg/L	1		6010B	Total/NA
Zinc	0.018		0.010	0.0017	mg/L	1		6010B	Total/NA
Alkalinity, Total	74.2	B	10.0	4.0	mg/L	1		310.2	Total/NA
Hardness as calcium carbonate	100		20.0	5.3	mg/L	1		SM 2340C	Total/NA

Client Sample ID: SVWC-94

Lab Sample ID: 480-13301-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.40	J	3.0	0.15	ug/L	1		200.8	Total/NA
Barium	0.0090		0.0020	0.00050	mg/L	1		6010B	Total/NA
Calcium	13.9		0.50	0.10	mg/L	1		6010B	Total/NA
Copper	0.0050	J	0.010	0.0015	mg/L	1		6010B	Total/NA
Magnesium	3.6		0.20	0.043	mg/L	1		6010B	Total/NA
Potassium	1.4		0.50	0.20	mg/L	1		6010B	Total/NA
Sodium	37.6		1.0	0.32	mg/L	1		6010B	Total/NA
Zinc	0.0081	J	0.010	0.0017	mg/L	1		6010B	Total/NA
Alkalinity, Total	57.8	B	10.0	4.0	mg/L	1		310.2	Total/NA
Hardness as calcium carbonate	80.0		20.0	5.3	mg/L	1		SM 2340C	Total/NA

Client Sample ID: SVWC-93

Lab Sample ID: 480-13301-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0059		0.0020	0.00050	mg/L	1		6010B	Total/NA
Calcium	14.0		0.50	0.10	mg/L	1		6010B	Total/NA
Chromium	0.00089	J	0.0040	0.00087	mg/L	1		6010B	Total/NA
Copper	0.0065	J	0.010	0.0015	mg/L	1		6010B	Total/NA
Magnesium	3.5		0.20	0.043	mg/L	1		6010B	Total/NA
Potassium	1.4		0.50	0.20	mg/L	1		6010B	Total/NA
Sodium	39.1		1.0	0.32	mg/L	1		6010B	Total/NA
Zinc	0.039		0.010	0.0017	mg/L	1		6010B	Total/NA
Alkalinity, Total	67.8	B	10.0	4.0	mg/L	1		310.2	Total/NA
Hardness as calcium carbonate	40.0		20.0	5.3	mg/L	1		SM 2340C	Total/NA

Client Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: TRIP BLANK

Date Collected: 11/29/11 00:00

Date Received: 11/30/11 10:15

Lab Sample ID: 480-13301-1

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.60	ug/L			12/01/11 17:20	1
Chlorobenzene	ND		5.0	0.48	ug/L			12/01/11 17:20	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			12/01/11 17:20	1
Vinyl chloride	ND		2.0	0.75	ug/L			12/01/11 17:20	1
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			12/01/11 17:20	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			12/01/11 17:20	1
Bromoform	ND		5.0	0.47	ug/L			12/01/11 17:20	1
Tetrachloroethene	ND		5.0	0.34	ug/L			12/01/11 17:20	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			12/01/11 17:20	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			12/01/11 17:20	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			12/01/11 17:20	1
Methylene Chloride	ND		5.0	0.81	ug/L			12/01/11 17:20	1
Chloromethane	ND		5.0	0.64	ug/L			12/01/11 17:20	1
Bromomethane	ND		5.0	1.2	ug/L			12/01/11 17:20	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			12/01/11 17:20	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			12/01/11 17:20	1
Toluene	ND		5.0	0.45	ug/L			12/01/11 17:20	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			12/01/11 17:20	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			12/01/11 17:20	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			12/01/11 17:20	1
Chloroethane	ND		5.0	0.87	ug/L			12/01/11 17:20	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			12/01/11 17:20	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			12/01/11 17:20	1
Trichloroethene	ND		5.0	0.60	ug/L			12/01/11 17:20	1
Acrylonitrile	ND		25	1.9	ug/L			12/01/11 17:20	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			12/01/11 17:20	1
Ethylbenzene	ND		5.0	0.46	ug/L			12/01/11 17:20	1
Acrolein	ND		100	17	ug/L			12/01/11 17:20	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			12/01/11 17:20	1
Chloroform	ND		5.0	0.54	ug/L			12/01/11 17:20	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			12/01/11 17:20	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			12/01/11 17:20	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			12/01/11 17:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		72 - 130		12/01/11 17:20	1
4-Bromofluorobenzene (Surr)	100		69 - 121		12/01/11 17:20	1
Toluene-d8 (Surr)	98		70 - 123		12/01/11 17:20	1

Client Sample ID: DUP

Date Collected: 11/29/11 10:45

Date Received: 11/30/11 10:15

Lab Sample ID: 480-13301-2

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.60	ug/L			12/01/11 17:46	1
Chlorobenzene	ND		5.0	0.48	ug/L			12/01/11 17:46	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			12/01/11 17:46	1
Vinyl chloride	ND		2.0	0.75	ug/L			12/01/11 17:46	1

Client Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: DUP

Lab Sample ID: 480-13301-2

Date Collected: 11/29/11 10:45

Matrix: Water

Date Received: 11/30/11 10:15

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			12/01/11 17:46	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			12/01/11 17:46	1
Bromoform	ND		5.0	0.47	ug/L			12/01/11 17:46	1
Tetrachloroethene	ND		5.0	0.34	ug/L			12/01/11 17:46	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			12/01/11 17:46	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			12/01/11 17:46	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			12/01/11 17:46	1
Methylene Chloride	ND		5.0	0.81	ug/L			12/01/11 17:46	1
Chloromethane	ND		5.0	0.64	ug/L			12/01/11 17:46	1
Bromomethane	ND		5.0	1.2	ug/L			12/01/11 17:46	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			12/01/11 17:46	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			12/01/11 17:46	1
Toluene	ND		5.0	0.45	ug/L			12/01/11 17:46	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			12/01/11 17:46	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			12/01/11 17:46	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			12/01/11 17:46	1
Chloroethane	ND		5.0	0.87	ug/L			12/01/11 17:46	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			12/01/11 17:46	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			12/01/11 17:46	1
Trichloroethene	ND		5.0	0.60	ug/L			12/01/11 17:46	1
Acrylonitrile	ND		25	1.9	ug/L			12/01/11 17:46	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			12/01/11 17:46	1
Ethylbenzene	ND		5.0	0.46	ug/L			12/01/11 17:46	1
Acrolein	ND		100	17	ug/L			12/01/11 17:46	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			12/01/11 17:46	1
Chloroform	ND		5.0	0.54	ug/L			12/01/11 17:46	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			12/01/11 17:46	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			12/01/11 17:46	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			12/01/11 17:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		72 - 130					12/01/11 17:46	1
4-Bromofluorobenzene (Surr)	99		69 - 121					12/01/11 17:46	1
Toluene-d8 (Surr)	98		70 - 123					12/01/11 17:46	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		3.0	0.15	ug/L		12/02/11 08:25	12/07/11 05:40	1
Thallium	ND		0.50	0.0080	ug/L		12/02/11 08:25	12/07/11 05:40	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		12/02/11 08:20	12/05/11 18:53	1
Arsenic	ND		0.010	0.0056	mg/L		12/02/11 08:20	12/05/11 18:53	1
Barium	0.0078		0.0020	0.00050	mg/L		12/02/11 08:20	12/05/11 18:53	1
Beryllium	ND		0.0020	0.00030	mg/L		12/02/11 08:20	12/05/11 18:53	1
Cadmium	ND		0.0010	0.00033	mg/L		12/02/11 08:20	12/05/11 18:53	1
Calcium	16.6		0.50	0.10	mg/L		12/02/11 08:20	12/05/11 18:53	1
Chromium	ND		0.0040	0.00087	mg/L		12/02/11 08:20	12/05/11 18:53	1
Cobalt	ND		0.0040	0.00063	mg/L		12/02/11 08:20	12/05/11 18:53	1
Copper	0.0036	J	0.010	0.0015	mg/L		12/02/11 08:20	12/05/11 18:53	1

Client Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: DUP

Lab Sample ID: 480-13301-2

Date Collected: 11/29/11 10:45

Matrix: Water

Date Received: 11/30/11 10:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050	0.019	mg/L		12/02/11 08:20	12/05/11 18:53	1
Lead	ND		0.0050	0.0030	mg/L		12/02/11 08:20	12/05/11 18:53	1
Magnesium	4.5		0.20	0.043	mg/L		12/02/11 08:20	12/05/11 18:53	1
Manganese	ND		0.0030	0.00030	mg/L		12/02/11 08:20	12/05/11 18:53	1
Nickel	ND		0.010	0.0013	mg/L		12/02/11 08:20	12/05/11 18:53	1
Potassium	1.5		0.50	0.20	mg/L		12/02/11 08:20	12/05/11 18:53	1
Selenium	ND		0.015	0.0087	mg/L		12/02/11 08:20	12/05/11 18:53	1
Silver	ND		0.0030	0.0017	mg/L		12/02/11 08:20	12/05/11 18:53	1
Sodium	51.5		1.0	0.32	mg/L		12/02/11 08:20	12/05/11 18:53	1
Vanadium	ND		0.0050	0.0011	mg/L		12/02/11 08:20	12/05/11 18:53	1
Zinc	0.0097	J	0.010	0.0017	mg/L		12/02/11 08:20	12/05/11 18:53	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		12/02/11 11:10	12/02/11 15:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	73.5	B	10.0	4.0	mg/L			12/09/11 07:42	1
Total Kjeldahl Nitrogen	ND		0.20	0.15	mg/L		12/03/11 10:04	12/06/11 09:12	1
Chemical Oxygen Demand	6.4	J	10.0	5.0	mg/L			12/03/11 11:00	1
Hardness as calcium carbonate	60.0		20.0	5.3	mg/L			12/01/11 15:27	1

Client Sample ID: 9-R

Lab Sample ID: 480-13301-3

Date Collected: 11/29/11 12:50

Matrix: Water

Date Received: 11/30/11 10:15

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.60	ug/L			12/01/11 18:12	1
Chlorobenzene	ND		5.0	0.48	ug/L			12/01/11 18:12	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			12/01/11 18:12	1
Vinyl chloride	ND		2.0	0.75	ug/L			12/01/11 18:12	1
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			12/01/11 18:12	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			12/01/11 18:12	1
Bromoform	ND		5.0	0.47	ug/L			12/01/11 18:12	1
Tetrachloroethene	ND		5.0	0.34	ug/L			12/01/11 18:12	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			12/01/11 18:12	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			12/01/11 18:12	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			12/01/11 18:12	1
Methylene Chloride	ND		5.0	0.81	ug/L			12/01/11 18:12	1
Chloromethane	ND		5.0	0.64	ug/L			12/01/11 18:12	1
Bromomethane	ND		5.0	1.2	ug/L			12/01/11 18:12	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			12/01/11 18:12	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			12/01/11 18:12	1
Toluene	ND		5.0	0.45	ug/L			12/01/11 18:12	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			12/01/11 18:12	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			12/01/11 18:12	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			12/01/11 18:12	1
Chloroethane	ND		5.0	0.87	ug/L			12/01/11 18:12	1

Client Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: 9-R

Lab Sample ID: 480-13301-3

Date Collected: 11/29/11 12:50

Matrix: Water

Date Received: 11/30/11 10:15

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		5.0	0.85	ug/L			12/01/11 18:12	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			12/01/11 18:12	1
Trichloroethene	ND		5.0	0.60	ug/L			12/01/11 18:12	1
Acrylonitrile	ND		25	1.9	ug/L			12/01/11 18:12	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			12/01/11 18:12	1
Ethylbenzene	ND		5.0	0.46	ug/L			12/01/11 18:12	1
Acrolein	ND		100	17	ug/L			12/01/11 18:12	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			12/01/11 18:12	1
Chloroform	ND		5.0	0.54	ug/L			12/01/11 18:12	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			12/01/11 18:12	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			12/01/11 18:12	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			12/01/11 18:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		72 - 130		12/01/11 18:12	1
4-Bromofluorobenzene (Surr)	99		69 - 121		12/01/11 18:12	1
Toluene-d8 (Surr)	99		70 - 123		12/01/11 18:12	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		3.0	0.15	ug/L		12/02/11 08:25	12/07/11 05:45	1
Thallium	ND		0.50	0.0080	ug/L		12/02/11 08:25	12/07/11 05:45	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		12/02/11 08:20	12/05/11 18:55	1
Arsenic	0.0060	J	0.010	0.0056	mg/L		12/02/11 08:20	12/05/11 18:55	1
Barium	0.028		0.0020	0.00050	mg/L		12/02/11 08:20	12/05/11 18:55	1
Beryllium	ND		0.0020	0.00030	mg/L		12/02/11 08:20	12/05/11 18:55	1
Cadmium	ND		0.0010	0.00033	mg/L		12/02/11 08:20	12/05/11 18:55	1
Calcium	39.9		0.50	0.10	mg/L		12/02/11 08:20	12/05/11 18:55	1
Chromium	ND		0.0040	0.00087	mg/L		12/02/11 08:20	12/05/11 18:55	1
Cobalt	0.0025	J	0.0040	0.00063	mg/L		12/02/11 08:20	12/05/11 18:55	1
Copper	ND		0.010	0.0015	mg/L		12/02/11 08:20	12/05/11 18:55	1
Iron	8.1		0.050	0.019	mg/L		12/02/11 08:20	12/05/11 18:55	1
Lead	ND		0.0050	0.0030	mg/L		12/02/11 08:20	12/05/11 18:55	1
Magnesium	11.4		0.20	0.043	mg/L		12/02/11 08:20	12/05/11 18:55	1
Manganese	2.9		0.0030	0.00030	mg/L		12/02/11 08:20	12/05/11 18:55	1
Nickel	0.0032	J	0.010	0.0013	mg/L		12/02/11 08:20	12/05/11 18:55	1
Potassium	11.2		0.50	0.20	mg/L		12/02/11 08:20	12/05/11 18:55	1
Selenium	ND		0.015	0.0087	mg/L		12/02/11 08:20	12/05/11 18:55	1
Silver	ND		0.0030	0.0017	mg/L		12/02/11 08:20	12/05/11 18:55	1
Sodium	58.0		1.0	0.32	mg/L		12/02/11 08:20	12/05/11 18:55	1
Vanadium	0.0028	J	0.0050	0.0011	mg/L		12/02/11 08:20	12/05/11 18:55	1
Zinc	0.0023	J	0.010	0.0017	mg/L		12/02/11 08:20	12/05/11 18:55	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		12/02/11 11:10	12/02/11 15:57	1

Client Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: 9-R

Date Collected: 11/29/11 12:50

Date Received: 11/30/11 10:15

Lab Sample ID: 480-13301-3

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	229		100	40.0	mg/L			12/09/11 07:21	10
Total Kjeldahl Nitrogen	5.3		0.60	0.45	mg/L		12/03/11 10:04	12/06/11 10:21	3
Chemical Oxygen Demand	30.1		10.0	5.0	mg/L			12/03/11 11:00	1
Hardness as calcium carbonate	160		20.0	5.3	mg/L			12/01/11 15:27	1

Client Sample ID: 9-I

Date Collected: 11/29/11 12:10

Date Received: 11/30/11 10:15

Lab Sample ID: 480-13301-4

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.60	ug/L			12/01/11 18:38	1
Chlorobenzene	ND		5.0	0.48	ug/L			12/01/11 18:38	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			12/01/11 18:38	1
Vinyl chloride	ND		2.0	0.75	ug/L			12/01/11 18:38	1
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			12/01/11 18:38	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			12/01/11 18:38	1
Bromoform	ND		5.0	0.47	ug/L			12/01/11 18:38	1
Tetrachloroethene	ND		5.0	0.34	ug/L			12/01/11 18:38	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			12/01/11 18:38	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			12/01/11 18:38	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			12/01/11 18:38	1
Methylene Chloride	ND		5.0	0.81	ug/L			12/01/11 18:38	1
Chloromethane	ND		5.0	0.64	ug/L			12/01/11 18:38	1
Bromomethane	ND		5.0	1.2	ug/L			12/01/11 18:38	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			12/01/11 18:38	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			12/01/11 18:38	1
Toluene	ND		5.0	0.45	ug/L			12/01/11 18:38	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			12/01/11 18:38	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			12/01/11 18:38	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			12/01/11 18:38	1
Chloroethane	ND		5.0	0.87	ug/L			12/01/11 18:38	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			12/01/11 18:38	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			12/01/11 18:38	1
Trichloroethene	ND		5.0	0.60	ug/L			12/01/11 18:38	1
Acrylonitrile	ND		25	1.9	ug/L			12/01/11 18:38	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			12/01/11 18:38	1
Ethylbenzene	ND		5.0	0.46	ug/L			12/01/11 18:38	1
Acrolein	ND		100	17	ug/L			12/01/11 18:38	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			12/01/11 18:38	1
Chloroform	ND		5.0	0.54	ug/L			12/01/11 18:38	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			12/01/11 18:38	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			12/01/11 18:38	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			12/01/11 18:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		72 - 130		12/01/11 18:38	1
4-Bromofluorobenzene (Surr)	97		69 - 121		12/01/11 18:38	1
Toluene-d8 (Surr)	97		70 - 123		12/01/11 18:38	1

Client Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: 9-I

Lab Sample ID: 480-13301-4

Date Collected: 11/29/11 12:10

Matrix: Water

Date Received: 11/30/11 10:15

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.18	J	3.0	0.15	ug/L		12/02/11 08:25	12/07/11 06:02	1
Thallium	0.094	J	0.50	0.0080	ug/L		12/02/11 08:25	12/07/11 06:02	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9.4		0.20	0.060	mg/L		12/02/11 08:20	12/05/11 18:58	1
Arsenic	ND	L	0.010	0.0056	mg/L		12/02/11 08:20	12/05/11 18:58	1
Barium	0.099		0.0020	0.00050	mg/L		12/02/11 08:20	12/05/11 18:58	1
Beryllium	0.00059	J	0.0020	0.00030	mg/L		12/02/11 08:20	12/05/11 18:58	1
Cadmium	ND		0.0010	0.00033	mg/L		12/02/11 08:20	12/05/11 18:58	1
Calcium	5.4		0.50	0.10	mg/L		12/02/11 08:20	12/05/11 18:58	1
Chromium	0.92		0.0040	0.00087	mg/L		12/02/11 08:20	12/05/11 18:58	1
Cobalt	0.013		0.0040	0.00063	mg/L		12/02/11 08:20	12/05/11 18:58	1
Copper	0.024		0.010	0.0015	mg/L		12/02/11 08:20	12/05/11 18:58	1
Iron	22.6		0.050	0.019	mg/L		12/02/11 08:20	12/05/11 18:58	1
Lead	ND		0.0050	0.0030	mg/L		12/02/11 08:20	12/05/11 18:58	1
Magnesium	3.4		0.20	0.043	mg/L		12/02/11 08:20	12/05/11 18:58	1
Manganese	0.31		0.0030	0.00030	mg/L		12/02/11 08:20	12/05/11 18:58	1
Nickel	0.027		0.010	0.0013	mg/L		12/02/11 08:20	12/05/11 18:58	1
Potassium	3.3		0.50	0.20	mg/L		12/02/11 08:20	12/05/11 18:58	1
Selenium	ND		0.015	0.0087	mg/L		12/02/11 08:20	12/05/11 18:58	1
Silver	ND		0.0030	0.0017	mg/L		12/02/11 08:20	12/05/11 18:58	1
Sodium	17.9		1.0	0.32	mg/L		12/02/11 08:20	12/05/11 18:58	1
Vanadium	0.026		0.0050	0.0011	mg/L		12/02/11 08:20	12/05/11 18:58	1
Zinc	0.030		0.010	0.0017	mg/L		12/02/11 08:20	12/05/11 18:58	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		12/02/11 11:10	12/02/11 16:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	36.8	B	10.0	4.0	mg/L			12/09/11 07:42	1
Total Kjeldahl Nitrogen	ND		0.20	0.15	mg/L		12/03/11 10:04	12/06/11 09:12	1
Chemical Oxygen Demand	ND		10.0	5.0	mg/L			12/03/11 11:00	1
Hardness as calcium carbonate	40.0		20.0	5.3	mg/L			12/01/11 15:27	1

Client Sample ID: 9-OS

Lab Sample ID: 480-13301-5

Date Collected: 11/29/11 12:40

Matrix: Water

Date Received: 11/30/11 10:15

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.60	ug/L			12/01/11 19:04	1
Chlorobenzene	ND		5.0	0.48	ug/L			12/01/11 19:04	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			12/01/11 19:04	1
Vinyl chloride	ND		2.0	0.75	ug/L			12/01/11 19:04	1
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			12/01/11 19:04	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			12/01/11 19:04	1
Bromoform	ND		5.0	0.47	ug/L			12/01/11 19:04	1

Client Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: 9-OS

Lab Sample ID: 480-13301-5

Date Collected: 11/29/11 12:40

Matrix: Water

Date Received: 11/30/11 10:15

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		5.0	0.34	ug/L			12/01/11 19:04	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			12/01/11 19:04	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			12/01/11 19:04	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			12/01/11 19:04	1
Methylene Chloride	ND		5.0	0.81	ug/L			12/01/11 19:04	1
Chloromethane	ND		5.0	0.64	ug/L			12/01/11 19:04	1
Bromomethane	ND		5.0	1.2	ug/L			12/01/11 19:04	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			12/01/11 19:04	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			12/01/11 19:04	1
Toluene	ND		5.0	0.45	ug/L			12/01/11 19:04	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			12/01/11 19:04	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			12/01/11 19:04	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			12/01/11 19:04	1
Chloroethane	ND		5.0	0.87	ug/L			12/01/11 19:04	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			12/01/11 19:04	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			12/01/11 19:04	1
Trichloroethene	ND		5.0	0.60	ug/L			12/01/11 19:04	1
Acrylonitrile	ND		25	1.9	ug/L			12/01/11 19:04	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			12/01/11 19:04	1
Ethylbenzene	ND		5.0	0.46	ug/L			12/01/11 19:04	1
Acrolein	ND		100	17	ug/L			12/01/11 19:04	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			12/01/11 19:04	1
Chloroform	ND		5.0	0.54	ug/L			12/01/11 19:04	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			12/01/11 19:04	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			12/01/11 19:04	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			12/01/11 19:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		72 - 130		12/01/11 19:04	1
4-Bromofluorobenzene (Surr)	100		69 - 121		12/01/11 19:04	1
Toluene-d8 (Surr)	99		70 - 123		12/01/11 19:04	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.17	J	3.0	0.15	ug/L		12/02/11 08:25	12/07/11 06:07	1
Thallium	0.029	J	0.50	0.0080	ug/L		12/02/11 08:25	12/07/11 06:07	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	3.6		0.20	0.060	mg/L		12/02/11 08:20	12/05/11 19:00	1
Arsenic	ND	L	0.010	0.0056	mg/L		12/02/11 08:20	12/05/11 19:00	1
Barium	0.033		0.0020	0.00050	mg/L		12/02/11 08:20	12/05/11 19:00	1
Beryllium	ND		0.0020	0.00030	mg/L		12/02/11 08:20	12/05/11 19:00	1
Cadmium	ND		0.0010	0.00033	mg/L		12/02/11 08:20	12/05/11 19:00	1
Calcium	8.1		0.50	0.10	mg/L		12/02/11 08:20	12/05/11 19:00	1
Chromium	0.64		0.0040	0.00087	mg/L		12/02/11 08:20	12/05/11 19:00	1
Cobalt	0.0015	J	0.0040	0.00063	mg/L		12/02/11 08:20	12/05/11 19:00	1
Copper	0.012		0.010	0.0015	mg/L		12/02/11 08:20	12/05/11 19:00	1
Iron	8.9		0.050	0.019	mg/L		12/02/11 08:20	12/05/11 19:00	1
Lead	ND		0.0050	0.0030	mg/L		12/02/11 08:20	12/05/11 19:00	1
Magnesium	2.5		0.20	0.043	mg/L		12/02/11 08:20	12/05/11 19:00	1

Client Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: 9-OS

Date Collected: 11/29/11 12:40

Date Received: 11/30/11 10:15

Lab Sample ID: 480-13301-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.12		0.0030	0.00030	mg/L		12/02/11 08:20	12/05/11 19:00	1
Nickel	0.023		0.010	0.0013	mg/L		12/02/11 08:20	12/05/11 19:00	1
Potassium	1.9		0.50	0.20	mg/L		12/02/11 08:20	12/05/11 19:00	1
Selenium	ND		0.015	0.0087	mg/L		12/02/11 08:20	12/05/11 19:00	1
Silver	ND		0.0030	0.0017	mg/L		12/02/11 08:20	12/05/11 19:00	1
Sodium	9.5		1.0	0.32	mg/L		12/02/11 08:20	12/05/11 19:00	1
Vanadium	0.012		0.0050	0.0011	mg/L		12/02/11 08:20	12/05/11 19:00	1
Zinc	0.012		0.010	0.0017	mg/L		12/02/11 08:20	12/05/11 19:00	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		12/02/11 11:10	12/02/11 16:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	26.2	B	10.0	4.0	mg/L			12/09/11 07:42	1
Total Kjeldahl Nitrogen	ND		0.20	0.15	mg/L		12/03/11 10:04	12/06/11 09:12	1
Chemical Oxygen Demand	6.7	J	10.0	5.0	mg/L			12/03/11 11:00	1
Hardness as calcium carbonate	60.0		20.0	5.3	mg/L			12/01/11 15:27	1

Client Sample ID: PW-1

Date Collected: 11/29/11 13:25

Date Received: 11/30/11 10:15

Lab Sample ID: 480-13301-6

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.60	ug/L			12/01/11 19:30	1
Chlorobenzene	ND		5.0	0.48	ug/L			12/01/11 19:30	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			12/01/11 19:30	1
Vinyl chloride	ND		2.0	0.75	ug/L			12/01/11 19:30	1
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			12/01/11 19:30	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			12/01/11 19:30	1
Bromoform	ND		5.0	0.47	ug/L			12/01/11 19:30	1
Tetrachloroethene	ND		5.0	0.34	ug/L			12/01/11 19:30	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			12/01/11 19:30	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			12/01/11 19:30	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			12/01/11 19:30	1
Methylene Chloride	ND		5.0	0.81	ug/L			12/01/11 19:30	1
Chloromethane	ND		5.0	0.64	ug/L			12/01/11 19:30	1
Bromomethane	ND		5.0	1.2	ug/L			12/01/11 19:30	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			12/01/11 19:30	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			12/01/11 19:30	1
Toluene	ND		5.0	0.45	ug/L			12/01/11 19:30	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			12/01/11 19:30	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			12/01/11 19:30	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			12/01/11 19:30	1
Chloroethane	ND		5.0	0.87	ug/L			12/01/11 19:30	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			12/01/11 19:30	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			12/01/11 19:30	1
Trichloroethene	ND		5.0	0.60	ug/L			12/01/11 19:30	1

Client Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: PW-1

Lab Sample ID: 480-13301-6

Date Collected: 11/29/11 13:25

Matrix: Water

Date Received: 11/30/11 10:15

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrylonitrile	ND		25	1.9	ug/L			12/01/11 19:30	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			12/01/11 19:30	1
Ethylbenzene	ND		5.0	0.46	ug/L			12/01/11 19:30	1
Acrolein	ND		100	17	ug/L			12/01/11 19:30	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			12/01/11 19:30	1
Chloroform	ND		5.0	0.54	ug/L			12/01/11 19:30	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			12/01/11 19:30	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			12/01/11 19:30	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			12/01/11 19:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		72 - 130		12/01/11 19:30	1
4-Bromofluorobenzene (Surr)	99		69 - 121		12/01/11 19:30	1
Toluene-d8 (Surr)	98		70 - 123		12/01/11 19:30	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		3.0	0.15	ug/L		12/02/11 08:25	12/07/11 06:12	1
Thallium	ND		0.50	0.0080	ug/L		12/02/11 08:25	12/07/11 06:12	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		12/02/11 08:20	12/05/11 19:07	1
Arsenic	ND		0.010	0.0056	mg/L		12/02/11 08:20	12/05/11 19:07	1
Barium	0.025		0.0020	0.00050	mg/L		12/02/11 08:20	12/05/11 19:07	1
Beryllium	ND		0.0020	0.00030	mg/L		12/02/11 08:20	12/05/11 19:07	1
Cadmium	ND		0.0010	0.00033	mg/L		12/02/11 08:20	12/05/11 19:07	1
Calcium	21.2		0.50	0.10	mg/L		12/02/11 08:20	12/05/11 19:07	1
Chromium	ND		0.0040	0.00087	mg/L		12/02/11 08:20	12/05/11 19:07	1
Cobalt	ND		0.0040	0.00063	mg/L		12/02/11 08:20	12/05/11 19:07	1
Copper	0.079		0.010	0.0015	mg/L		12/02/11 08:20	12/05/11 19:07	1
Iron	0.039	J	0.050	0.019	mg/L		12/02/11 08:20	12/05/11 19:07	1
Lead	ND		0.0050	0.0030	mg/L		12/02/11 08:20	12/05/11 19:07	1
Magnesium	5.8		0.20	0.043	mg/L		12/02/11 08:20	12/05/11 19:07	1
Manganese	0.0014	J	0.0030	0.00030	mg/L		12/02/11 08:20	12/05/11 19:07	1
Nickel	ND		0.010	0.0013	mg/L		12/02/11 08:20	12/05/11 19:07	1
Potassium	2.4		0.50	0.20	mg/L		12/02/11 08:20	12/05/11 19:07	1
Selenium	ND		0.015	0.0087	mg/L		12/02/11 08:20	12/05/11 19:07	1
Silver	ND		0.0030	0.0017	mg/L		12/02/11 08:20	12/05/11 19:07	1
Sodium	64.8		1.0	0.32	mg/L		12/02/11 08:20	12/05/11 19:07	1
Vanadium	ND		0.0050	0.0011	mg/L		12/02/11 08:20	12/05/11 19:07	1
Zinc	0.076		0.010	0.0017	mg/L		12/02/11 08:20	12/05/11 19:07	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		12/02/11 11:10	12/02/11 16:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	30.9	B	10.0	4.0	mg/L			12/09/11 07:42	1
Total Kjeldahl Nitrogen	ND		0.20	0.15	mg/L		12/03/11 10:04	12/06/11 09:12	1

Client Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: PW-1

Date Collected: 11/29/11 13:25

Date Received: 11/30/11 10:15

Lab Sample ID: 480-13301-6

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	6.4	J	10.0	5.0	mg/L			12/03/11 11:00	1
Hardness as calcium carbonate	80.0		20.0	5.3	mg/L			12/01/11 15:27	1

Client Sample ID: PW-2

Date Collected: 11/29/11 11:30

Date Received: 11/30/11 10:15

Lab Sample ID: 480-13301-7

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.60	ug/L			12/01/11 19:56	1
Chlorobenzene	ND		5.0	0.48	ug/L			12/01/11 19:56	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			12/01/11 19:56	1
Vinyl chloride	ND		2.0	0.75	ug/L			12/01/11 19:56	1
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			12/01/11 19:56	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			12/01/11 19:56	1
Bromoform	ND		5.0	0.47	ug/L			12/01/11 19:56	1
Tetrachloroethene	ND		5.0	0.34	ug/L			12/01/11 19:56	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			12/01/11 19:56	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			12/01/11 19:56	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			12/01/11 19:56	1
Methylene Chloride	ND		5.0	0.81	ug/L			12/01/11 19:56	1
Chloromethane	ND		5.0	0.64	ug/L			12/01/11 19:56	1
Bromomethane	ND		5.0	1.2	ug/L			12/01/11 19:56	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			12/01/11 19:56	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			12/01/11 19:56	1
Toluene	ND		5.0	0.45	ug/L			12/01/11 19:56	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			12/01/11 19:56	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			12/01/11 19:56	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			12/01/11 19:56	1
Chloroethane	ND		5.0	0.87	ug/L			12/01/11 19:56	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			12/01/11 19:56	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			12/01/11 19:56	1
Trichloroethene	ND		5.0	0.60	ug/L			12/01/11 19:56	1
Acrylonitrile	ND		25	1.9	ug/L			12/01/11 19:56	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			12/01/11 19:56	1
Ethylbenzene	ND		5.0	0.46	ug/L			12/01/11 19:56	1
Acrolein	ND		100	17	ug/L			12/01/11 19:56	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			12/01/11 19:56	1
Chloroform	ND		5.0	0.54	ug/L			12/01/11 19:56	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			12/01/11 19:56	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			12/01/11 19:56	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			12/01/11 19:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		72 - 130		12/01/11 19:56	1
4-Bromofluorobenzene (Surr)	99		69 - 121		12/01/11 19:56	1
Toluene-d8 (Surr)	98		70 - 123		12/01/11 19:56	1

Client Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: PW-2

Lab Sample ID: 480-13301-7

Date Collected: 11/29/11 11:30

Matrix: Water

Date Received: 11/30/11 10:15

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		3.0	0.15	ug/L		12/02/11 08:25	12/07/11 06:18	1
Thallium	ND		0.50	0.0080	ug/L		12/02/11 08:25	12/07/11 06:18	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		12/02/11 08:20	12/05/11 19:09	1
Arsenic	ND		0.010	0.0056	mg/L		12/02/11 08:20	12/05/11 19:09	1
Barium	0.0019	J	0.0020	0.00050	mg/L		12/02/11 08:20	12/05/11 19:09	1
Beryllium	ND		0.0020	0.00030	mg/L		12/02/11 08:20	12/05/11 19:09	1
Cadmium	ND		0.0010	0.00033	mg/L		12/02/11 08:20	12/05/11 19:09	1
Calcium	34.9		0.50	0.10	mg/L		12/02/11 08:20	12/05/11 19:09	1
Chromium	ND		0.0040	0.00087	mg/L		12/02/11 08:20	12/05/11 19:09	1
Cobalt	ND		0.0040	0.00063	mg/L		12/02/11 08:20	12/05/11 19:09	1
Copper	0.014		0.010	0.0015	mg/L		12/02/11 08:20	12/05/11 19:09	1
Iron	0.087		0.050	0.019	mg/L		12/02/11 08:20	12/05/11 19:09	1
Lead	ND		0.0050	0.0030	mg/L		12/02/11 08:20	12/05/11 19:09	1
Magnesium	4.1		0.20	0.043	mg/L		12/02/11 08:20	12/05/11 19:09	1
Manganese	0.0013	J	0.0030	0.00030	mg/L		12/02/11 08:20	12/05/11 19:09	1
Nickel	0.0016	J	0.010	0.0013	mg/L		12/02/11 08:20	12/05/11 19:09	1
Potassium	1.2		0.50	0.20	mg/L		12/02/11 08:20	12/05/11 19:09	1
Selenium	ND		0.015	0.0087	mg/L		12/02/11 08:20	12/05/11 19:09	1
Silver	ND		0.0030	0.0017	mg/L		12/02/11 08:20	12/05/11 19:09	1
Sodium	9.9		1.0	0.32	mg/L		12/02/11 08:20	12/05/11 19:09	1
Vanadium	ND		0.0050	0.0011	mg/L		12/02/11 08:20	12/05/11 19:09	1
Zinc	0.024		0.010	0.0017	mg/L		12/02/11 08:20	12/05/11 19:09	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		12/02/11 11:10	12/02/11 16:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	154		100	40.0	mg/L			12/09/11 07:21	10
Total Kjeldahl Nitrogen	ND		0.20	0.15	mg/L		12/03/11 10:04	12/06/11 09:18	1
Chemical Oxygen Demand	5.4	J	10.0	5.0	mg/L			12/03/11 11:00	1
Hardness as calcium carbonate	120		20.0	5.3	mg/L			12/01/11 15:27	1

Client Sample ID: SVWC-96

Lab Sample ID: 480-13301-8

Date Collected: 11/29/11 10:45

Matrix: Water

Date Received: 11/30/11 10:15

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.60	ug/L			12/01/11 20:22	1
Chlorobenzene	ND		5.0	0.48	ug/L			12/01/11 20:22	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			12/01/11 20:22	1
Vinyl chloride	ND		2.0	0.75	ug/L			12/01/11 20:22	1
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			12/01/11 20:22	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			12/01/11 20:22	1
Bromoform	ND		5.0	0.47	ug/L			12/01/11 20:22	1

Client Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: SVWC-96

Lab Sample ID: 480-13301-8

Date Collected: 11/29/11 10:45

Matrix: Water

Date Received: 11/30/11 10:15

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		5.0	0.34	ug/L			12/01/11 20:22	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			12/01/11 20:22	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			12/01/11 20:22	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			12/01/11 20:22	1
Methylene Chloride	ND		5.0	0.81	ug/L			12/01/11 20:22	1
Chloromethane	ND		5.0	0.64	ug/L			12/01/11 20:22	1
Bromomethane	ND		5.0	1.2	ug/L			12/01/11 20:22	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			12/01/11 20:22	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			12/01/11 20:22	1
Toluene	ND		5.0	0.45	ug/L			12/01/11 20:22	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			12/01/11 20:22	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			12/01/11 20:22	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			12/01/11 20:22	1
Chloroethane	ND		5.0	0.87	ug/L			12/01/11 20:22	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			12/01/11 20:22	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			12/01/11 20:22	1
Trichloroethene	ND		5.0	0.60	ug/L			12/01/11 20:22	1
Acrylonitrile	ND		25	1.9	ug/L			12/01/11 20:22	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			12/01/11 20:22	1
Ethylbenzene	ND		5.0	0.46	ug/L			12/01/11 20:22	1
Acrolein	ND		100	17	ug/L			12/01/11 20:22	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			12/01/11 20:22	1
Chloroform	ND		5.0	0.54	ug/L			12/01/11 20:22	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			12/01/11 20:22	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			12/01/11 20:22	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			12/01/11 20:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		72 - 130		12/01/11 20:22	1
4-Bromofluorobenzene (Surr)	98		69 - 121		12/01/11 20:22	1
Toluene-d8 (Surr)	97		70 - 123		12/01/11 20:22	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		3.0	0.15	ug/L		12/02/11 08:25	12/07/11 06:23	1
Thallium	ND		0.50	0.0080	ug/L		12/02/11 08:25	12/07/11 06:23	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		12/02/11 08:20	12/05/11 19:12	1
Arsenic	ND		0.010	0.0056	mg/L		12/02/11 08:20	12/05/11 19:12	1
Barium	0.0076		0.0020	0.00050	mg/L		12/02/11 08:20	12/05/11 19:12	1
Beryllium	ND		0.0020	0.00030	mg/L		12/02/11 08:20	12/05/11 19:12	1
Cadmium	ND		0.0010	0.00033	mg/L		12/02/11 08:20	12/05/11 19:12	1
Calcium	16.3		0.50	0.10	mg/L		12/02/11 08:20	12/05/11 19:12	1
Chromium	ND		0.0040	0.00087	mg/L		12/02/11 08:20	12/05/11 19:12	1
Cobalt	ND		0.0040	0.00063	mg/L		12/02/11 08:20	12/05/11 19:12	1
Copper	0.0084	J	0.010	0.0015	mg/L		12/02/11 08:20	12/05/11 19:12	1
Iron	ND		0.050	0.019	mg/L		12/02/11 08:20	12/05/11 19:12	1
Lead	ND		0.0050	0.0030	mg/L		12/02/11 08:20	12/05/11 19:12	1
Magnesium	4.5		0.20	0.043	mg/L		12/02/11 08:20	12/05/11 19:12	1

Client Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: SVWC-96

Date Collected: 11/29/11 10:45

Date Received: 11/30/11 10:15

Lab Sample ID: 480-13301-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		0.0030	0.00030	mg/L		12/02/11 08:20	12/05/11 19:12	1
Nickel	ND		0.010	0.0013	mg/L		12/02/11 08:20	12/05/11 19:12	1
Potassium	1.4		0.50	0.20	mg/L		12/02/11 08:20	12/05/11 19:12	1
Selenium	ND		0.015	0.0087	mg/L		12/02/11 08:20	12/05/11 19:12	1
Silver	ND		0.0030	0.0017	mg/L		12/02/11 08:20	12/05/11 19:12	1
Sodium	49.6		1.0	0.32	mg/L		12/02/11 08:20	12/05/11 19:12	1
Vanadium	ND		0.0050	0.0011	mg/L		12/02/11 08:20	12/05/11 19:12	1
Zinc	0.018		0.010	0.0017	mg/L		12/02/11 08:20	12/05/11 19:12	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		12/02/11 11:10	12/02/11 16:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	74.2	B	10.0	4.0	mg/L			12/09/11 07:42	1
Total Kjeldahl Nitrogen	ND		0.20	0.15	mg/L		12/03/11 10:04	12/06/11 09:18	1
Chemical Oxygen Demand	ND		10.0	5.0	mg/L			12/05/11 17:10	1
Hardness as calcium carbonate	100		20.0	5.3	mg/L			12/01/11 15:27	1

Client Sample ID: SVWC-94

Date Collected: 11/29/11 10:30

Date Received: 11/30/11 10:15

Lab Sample ID: 480-13301-9

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.60	ug/L			12/01/11 21:40	1
Chlorobenzene	ND		5.0	0.48	ug/L			12/01/11 21:40	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			12/01/11 21:40	1
Vinyl chloride	ND		2.0	0.75	ug/L			12/01/11 21:40	1
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			12/01/11 21:40	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			12/01/11 21:40	1
Bromoform	ND		5.0	0.47	ug/L			12/01/11 21:40	1
Tetrachloroethene	ND		5.0	0.34	ug/L			12/01/11 21:40	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			12/01/11 21:40	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			12/01/11 21:40	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			12/01/11 21:40	1
Methylene Chloride	ND		5.0	0.81	ug/L			12/01/11 21:40	1
Chloromethane	ND		5.0	0.64	ug/L			12/01/11 21:40	1
Bromomethane	ND		5.0	1.2	ug/L			12/01/11 21:40	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			12/01/11 21:40	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			12/01/11 21:40	1
Toluene	ND		5.0	0.45	ug/L			12/01/11 21:40	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			12/01/11 21:40	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			12/01/11 21:40	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			12/01/11 21:40	1
Chloroethane	ND		5.0	0.87	ug/L			12/01/11 21:40	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			12/01/11 21:40	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			12/01/11 21:40	1
Trichloroethene	ND		5.0	0.60	ug/L			12/01/11 21:40	1

Client Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: SVWC-94

Lab Sample ID: 480-13301-9

Date Collected: 11/29/11 10:30

Matrix: Water

Date Received: 11/30/11 10:15

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrylonitrile	ND		25	1.9	ug/L			12/01/11 21:40	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			12/01/11 21:40	1
Ethylbenzene	ND		5.0	0.46	ug/L			12/01/11 21:40	1
Acrolein	ND		100	17	ug/L			12/01/11 21:40	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			12/01/11 21:40	1
Chloroform	ND		5.0	0.54	ug/L			12/01/11 21:40	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			12/01/11 21:40	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			12/01/11 21:40	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			12/01/11 21:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		72 - 130					12/01/11 21:40	1
4-Bromofluorobenzene (Surr)	99		69 - 121					12/01/11 21:40	1
Toluene-d8 (Surr)	98		70 - 123					12/01/11 21:40	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.40	J	3.0	0.15	ug/L		12/02/11 08:25	12/07/11 06:50	1
Thallium	ND		0.50	0.0080	ug/L		12/02/11 08:25	12/07/11 06:50	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		12/02/11 08:20	12/05/11 19:23	1
Arsenic	ND		0.010	0.0056	mg/L		12/02/11 08:20	12/05/11 19:23	1
Barium	0.0090		0.0020	0.00050	mg/L		12/02/11 08:20	12/05/11 19:23	1
Beryllium	ND		0.0020	0.00030	mg/L		12/02/11 08:20	12/05/11 19:23	1
Cadmium	ND		0.0010	0.00033	mg/L		12/02/11 08:20	12/05/11 19:23	1
Calcium	13.9		0.50	0.10	mg/L		12/02/11 08:20	12/05/11 19:23	1
Chromium	ND		0.0040	0.00087	mg/L		12/02/11 08:20	12/05/11 19:23	1
Cobalt	ND		0.0040	0.00063	mg/L		12/02/11 08:20	12/05/11 19:23	1
Copper	0.0050	J	0.010	0.0015	mg/L		12/02/11 08:20	12/05/11 19:23	1
Iron	ND		0.050	0.019	mg/L		12/02/11 08:20	12/05/11 19:23	1
Lead	ND		0.0050	0.0030	mg/L		12/02/11 08:20	12/05/11 19:23	1
Magnesium	3.6		0.20	0.043	mg/L		12/02/11 08:20	12/05/11 19:23	1
Manganese	ND		0.0030	0.00030	mg/L		12/02/11 08:20	12/05/11 19:23	1
Nickel	ND		0.010	0.0013	mg/L		12/02/11 08:20	12/05/11 19:23	1
Potassium	1.4		0.50	0.20	mg/L		12/02/11 08:20	12/05/11 19:23	1
Selenium	ND		0.015	0.0087	mg/L		12/02/11 08:20	12/05/11 19:23	1
Silver	ND		0.0030	0.0017	mg/L		12/02/11 08:20	12/05/11 19:23	1
Sodium	37.6		1.0	0.32	mg/L		12/02/11 08:20	12/05/11 19:23	1
Vanadium	ND		0.0050	0.0011	mg/L		12/02/11 08:20	12/05/11 19:23	1
Zinc	0.0081	J	0.010	0.0017	mg/L		12/02/11 08:20	12/05/11 19:23	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		12/02/11 11:10	12/02/11 16:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	57.8	B	10.0	4.0	mg/L			12/09/11 07:42	1
Total Kjeldahl Nitrogen	ND		0.20	0.15	mg/L		12/03/11 10:04	12/06/11 09:18	1

Client Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: SVWC-94

Date Collected: 11/29/11 10:30

Date Received: 11/30/11 10:15

Lab Sample ID: 480-13301-9

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0	5.0	mg/L			12/05/11 17:10	1
Hardness as calcium carbonate	80.0		20.0	5.3	mg/L			12/01/11 15:27	1

Client Sample ID: SVWC-93

Date Collected: 11/29/11 10:05

Date Received: 11/30/11 10:15

Lab Sample ID: 480-13301-10

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.60	ug/L			12/01/11 22:06	1
Chlorobenzene	ND		5.0	0.48	ug/L			12/01/11 22:06	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			12/01/11 22:06	1
Vinyl chloride	ND		2.0	0.75	ug/L			12/01/11 22:06	1
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			12/01/11 22:06	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			12/01/11 22:06	1
Bromoform	ND		5.0	0.47	ug/L			12/01/11 22:06	1
Tetrachloroethene	ND		5.0	0.34	ug/L			12/01/11 22:06	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			12/01/11 22:06	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			12/01/11 22:06	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			12/01/11 22:06	1
Methylene Chloride	ND		5.0	0.81	ug/L			12/01/11 22:06	1
Chloromethane	ND		5.0	0.64	ug/L			12/01/11 22:06	1
Bromomethane	ND		5.0	1.2	ug/L			12/01/11 22:06	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			12/01/11 22:06	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			12/01/11 22:06	1
Toluene	ND		5.0	0.45	ug/L			12/01/11 22:06	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			12/01/11 22:06	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			12/01/11 22:06	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			12/01/11 22:06	1
Chloroethane	ND		5.0	0.87	ug/L			12/01/11 22:06	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			12/01/11 22:06	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			12/01/11 22:06	1
Trichloroethene	ND		5.0	0.60	ug/L			12/01/11 22:06	1
Acrylonitrile	ND		25	1.9	ug/L			12/01/11 22:06	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			12/01/11 22:06	1
Ethylbenzene	ND		5.0	0.46	ug/L			12/01/11 22:06	1
Acrolein	ND		100	17	ug/L			12/01/11 22:06	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			12/01/11 22:06	1
Chloroform	ND		5.0	0.54	ug/L			12/01/11 22:06	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			12/01/11 22:06	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			12/01/11 22:06	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			12/01/11 22:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		72 - 130		12/01/11 22:06	1
4-Bromofluorobenzene (Surr)	99		69 - 121		12/01/11 22:06	1
Toluene-d8 (Surr)	98		70 - 123		12/01/11 22:06	1

Client Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: SVWC-93

Lab Sample ID: 480-13301-10

Date Collected: 11/29/11 10:05

Matrix: Water

Date Received: 11/30/11 10:15

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		3.0	0.15	ug/L		12/02/11 08:25	12/07/11 07:06	1
Thallium	ND		0.50	0.0080	ug/L		12/02/11 08:25	12/07/11 07:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		12/02/11 08:20	12/05/11 19:25	1
Arsenic	ND		0.010	0.0056	mg/L		12/02/11 08:20	12/05/11 19:25	1
Barium	0.0059		0.0020	0.00050	mg/L		12/02/11 08:20	12/05/11 19:25	1
Beryllium	ND		0.0020	0.00030	mg/L		12/02/11 08:20	12/05/11 19:25	1
Cadmium	ND		0.0010	0.00033	mg/L		12/02/11 08:20	12/05/11 19:25	1
Calcium	14.0		0.50	0.10	mg/L		12/02/11 08:20	12/05/11 19:25	1
Chromium	0.00089	J	0.0040	0.00087	mg/L		12/02/11 08:20	12/05/11 19:25	1
Cobalt	ND		0.0040	0.00063	mg/L		12/02/11 08:20	12/05/11 19:25	1
Copper	0.0065	J	0.010	0.0015	mg/L		12/02/11 08:20	12/05/11 19:25	1
Iron	ND		0.050	0.019	mg/L		12/02/11 08:20	12/05/11 19:25	1
Lead	ND		0.0050	0.0030	mg/L		12/02/11 08:20	12/05/11 19:25	1
Magnesium	3.5		0.20	0.043	mg/L		12/02/11 08:20	12/05/11 19:25	1
Manganese	ND		0.0030	0.00030	mg/L		12/02/11 08:20	12/05/11 19:25	1
Nickel	ND		0.010	0.0013	mg/L		12/02/11 08:20	12/05/11 19:25	1
Potassium	1.4		0.50	0.20	mg/L		12/02/11 08:20	12/05/11 19:25	1
Selenium	ND		0.015	0.0087	mg/L		12/02/11 08:20	12/05/11 19:25	1
Silver	ND		0.0030	0.0017	mg/L		12/02/11 08:20	12/05/11 19:25	1
Sodium	39.1		1.0	0.32	mg/L		12/02/11 08:20	12/05/11 19:25	1
Vanadium	ND		0.0050	0.0011	mg/L		12/02/11 08:20	12/05/11 19:25	1
Zinc	0.039		0.010	0.0017	mg/L		12/02/11 08:20	12/05/11 19:25	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		12/02/11 11:10	12/02/11 16:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	67.8	B	10.0	4.0	mg/L			12/09/11 07:42	1
Total Kjeldahl Nitrogen	ND		0.20	0.15	mg/L		12/03/11 10:04	12/06/11 09:25	1
Chemical Oxygen Demand	ND		10.0	5.0	mg/L			12/05/11 17:10	1
Hardness as calcium carbonate	40.0		20.0	5.3	mg/L			12/01/11 15:27	1

Surrogate Summary

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (72-130)	BFB (69-121)	TOL (70-123)
480-13301-1	TRIP BLANK	102	100	98
480-13301-2	DUP	104	99	98
480-13301-3	9-R	101	99	99
480-13301-4	9-I	101	97	97
480-13301-5	9-OS	101	100	99
480-13301-6	PW-1	103	99	98
480-13301-7	PW-2	102	99	98
480-13301-8	SVWC-96	99	98	97
480-13301-8 MS	SVWC-96	100	100	98
480-13301-8 MSD	SVWC-96	100	102	98
480-13301-9	SVWC-94	102	99	98
480-13301-10	SVWC-93	100	99	98
LCS 480-42433/3	Lab Control Sample	98	100	98
MB 480-42433/5	Method Blank	102	97	97

Surrogate Legend

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

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-42433/5

Matrix: Water

Analysis Batch: 42433

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.60	ug/L			12/01/11 12:57	1
Chlorobenzene	ND		5.0	0.48	ug/L			12/01/11 12:57	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			12/01/11 12:57	1
Vinyl chloride	ND		2.0	0.75	ug/L			12/01/11 12:57	1
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			12/01/11 12:57	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			12/01/11 12:57	1
Bromoform	ND		5.0	0.47	ug/L			12/01/11 12:57	1
Tetrachloroethene	ND		5.0	0.34	ug/L			12/01/11 12:57	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			12/01/11 12:57	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			12/01/11 12:57	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			12/01/11 12:57	1
Methylene Chloride	ND		5.0	0.81	ug/L			12/01/11 12:57	1
Chloromethane	ND		5.0	0.64	ug/L			12/01/11 12:57	1
Bromomethane	ND		5.0	1.2	ug/L			12/01/11 12:57	1
Chlorodibromomethane	ND		5.0	0.41	ug/L			12/01/11 12:57	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			12/01/11 12:57	1
Toluene	ND		5.0	0.45	ug/L			12/01/11 12:57	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			12/01/11 12:57	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/L			12/01/11 12:57	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			12/01/11 12:57	1
Chloroethane	ND		5.0	0.87	ug/L			12/01/11 12:57	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			12/01/11 12:57	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			12/01/11 12:57	1
Trichloroethene	ND		5.0	0.60	ug/L			12/01/11 12:57	1
Acrylonitrile	ND		25	1.9	ug/L			12/01/11 12:57	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			12/01/11 12:57	1
Ethylbenzene	ND		5.0	0.46	ug/L			12/01/11 12:57	1
Acrolein	ND		100	17	ug/L			12/01/11 12:57	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			12/01/11 12:57	1
Chloroform	ND		5.0	0.54	ug/L			12/01/11 12:57	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			12/01/11 12:57	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			12/01/11 12:57	1
Dichlorobromomethane	ND		5.0	0.54	ug/L			12/01/11 12:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		72 - 130		12/01/11 12:57	1
4-Bromofluorobenzene (Surr)	97		69 - 121		12/01/11 12:57	1
Toluene-d8 (Surr)	97		70 - 123		12/01/11 12:57	1

Lab Sample ID: LCS 480-42433/3

Matrix: Water

Analysis Batch: 42433

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	21.5		ug/L		108	64 - 136
Chlorobenzene	20.0	21.2		ug/L		106	66 - 134
1,1-Dichloroethane	20.0	20.6		ug/L		103	73 - 128
Vinyl chloride	20.0	19.2		ug/L		96	4 - 196

QC Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-42433/3

Matrix: Water

Analysis Batch: 42433

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		72 - 130
4-Bromofluorobenzene (Surr)	100		69 - 121
Toluene-d8 (Surr)	98		70 - 123

Lab Sample ID: 480-13301-8 MS

Matrix: Water

Analysis Batch: 42433

Client Sample ID: SVWC-96

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		20.0	22.0		ug/L		110	64 - 136
Chlorobenzene	ND		20.0	20.4		ug/L		102	66 - 134
1,1-Dichloroethane	ND		20.0	20.7		ug/L		104	73 - 128
Vinyl chloride	ND		20.0	20.1		ug/L		101	4 - 196
1,1,1-Trichloroethane	ND		20.0	ND	F	ug/L		0	75 - 125
cis-1,3-Dichloropropene	ND		20.0	ND	F	ug/L		0	24 - 176
Bromoform	ND		20.0	ND	F	ug/L		0	71 - 129
Tetrachloroethene	ND		20.0	ND	F	ug/L		0	74 - 127
1,2-Dichloroethane	ND		20.0	ND	F	ug/L		0	68 - 132
1,2-Dichloropropane	ND		20.0	ND	F	ug/L		0	34 - 166
1,1,2-Trichloroethane	ND		20.0	ND	F	ug/L		0	71 - 129
Methylene Chloride	ND		20.0	ND	F	ug/L		0	61 - 140
Chloromethane	ND		20.0	ND	F	ug/L		0	1 - 204
Bromomethane	ND		20.0	ND	F	ug/L		0	14 - 186
Chlorodibromomethane	ND		20.0	ND	F	ug/L		0	68 - 133
Toluene	ND		20.0	ND	F	ug/L		0	75 - 126
1,3-Dichlorobenzene	ND		20.0	ND	F	ug/L		0	73 - 127
trans-1,2-Dichloroethene	ND		20.0	ND	F	ug/L		0	72 - 133
1,1,2,2-Tetrachloroethane	ND		20.0	ND	F	ug/L		0	61 - 140
Chloroethane	ND		20.0	ND	F	ug/L		0	38 - 162
1,1-Dichloroethene	ND		20.0	ND	F	ug/L		0	51 - 150
1,2-Dichlorobenzene	ND		20.0	ND	F	ug/L		0	63 - 137
Trichloroethene	ND		20.0	ND	F	ug/L		0	67 - 134
2-Chloroethyl vinyl ether	ND		100	ND	F	ug/L		0	1 - 224
Ethylbenzene	ND		20.0	ND	F	ug/L		0	59 - 141
trans-1,3-Dichloropropene	ND		20.0	ND	F	ug/L		0	50 - 150
Chloroform	ND		20.0	ND	F	ug/L		0	68 - 133
Carbon tetrachloride	ND		20.0	ND	F	ug/L		0	73 - 127
1,4-Dichlorobenzene	ND		20.0	ND	F	ug/L		0	63 - 137
Dichlorobromomethane	ND		20.0	ND	F	ug/L		0	66 - 135

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		72 - 130
4-Bromofluorobenzene (Surr)	100		69 - 121
Toluene-d8 (Surr)	98		70 - 123

QC Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-13301-8 MSD

Matrix: Water

Analysis Batch: 42433

Client Sample ID: SVWC-96

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		20.0	21.9		ug/L		110	64 - 136	0	15
Chlorobenzene	ND		20.0	21.2		ug/L		106	66 - 134	4	15
1,1-Dichloroethane	ND		20.0	21.2		ug/L		106	73 - 128	2	15
Vinyl chloride	ND		20.0	20.3		ug/L		102	4 - 196	1	15
1,1,1-Trichloroethane	ND		20.0	ND	F	ug/L		0	75 - 125	NC	15
cis-1,3-Dichloropropene	ND		20.0	ND	F	ug/L		0	24 - 176	NC	15
Bromoform	ND		20.0	ND	F	ug/L		0	71 - 129	NC	15
Tetrachloroethene	ND		20.0	ND	F	ug/L		0	74 - 127	NC	15
1,2-Dichloroethane	ND		20.0	ND	F	ug/L		0	68 - 132	NC	15
1,2-Dichloropropane	ND		20.0	ND	F	ug/L		0	34 - 166	NC	15
1,1,2-Trichloroethane	ND		20.0	ND	F	ug/L		0	71 - 129	NC	15
Methylene Chloride	ND		20.0	ND	F	ug/L		0	61 - 140	NC	15
Chloromethane	ND		20.0	ND	F	ug/L		0	1 - 204	NC	15
Bromomethane	ND		20.0	ND	F	ug/L		0	14 - 186	NC	15
Chlorodibromomethane	ND		20.0	ND	F	ug/L		0	68 - 133	NC	15
Toluene	ND		20.0	ND	F	ug/L		0	75 - 126	NC	15
1,3-Dichlorobenzene	ND		20.0	ND	F	ug/L		0	73 - 127	NC	15
trans-1,2-Dichloroethene	ND		20.0	ND	F	ug/L		0	72 - 133	NC	15
1,1,2,2-Tetrachloroethane	ND		20.0	ND	F	ug/L		0	61 - 140	NC	15
Chloroethane	ND		20.0	ND	F	ug/L		0	38 - 162	NC	15
1,1-Dichloroethene	ND		20.0	ND	F	ug/L		0	51 - 150	NC	15
1,2-Dichlorobenzene	ND		20.0	ND	F	ug/L		0	63 - 137	NC	15
Trichloroethene	ND		20.0	ND	F	ug/L		0	67 - 134	NC	15
2-Chloroethyl vinyl ether	ND		100	ND	F	ug/L		0	1 - 224	NC	15
Ethylbenzene	ND		20.0	ND	F	ug/L		0	59 - 141	NC	15
trans-1,3-Dichloropropene	ND		20.0	ND	F	ug/L		0	50 - 150	NC	15
Chloroform	ND		20.0	ND	F	ug/L		0	68 - 133	NC	15
Carbon tetrachloride	ND		20.0	ND	F	ug/L		0	73 - 127	NC	15
1,4-Dichlorobenzene	ND		20.0	ND	F	ug/L		0	63 - 137	NC	15
Dichlorobromomethane	ND		20.0	ND	F	ug/L		0	66 - 135	NC	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		72 - 130
4-Bromofluorobenzene (Surr)	102		69 - 121
Toluene-d8 (Surr)	98		70 - 123

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 480-42521/1-A

Matrix: Water

Analysis Batch: 43240

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 42521

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		3.0	0.15	ug/L		12/02/11 08:25	12/07/11 04:14	1
Thallium	ND		0.50	0.0080	ug/L		12/02/11 08:25	12/07/11 04:14	1

QC Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 480-42521/2-A

Matrix: Water

Analysis Batch: 43240

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 42521

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	20.0	19.74		ug/L		99	85 - 115
Thallium	20.0	20.73		ug/L		104	85 - 115

Lab Sample ID: 480-13301-8 MS

Matrix: Water

Analysis Batch: 43240

Client Sample ID: SVWC-96

Prep Type: Total/NA

Prep Batch: 42521

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		20.0	21.99		ug/L		110	70 - 130
Thallium	ND		20.0	20.48		ug/L		102	70 - 130

Lab Sample ID: 480-13301-8 MSD

Matrix: Water

Analysis Batch: 43240

Client Sample ID: SVWC-96

Prep Type: Total/NA

Prep Batch: 42521

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		20.0	21.86		ug/L		109	70 - 130	1	20
Thallium	ND		20.0	20.32		ug/L		102	70 - 130	1	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 480-42520/1-A

Matrix: Water

Analysis Batch: 42988

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 42520

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		12/02/11 08:20	12/05/11 18:20	1
Arsenic	ND		0.010	0.0056	mg/L		12/02/11 08:20	12/05/11 18:20	1
Barium	ND		0.0020	0.00050	mg/L		12/02/11 08:20	12/05/11 18:20	1
Beryllium	ND		0.0020	0.00030	mg/L		12/02/11 08:20	12/05/11 18:20	1
Cadmium	ND		0.0010	0.00033	mg/L		12/02/11 08:20	12/05/11 18:20	1
Calcium	ND		0.50	0.10	mg/L		12/02/11 08:20	12/05/11 18:20	1
Chromium	ND		0.0040	0.00087	mg/L		12/02/11 08:20	12/05/11 18:20	1
Cobalt	ND		0.0040	0.00063	mg/L		12/02/11 08:20	12/05/11 18:20	1
Copper	ND		0.010	0.0015	mg/L		12/02/11 08:20	12/05/11 18:20	1
Iron	ND		0.050	0.019	mg/L		12/02/11 08:20	12/05/11 18:20	1
Lead	ND		0.0050	0.0030	mg/L		12/02/11 08:20	12/05/11 18:20	1
Magnesium	ND		0.20	0.043	mg/L		12/02/11 08:20	12/05/11 18:20	1
Manganese	ND		0.0030	0.00030	mg/L		12/02/11 08:20	12/05/11 18:20	1
Nickel	ND		0.010	0.0013	mg/L		12/02/11 08:20	12/05/11 18:20	1
Potassium	ND		0.50	0.20	mg/L		12/02/11 08:20	12/05/11 18:20	1
Selenium	ND		0.015	0.0087	mg/L		12/02/11 08:20	12/05/11 18:20	1
Silver	ND		0.0030	0.0017	mg/L		12/02/11 08:20	12/05/11 18:20	1
Sodium	ND		1.0	0.32	mg/L		12/02/11 08:20	12/05/11 18:20	1
Vanadium	ND		0.0050	0.0011	mg/L		12/02/11 08:20	12/05/11 18:20	1
Zinc	ND		0.010	0.0017	mg/L		12/02/11 08:20	12/05/11 18:20	1

QC Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

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

Lab Sample ID: LCS 480-42520/2-A

Matrix: Water

Analysis Batch: 42988

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 42520

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	9.50		mg/L		95	80 - 120
Arsenic	0.200	0.196		mg/L		98	80 - 120
Barium	0.200	0.195		mg/L		97	80 - 120
Beryllium	0.200	0.196		mg/L		98	80 - 120
Cadmium	0.200	0.198		mg/L		99	80 - 120
Calcium	10.0	10.06		mg/L		101	80 - 120
Chromium	0.200	0.200		mg/L		100	80 - 120
Cobalt	0.200	0.186		mg/L		93	80 - 120
Copper	0.200	0.203		mg/L		102	80 - 120
Iron	10.0	9.48		mg/L		95	80 - 120
Lead	0.200	0.197		mg/L		98	80 - 120
Magnesium	10.0	10.27		mg/L		103	80 - 120
Manganese	0.200	0.202		mg/L		101	80 - 120
Nickel	0.200	0.202		mg/L		101	80 - 120
Potassium	10.0	9.30		mg/L		93	80 - 120
Selenium	0.200	0.202		mg/L		101	80 - 120
Silver	0.0500	0.0507		mg/L		101	80 - 120
Sodium	10.0	9.27		mg/L		93	80 - 120
Vanadium	0.200	0.195		mg/L		98	80 - 120
Zinc	0.200	0.213		mg/L		107	80 - 120

Lab Sample ID: 480-13301-8 MS

Matrix: Water

Analysis Batch: 42988

Client Sample ID: SVWC-96

Prep Type: Total/NA

Prep Batch: 42520

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	ND		10.0	9.54		mg/L		95	75 - 125
Arsenic	ND		0.200	0.200		mg/L		100	75 - 125
Barium	0.0076		0.200	0.199		mg/L		96	75 - 125
Beryllium	ND		0.200	0.203		mg/L		102	75 - 125
Cadmium	ND		0.200	0.200		mg/L		100	75 - 125
Calcium	16.3		10.0	26.09		mg/L		97	75 - 125
Chromium	ND		0.200	0.202		mg/L		101	75 - 125
Cobalt	ND		0.200	0.189		mg/L		95	75 - 125
Copper	0.0084	J	0.200	0.209		mg/L		100	75 - 125
Iron	ND		10.0	9.75		mg/L		97	75 - 125
Lead	ND		0.200	0.196		mg/L		98	75 - 125
Magnesium	4.5		10.0	14.57		mg/L		100	75 - 125
Manganese	ND		0.200	0.204		mg/L		102	75 - 125
Nickel	ND		0.200	0.204		mg/L		102	75 - 125
Potassium	1.4		10.0	10.77		mg/L		94	75 - 125
Selenium	ND		0.200	0.200		mg/L		100	75 - 125
Silver	ND		0.0500	0.0503		mg/L		101	75 - 125
Sodium	49.3		10.0	59.28	4	mg/L		99	75 - 125
Vanadium	ND		0.200	0.197		mg/L		98	75 - 125
Zinc	0.018		0.200	0.233		mg/L		108	75 - 125

QC Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

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

Lab Sample ID: 480-13301-8 MSD

Matrix: Water

Analysis Batch: 42988

Client Sample ID: SVWC-96

Prep Type: Total/NA

Prep Batch: 42520

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	ND		10.0	9.84		mg/L		98	75 - 125	3	20
Arsenic	ND		0.200	0.212		mg/L		106	75 - 125	6	20
Barium	0.0076		0.200	0.208		mg/L		100	75 - 125	4	20
Beryllium	ND		0.200	0.212		mg/L		106	75 - 125	4	20
Cadmium	ND		0.200	0.209		mg/L		104	75 - 125	5	20
Calcium	16.3		10.0	27.01		mg/L		107	75 - 125	3	20
Chromium	ND		0.200	0.212		mg/L		106	75 - 125	5	20
Cobalt	ND		0.200	0.198		mg/L		99	75 - 125	4	20
Copper	0.0084	J	0.200	0.220		mg/L		106	75 - 125	5	20
Iron	ND		10.0	10.15		mg/L		101	75 - 125	4	20
Lead	ND		0.200	0.206		mg/L		103	75 - 125	5	20
Magnesium	4.5		10.0	15.15		mg/L		106	75 - 125	4	20
Manganese	ND		0.200	0.212		mg/L		106	75 - 125	4	20
Nickel	ND		0.200	0.215		mg/L		107	75 - 125	5	20
Potassium	1.4		10.0	11.19		mg/L		98	75 - 125	4	20
Selenium	ND		0.200	0.211		mg/L		105	75 - 125	5	20
Silver	ND		0.0500	0.0522		mg/L		104	75 - 125	4	20
Sodium	49.3		10.0	61.00	4	mg/L		117	75 - 125	3	20
Vanadium	ND		0.200	0.205		mg/L		102	75 - 125	4	20
Zinc	0.018		0.200	0.243		mg/L		112	75 - 125	4	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-42626/1-A

Matrix: Water

Analysis Batch: 42797

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 42626

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		12/02/11 11:10	12/02/11 15:30	1

Lab Sample ID: LCS 480-42626/2-A

Matrix: Water

Analysis Batch: 42797

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 42626

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00667	0.00683		mg/L		102	80 - 120

Lab Sample ID: 480-13301-8 MS

Matrix: Water

Analysis Batch: 42797

Client Sample ID: SVWC-96

Prep Type: Total/NA

Prep Batch: 42626

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00667	0.00697		mg/L		104	75 - 125

Lab Sample ID: 480-13301-8 MSD

Matrix: Water

Analysis Batch: 42797

Client Sample ID: SVWC-96

Prep Type: Total/NA

Prep Batch: 42626

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00667	0.00698		mg/L		105	75 - 125	0	20

QC Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Method: 310.2 - Alkalinity

Lab Sample ID: MB 480-43664/81

Matrix: Water

Analysis Batch: 43664

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0	4.0	mg/L			12/09/11 07:11	1

Lab Sample ID: MB 480-43664/99

Matrix: Water

Analysis Batch: 43664

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	4.30	J	10.0	4.0	mg/L			12/09/11 07:42	1

Lab Sample ID: LCS 480-43664/80

Matrix: Water

Analysis Batch: 43664

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	50.0	50.58		mg/L		101	90 - 110

Lab Sample ID: LCS 480-43664/98

Matrix: Water

Analysis Batch: 43664

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	50.0	51.68		mg/L		103	90 - 110

Lab Sample ID: 480-13301-8 MS

Matrix: Water

Analysis Batch: 43664

Client Sample ID: SVWC-96

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	74.2	B	200	131.9		mg/L		29	22 - 128

Lab Sample ID: 480-13301-8 MSD

Matrix: Water

Analysis Batch: 43664

Client Sample ID: SVWC-96

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity, Total	74.2	B	20.0	99.48	F	mg/L		127	22 - 128	28	20

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 480-42768/1-A

Matrix: Water

Analysis Batch: 43026

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 42768

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		0.20	0.15	mg/L		12/03/11 10:04	12/06/11 08:27	1

QC Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: LCS 480-42768/2-A

Matrix: Water

Analysis Batch: 43026

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 42768

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Kjeldahl Nitrogen	2.50	2.62		mg/L		105	90 - 110

Lab Sample ID: 480-13301-8 MS

Matrix: Water

Analysis Batch: 43026

Client Sample ID: SVWC-96

Prep Type: Total/NA

Prep Batch: 42768

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Kjeldahl Nitrogen	ND		1.00	0.953		mg/L		95	72 - 127

Lab Sample ID: 480-13301-8 MSD

Matrix: Water

Analysis Batch: 43026

Client Sample ID: SVWC-96

Prep Type: Total/NA

Prep Batch: 42768

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	ND		1.00	1.07		mg/L		107	72 - 127	12	20

Method: 410.4 - COD

Lab Sample ID: MB 480-42775/27

Matrix: Water

Analysis Batch: 42775

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0	5.0	mg/L			12/03/11 11:00	1

Lab Sample ID: LCS 480-42775/28

Matrix: Water

Analysis Batch: 42775

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	25.0	24.08		mg/L		96	90 - 110

Lab Sample ID: MB 480-42959/27

Matrix: Water

Analysis Batch: 42959

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0	5.0	mg/L			12/05/11 17:10	1

Lab Sample ID: LCS 480-42959/28

Matrix: Water

Analysis Batch: 42959

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	25.0	23.45		mg/L		94	90 - 110

QC Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Method: 410.4 - COD (Continued)

Lab Sample ID: 480-13301-8 MS

Matrix: Water

Analysis Batch: 42959

Client Sample ID: SVWC-96

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	ND		50.0	52.59		mg/L		105	75 - 125

Lab Sample ID: 480-13301-8 MSD

Matrix: Water

Analysis Batch: 42959

Client Sample ID: SVWC-96

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	ND		50.0	43.10		mg/L		86	75 - 125	20	20

Method: SM 2340C - Hardness, Total

Lab Sample ID: MB 480-42516/27

Matrix: Water

Analysis Batch: 42516

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		2.0	0.53	mg/L			12/01/11 15:27	1

Lab Sample ID: MB 480-42516/3

Matrix: Water

Analysis Batch: 42516

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		2.0	0.53	mg/L			12/01/11 15:27	1

Lab Sample ID: LCS 480-42516/28

Matrix: Water

Analysis Batch: 42516

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	250	236.0		mg/L		94	90 - 110

Lab Sample ID: LCS 480-42516/4

Matrix: Water

Analysis Batch: 42516

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	250	244.0		mg/L		98	90 - 110

Lab Sample ID: 480-13301-8 MS

Matrix: Water

Analysis Batch: 42516

Client Sample ID: SVWC-96

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	100		1000	1020		mg/L		92	74 - 130

QC Sample Results

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Method: SM 2340C - Hardness, Total (Continued)

Lab Sample ID: 480-13301-8 MSD

Matrix: Water

Analysis Batch: 42516

Client Sample ID: SVWC-96

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hardness as calcium carbonate	100		1000	1040		mg/L	—	94	74 - 130	2	15

QC Association Summary

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

GC/MS VOA

Analysis Batch: 42433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-13301-1	TRIP BLANK	Total/NA	Water	624	
480-13301-2	DUP	Total/NA	Water	624	
480-13301-3	9-R	Total/NA	Water	624	
480-13301-4	9-I	Total/NA	Water	624	
480-13301-5	9-OS	Total/NA	Water	624	
480-13301-6	PW-1	Total/NA	Water	624	
480-13301-7	PW-2	Total/NA	Water	624	
480-13301-8	SVWC-96	Total/NA	Water	624	
480-13301-8 MS	SVWC-96	Total/NA	Water	624	
480-13301-8 MSD	SVWC-96	Total/NA	Water	624	
480-13301-9	SVWC-94	Total/NA	Water	624	
480-13301-10	SVWC-93	Total/NA	Water	624	
LCS 480-42433/3	Lab Control Sample	Total/NA	Water	624	
MB 480-42433/5	Method Blank	Total/NA	Water	624	

Metals

Prep Batch: 42520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-13301-2	DUP	Total/NA	Water	3005A	
480-13301-3	9-R	Total/NA	Water	3005A	
480-13301-4	9-I	Total/NA	Water	3005A	
480-13301-5	9-OS	Total/NA	Water	3005A	
480-13301-6	PW-1	Total/NA	Water	3005A	
480-13301-7	PW-2	Total/NA	Water	3005A	
480-13301-8	SVWC-96	Total/NA	Water	3005A	
480-13301-8 MS	SVWC-96	Total/NA	Water	3005A	
480-13301-8 MSD	SVWC-96	Total/NA	Water	3005A	
480-13301-9	SVWC-94	Total/NA	Water	3005A	
480-13301-10	SVWC-93	Total/NA	Water	3005A	
LCS 480-42520/2-A	Lab Control Sample	Total/NA	Water	3005A	
MB 480-42520/1-A	Method Blank	Total/NA	Water	3005A	

Prep Batch: 42521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-13301-2	DUP	Total/NA	Water	200.8	
480-13301-3	9-R	Total/NA	Water	200.8	
480-13301-4	9-I	Total/NA	Water	200.8	
480-13301-5	9-OS	Total/NA	Water	200.8	
480-13301-6	PW-1	Total/NA	Water	200.8	
480-13301-7	PW-2	Total/NA	Water	200.8	
480-13301-8	SVWC-96	Total/NA	Water	200.8	
480-13301-8 MS	SVWC-96	Total/NA	Water	200.8	
480-13301-8 MSD	SVWC-96	Total/NA	Water	200.8	
480-13301-9	SVWC-94	Total/NA	Water	200.8	
480-13301-10	SVWC-93	Total/NA	Water	200.8	
LCS 480-42521/2-A	Lab Control Sample	Total/NA	Water	200.8	
MB 480-42521/1-A	Method Blank	Total/NA	Water	200.8	

Prep Batch: 42626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-13301-2	DUP	Total/NA	Water	7470A	

QC Association Summary

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Metals (Continued)

Prep Batch: 42626 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-13301-3	9-R	Total/NA	Water	7470A	
480-13301-4	9-I	Total/NA	Water	7470A	
480-13301-5	9-OS	Total/NA	Water	7470A	
480-13301-6	PW-1	Total/NA	Water	7470A	
480-13301-7	PW-2	Total/NA	Water	7470A	
480-13301-8	SVWC-96	Total/NA	Water	7470A	
480-13301-8 MS	SVWC-96	Total/NA	Water	7470A	
480-13301-8 MSD	SVWC-96	Total/NA	Water	7470A	
480-13301-9	SVWC-94	Total/NA	Water	7470A	
480-13301-10	SVWC-93	Total/NA	Water	7470A	
LCS 480-42626/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 480-42626/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 42797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-13301-2	DUP	Total/NA	Water	7470A	42626
480-13301-3	9-R	Total/NA	Water	7470A	42626
480-13301-4	9-I	Total/NA	Water	7470A	42626
480-13301-5	9-OS	Total/NA	Water	7470A	42626
480-13301-6	PW-1	Total/NA	Water	7470A	42626
480-13301-7	PW-2	Total/NA	Water	7470A	42626
480-13301-8	SVWC-96	Total/NA	Water	7470A	42626
480-13301-8 MS	SVWC-96	Total/NA	Water	7470A	42626
480-13301-8 MSD	SVWC-96	Total/NA	Water	7470A	42626
480-13301-9	SVWC-94	Total/NA	Water	7470A	42626
480-13301-10	SVWC-93	Total/NA	Water	7470A	42626
LCS 480-42626/2-A	Lab Control Sample	Total/NA	Water	7470A	42626
MB 480-42626/1-A	Method Blank	Total/NA	Water	7470A	42626

Analysis Batch: 42988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-13301-2	DUP	Total/NA	Water	6010B	42520
480-13301-3	9-R	Total/NA	Water	6010B	42520
480-13301-4	9-I	Total/NA	Water	6010B	42520
480-13301-5	9-OS	Total/NA	Water	6010B	42520
480-13301-6	PW-1	Total/NA	Water	6010B	42520
480-13301-7	PW-2	Total/NA	Water	6010B	42520
480-13301-8	SVWC-96	Total/NA	Water	6010B	42520
480-13301-8 MS	SVWC-96	Total/NA	Water	6010B	42520
480-13301-8 MSD	SVWC-96	Total/NA	Water	6010B	42520
480-13301-9	SVWC-94	Total/NA	Water	6010B	42520
480-13301-10	SVWC-93	Total/NA	Water	6010B	42520
LCS 480-42520/2-A	Lab Control Sample	Total/NA	Water	6010B	42520
MB 480-42520/1-A	Method Blank	Total/NA	Water	6010B	42520

Analysis Batch: 43240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-13301-2	DUP	Total/NA	Water	200.8	42521
480-13301-3	9-R	Total/NA	Water	200.8	42521
480-13301-4	9-I	Total/NA	Water	200.8	42521
480-13301-5	9-OS	Total/NA	Water	200.8	42521
480-13301-6	PW-1	Total/NA	Water	200.8	42521

QC Association Summary

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Metals (Continued)

Analysis Batch: 43240 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-13301-7	PW-2	Total/NA	Water	200.8	42521
480-13301-8	SVWC-96	Total/NA	Water	200.8	42521
480-13301-8 MS	SVWC-96	Total/NA	Water	200.8	42521
480-13301-8 MSD	SVWC-96	Total/NA	Water	200.8	42521
480-13301-9	SVWC-94	Total/NA	Water	200.8	42521
480-13301-10	SVWC-93	Total/NA	Water	200.8	42521
LCS 480-42521/2-A	Lab Control Sample	Total/NA	Water	200.8	42521
MB 480-42521/1-A	Method Blank	Total/NA	Water	200.8	42521

General Chemistry

Analysis Batch: 42516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-13301-2	DUP	Total/NA	Water	SM 2340C	
480-13301-3	9-R	Total/NA	Water	SM 2340C	
480-13301-4	9-I	Total/NA	Water	SM 2340C	
480-13301-5	9-OS	Total/NA	Water	SM 2340C	
480-13301-6	PW-1	Total/NA	Water	SM 2340C	
480-13301-7	PW-2	Total/NA	Water	SM 2340C	
480-13301-8	SVWC-96	Total/NA	Water	SM 2340C	
480-13301-8 MS	SVWC-96	Total/NA	Water	SM 2340C	
480-13301-8 MSD	SVWC-96	Total/NA	Water	SM 2340C	
480-13301-9	SVWC-94	Total/NA	Water	SM 2340C	
480-13301-10	SVWC-93	Total/NA	Water	SM 2340C	
LCS 480-42516/28	Lab Control Sample	Total/NA	Water	SM 2340C	
LCS 480-42516/4	Lab Control Sample	Total/NA	Water	SM 2340C	
MB 480-42516/27	Method Blank	Total/NA	Water	SM 2340C	
MB 480-42516/3	Method Blank	Total/NA	Water	SM 2340C	

Prep Batch: 42768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-13301-2	DUP	Total/NA	Water	351.2	
480-13301-3	9-R	Total/NA	Water	351.2	
480-13301-4	9-I	Total/NA	Water	351.2	
480-13301-5	9-OS	Total/NA	Water	351.2	
480-13301-6	PW-1	Total/NA	Water	351.2	
480-13301-7	PW-2	Total/NA	Water	351.2	
480-13301-8	SVWC-96	Total/NA	Water	351.2	
480-13301-8 MS	SVWC-96	Total/NA	Water	351.2	
480-13301-8 MSD	SVWC-96	Total/NA	Water	351.2	
480-13301-9	SVWC-94	Total/NA	Water	351.2	
480-13301-10	SVWC-93	Total/NA	Water	351.2	
LCS 480-42768/2-A	Lab Control Sample	Total/NA	Water	351.2	
MB 480-42768/1-A	Method Blank	Total/NA	Water	351.2	

Analysis Batch: 42775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-13301-2	DUP	Total/NA	Water	410.4	
480-13301-3	9-R	Total/NA	Water	410.4	
480-13301-4	9-I	Total/NA	Water	410.4	
480-13301-5	9-OS	Total/NA	Water	410.4	
480-13301-6	PW-1	Total/NA	Water	410.4	

QC Association Summary

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

General Chemistry (Continued)

Analysis Batch: 42775 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-13301-7	PW-2	Total/NA	Water	410.4	
LCS 480-42775/28	Lab Control Sample	Total/NA	Water	410.4	
MB 480-42775/27	Method Blank	Total/NA	Water	410.4	

Analysis Batch: 42959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-13301-8	SVWC-96	Total/NA	Water	410.4	
480-13301-8 MS	SVWC-96	Total/NA	Water	410.4	
480-13301-8 MSD	SVWC-96	Total/NA	Water	410.4	
480-13301-9	SVWC-94	Total/NA	Water	410.4	
480-13301-10	SVWC-93	Total/NA	Water	410.4	
LCS 480-42959/28	Lab Control Sample	Total/NA	Water	410.4	
MB 480-42959/27	Method Blank	Total/NA	Water	410.4	

Analysis Batch: 43026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-13301-2	DUP	Total/NA	Water	351.2	42768
480-13301-3	9-R	Total/NA	Water	351.2	42768
480-13301-4	9-I	Total/NA	Water	351.2	42768
480-13301-5	9-OS	Total/NA	Water	351.2	42768
480-13301-6	PW-1	Total/NA	Water	351.2	42768
480-13301-7	PW-2	Total/NA	Water	351.2	42768
480-13301-8	SVWC-96	Total/NA	Water	351.2	42768
480-13301-8 MS	SVWC-96	Total/NA	Water	351.2	42768
480-13301-8 MSD	SVWC-96	Total/NA	Water	351.2	42768
480-13301-9	SVWC-94	Total/NA	Water	351.2	42768
480-13301-10	SVWC-93	Total/NA	Water	351.2	42768
LCS 480-42768/2-A	Lab Control Sample	Total/NA	Water	351.2	42768
MB 480-42768/1-A	Method Blank	Total/NA	Water	351.2	42768

Analysis Batch: 43664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-13301-2	DUP	Total/NA	Water	310.2	
480-13301-3	9-R	Total/NA	Water	310.2	
480-13301-4	9-I	Total/NA	Water	310.2	
480-13301-5	9-OS	Total/NA	Water	310.2	
480-13301-6	PW-1	Total/NA	Water	310.2	
480-13301-7	PW-2	Total/NA	Water	310.2	
480-13301-8	SVWC-96	Total/NA	Water	310.2	
480-13301-8 MS	SVWC-96	Total/NA	Water	310.2	
480-13301-8 MSD	SVWC-96	Total/NA	Water	310.2	
480-13301-9	SVWC-94	Total/NA	Water	310.2	
480-13301-10	SVWC-93	Total/NA	Water	310.2	
LCS 480-43664/80	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-43664/98	Lab Control Sample	Total/NA	Water	310.2	
MB 480-43664/81	Method Blank	Total/NA	Water	310.2	
MB 480-43664/99	Method Blank	Total/NA	Water	310.2	

Lab Chronicle

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: TRIP BLANK

Date Collected: 11/29/11 00:00

Date Received: 11/30/11 10:15

Lab Sample ID: 480-13301-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	42433	12/01/11 17:20	TRB	TAL BUF

Client Sample ID: DUP

Date Collected: 11/29/11 10:45

Date Received: 11/30/11 10:15

Lab Sample ID: 480-13301-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	42433	12/01/11 17:46	TRB	TAL BUF
Total/NA	Prep	7470A			42626	12/02/11 11:10	MM	TAL BUF
Total/NA	Analysis	7470A		1	42797	12/02/11 15:55	MM	TAL BUF
Total/NA	Prep	3005A			42520	12/02/11 08:20	SS	TAL BUF
Total/NA	Analysis	6010B		1	42988	12/05/11 18:53	LH	TAL BUF
Total/NA	Prep	200.8			42521	12/02/11 08:25	SS	TAL BUF
Total/NA	Analysis	200.8		1	43240	12/07/11 05:40	MM	TAL BUF
Total/NA	Analysis	SM 2340C		1	42516	12/01/11 15:27	TYW	TAL BUF
Total/NA	Analysis	410.4		1	42775	12/03/11 11:00	JS	TAL BUF
Total/NA	Prep	351.2			42768	12/03/11 10:04	PN	TAL BUF
Total/NA	Analysis	351.2		1	43026	12/06/11 09:12	PN	TAL BUF
Total/NA	Analysis	310.2		1	43664	12/09/11 07:42	PN	TAL BUF

Client Sample ID: 9-R

Date Collected: 11/29/11 12:50

Date Received: 11/30/11 10:15

Lab Sample ID: 480-13301-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	42433	12/01/11 18:12	TRB	TAL BUF
Total/NA	Prep	7470A			42626	12/02/11 11:10	MM	TAL BUF
Total/NA	Analysis	7470A		1	42797	12/02/11 15:57	MM	TAL BUF
Total/NA	Prep	3005A			42520	12/02/11 08:20	SS	TAL BUF
Total/NA	Analysis	6010B		1	42988	12/05/11 18:55	LH	TAL BUF
Total/NA	Prep	200.8			42521	12/02/11 08:25	SS	TAL BUF
Total/NA	Analysis	200.8		1	43240	12/07/11 05:45	MM	TAL BUF
Total/NA	Analysis	SM 2340C		1	42516	12/01/11 15:27	TYW	TAL BUF
Total/NA	Analysis	410.4		1	42775	12/03/11 11:00	JS	TAL BUF
Total/NA	Prep	351.2			42768	12/03/11 10:04	PN	TAL BUF
Total/NA	Analysis	351.2		3	43026	12/06/11 10:21	PN	TAL BUF
Total/NA	Analysis	310.2		10	43664	12/09/11 07:21	PN	TAL BUF

Lab Chronicle

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: 9-I

Lab Sample ID: 480-13301-4

Date Collected: 11/29/11 12:10

Matrix: Water

Date Received: 11/30/11 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	42433	12/01/11 18:38	TRB	TAL BUF
Total/NA	Prep	7470A			42626	12/02/11 11:10	MM	TAL BUF
Total/NA	Analysis	7470A		1	42797	12/02/11 16:02	MM	TAL BUF
Total/NA	Prep	3005A			42520	12/02/11 08:20	SS	TAL BUF
Total/NA	Analysis	6010B		1	42988	12/05/11 18:58	LH	TAL BUF
Total/NA	Prep	200.8			42521	12/02/11 08:25	SS	TAL BUF
Total/NA	Analysis	200.8		1	43240	12/07/11 06:02	MM	TAL BUF
Total/NA	Analysis	SM 2340C		1	42516	12/01/11 15:27	TYW	TAL BUF
Total/NA	Analysis	410.4		1	42775	12/03/11 11:00	JS	TAL BUF
Total/NA	Prep	351.2			42768	12/03/11 10:04	PN	TAL BUF
Total/NA	Analysis	351.2		1	43026	12/06/11 09:12	PN	TAL BUF
Total/NA	Analysis	310.2		1	43664	12/09/11 07:42	PN	TAL BUF

Client Sample ID: 9-OS

Lab Sample ID: 480-13301-5

Date Collected: 11/29/11 12:40

Matrix: Water

Date Received: 11/30/11 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	42433	12/01/11 19:04	TRB	TAL BUF
Total/NA	Prep	7470A			42626	12/02/11 11:10	MM	TAL BUF
Total/NA	Analysis	7470A		1	42797	12/02/11 16:04	MM	TAL BUF
Total/NA	Prep	3005A			42520	12/02/11 08:20	SS	TAL BUF
Total/NA	Analysis	6010B		1	42988	12/05/11 19:00	LH	TAL BUF
Total/NA	Prep	200.8			42521	12/02/11 08:25	SS	TAL BUF
Total/NA	Analysis	200.8		1	43240	12/07/11 06:07	MM	TAL BUF
Total/NA	Analysis	SM 2340C		1	42516	12/01/11 15:27	TYW	TAL BUF
Total/NA	Analysis	410.4		1	42775	12/03/11 11:00	JS	TAL BUF
Total/NA	Prep	351.2			42768	12/03/11 10:04	PN	TAL BUF
Total/NA	Analysis	351.2		1	43026	12/06/11 09:12	PN	TAL BUF
Total/NA	Analysis	310.2		1	43664	12/09/11 07:42	PN	TAL BUF

Client Sample ID: PW-1

Lab Sample ID: 480-13301-6

Date Collected: 11/29/11 13:25

Matrix: Water

Date Received: 11/30/11 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	42433	12/01/11 19:30	TRB	TAL BUF
Total/NA	Prep	7470A			42626	12/02/11 11:10	MM	TAL BUF
Total/NA	Analysis	7470A		1	42797	12/02/11 16:06	MM	TAL BUF
Total/NA	Prep	3005A			42520	12/02/11 08:20	SS	TAL BUF
Total/NA	Analysis	6010B		1	42988	12/05/11 19:07	LH	TAL BUF
Total/NA	Prep	200.8			42521	12/02/11 08:25	SS	TAL BUF
Total/NA	Analysis	200.8		1	43240	12/07/11 06:12	MM	TAL BUF
Total/NA	Analysis	SM 2340C		1	42516	12/01/11 15:27	TYW	TAL BUF

Lab Chronicle

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: PW-1

Lab Sample ID: 480-13301-6

Date Collected: 11/29/11 13:25

Matrix: Water

Date Received: 11/30/11 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	410.4		1	42775	12/03/11 11:00	JS	TAL BUF
Total/NA	Prep	351.2			42768	12/03/11 10:04	PN	TAL BUF
Total/NA	Analysis	351.2		1	43026	12/06/11 09:12	PN	TAL BUF
Total/NA	Analysis	310.2		1	43664	12/09/11 07:42	PN	TAL BUF

Client Sample ID: PW-2

Lab Sample ID: 480-13301-7

Date Collected: 11/29/11 11:30

Matrix: Water

Date Received: 11/30/11 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	42433	12/01/11 19:56	TRB	TAL BUF
Total/NA	Prep	7470A			42626	12/02/11 11:10	MM	TAL BUF
Total/NA	Analysis	7470A		1	42797	12/02/11 16:08	MM	TAL BUF
Total/NA	Prep	3005A			42520	12/02/11 08:20	SS	TAL BUF
Total/NA	Analysis	6010B		1	42988	12/05/11 19:09	LH	TAL BUF
Total/NA	Prep	200.8			42521	12/02/11 08:25	SS	TAL BUF
Total/NA	Analysis	200.8		1	43240	12/07/11 06:18	MM	TAL BUF
Total/NA	Analysis	SM 2340C		1	42516	12/01/11 15:27	TYW	TAL BUF
Total/NA	Analysis	410.4		1	42775	12/03/11 11:00	JS	TAL BUF
Total/NA	Prep	351.2			42768	12/03/11 10:04	PN	TAL BUF
Total/NA	Analysis	351.2		1	43026	12/06/11 09:18	PN	TAL BUF
Total/NA	Analysis	310.2		10	43664	12/09/11 07:21	PN	TAL BUF

Client Sample ID: SVWC-96

Lab Sample ID: 480-13301-8

Date Collected: 11/29/11 10:45

Matrix: Water

Date Received: 11/30/11 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	42433	12/01/11 20:22	TRB	TAL BUF
Total/NA	Prep	7470A			42626	12/02/11 11:10	MM	TAL BUF
Total/NA	Analysis	7470A		1	42797	12/02/11 16:09	MM	TAL BUF
Total/NA	Prep	3005A			42520	12/02/11 08:20	SS	TAL BUF
Total/NA	Analysis	6010B		1	42988	12/05/11 19:12	LH	TAL BUF
Total/NA	Prep	200.8			42521	12/02/11 08:25	SS	TAL BUF
Total/NA	Analysis	200.8		1	43240	12/07/11 06:23	MM	TAL BUF
Total/NA	Analysis	SM 2340C		1	42516	12/01/11 15:27	TYW	TAL BUF
Total/NA	Analysis	410.4		1	42959	12/05/11 17:10	EGN	TAL BUF
Total/NA	Prep	351.2			42768	12/03/11 10:04	PN	TAL BUF
Total/NA	Analysis	351.2		1	43026	12/06/11 09:18	PN	TAL BUF
Total/NA	Analysis	310.2		1	43664	12/09/11 07:42	PN	TAL BUF

Lab Chronicle

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Client Sample ID: SVWC-94

Lab Sample ID: 480-13301-9

Date Collected: 11/29/11 10:30

Matrix: Water

Date Received: 11/30/11 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	42433	12/01/11 21:40	TRB	TAL BUF
Total/NA	Prep	7470A			42626	12/02/11 11:10	MM	TAL BUF
Total/NA	Analysis	7470A		1	42797	12/02/11 16:16	MM	TAL BUF
Total/NA	Prep	3005A			42520	12/02/11 08:20	SS	TAL BUF
Total/NA	Analysis	6010B		1	42988	12/05/11 19:23	LH	TAL BUF
Total/NA	Prep	200.8			42521	12/02/11 08:25	SS	TAL BUF
Total/NA	Analysis	200.8		1	43240	12/07/11 06:50	MM	TAL BUF
Total/NA	Analysis	SM 2340C		1	42516	12/01/11 15:27	TYW	TAL BUF
Total/NA	Analysis	410.4		1	42959	12/05/11 17:10	EGN	TAL BUF
Total/NA	Prep	351.2			42768	12/03/11 10:04	PN	TAL BUF
Total/NA	Analysis	351.2		1	43026	12/06/11 09:18	PN	TAL BUF
Total/NA	Analysis	310.2		1	43664	12/09/11 07:42	PN	TAL BUF

Client Sample ID: SVWC-93

Lab Sample ID: 480-13301-10

Date Collected: 11/29/11 10:05

Matrix: Water

Date Received: 11/30/11 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	42433	12/01/11 22:06	TRB	TAL BUF
Total/NA	Prep	7470A			42626	12/02/11 11:10	MM	TAL BUF
Total/NA	Analysis	7470A		1	42797	12/02/11 16:18	MM	TAL BUF
Total/NA	Prep	3005A			42520	12/02/11 08:20	SS	TAL BUF
Total/NA	Analysis	6010B		1	42988	12/05/11 19:25	LH	TAL BUF
Total/NA	Prep	200.8			42521	12/02/11 08:25	SS	TAL BUF
Total/NA	Analysis	200.8		1	43240	12/07/11 07:06	MM	TAL BUF
Total/NA	Analysis	SM 2340C		1	42516	12/01/11 15:27	TYW	TAL BUF
Total/NA	Analysis	410.4		1	42959	12/05/11 17:10	EGN	TAL BUF
Total/NA	Prep	351.2			42768	12/03/11 10:04	PN	TAL BUF
Total/NA	Analysis	351.2		1	43026	12/06/11 09:25	PN	TAL BUF
Total/NA	Analysis	310.2		1	43664	12/09/11 07:42	PN	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Buffalo	Arkansas	State Program	6	88-0686
TestAmerica Buffalo	California	NELAC	9	1169CA
TestAmerica Buffalo	Connecticut	State Program	1	PH-0568
TestAmerica Buffalo	Florida	NELAC	4	E87672
TestAmerica Buffalo	Georgia	Georgia EPD	4	N/A
TestAmerica Buffalo	Georgia	State Program	4	956
TestAmerica Buffalo	Illinois	NELAC	5	100325 / 200003
TestAmerica Buffalo	Iowa	State Program	7	374
TestAmerica Buffalo	Kansas	NELAC	7	E-10187
TestAmerica Buffalo	Kentucky	Kentucky UST	4	30
TestAmerica Buffalo	Kentucky	State Program	4	90029
TestAmerica Buffalo	Louisiana	NELAC	6	02031
TestAmerica Buffalo	Maine	State Program	1	NY0044
TestAmerica Buffalo	Maryland	State Program	3	294
TestAmerica Buffalo	Massachusetts	State Program	1	M-NY044
TestAmerica Buffalo	Michigan	State Program	5	9937
TestAmerica Buffalo	Minnesota	NELAC	5	036-999-337
TestAmerica Buffalo	New Hampshire	NELAC	1	2337
TestAmerica Buffalo	New Hampshire	NELAC	1	68-00281
TestAmerica Buffalo	New Jersey	NELAC	2	NY455
TestAmerica Buffalo	New York	NELAC	2	10026
TestAmerica Buffalo	North Dakota	State Program	8	R-176
TestAmerica Buffalo	Oklahoma	State Program	6	9421
TestAmerica Buffalo	Oregon	NELAC	10	NY200003
TestAmerica Buffalo	Pennsylvania	NELAC	3	68-00281
TestAmerica Buffalo	Tennessee	State Program	4	TN02970
TestAmerica Buffalo	Texas	NELAC	6	T104704412-08-TX
TestAmerica Buffalo	USDA	USDA		P330-08-00242
TestAmerica Buffalo	Virginia	NELAC Secondary AB	3	460185
TestAmerica Buffalo	Virginia	State Program	3	278
TestAmerica Buffalo	Washington	State Program	10	C1677
TestAmerica Buffalo	Wisconsin	State Program	5	998310390

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
200.8	Metals (ICP/MS)	EPA	TAL BUF
6010B	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL BUF
410.4	COD	MCAWW	TAL BUF
SM 2340C	Hardness, Total	SM	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

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

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-13301-1	TRIP BLANK	Water	11/29/11 00:00	11/30/11 10:15
480-13301-2	DUP	Water	11/29/11 10:45	11/30/11 10:15
480-13301-3	9-R	Water	11/29/11 12:50	11/30/11 10:15
480-13301-4	9-I	Water	11/29/11 12:10	11/30/11 10:15
480-13301-5	9-OS	Water	11/29/11 12:40	11/30/11 10:15
480-13301-6	PW-1	Water	11/29/11 13:25	11/30/11 10:15
480-13301-7	PW-2	Water	11/29/11 11:30	11/30/11 10:15
480-13301-8	SVWC-96	Water	11/29/11 10:45	11/30/11 10:15
480-13301-9	SVWC-94	Water	11/29/11 10:30	11/30/11 10:15
480-13301-10	SVWC-93	Water	11/29/11 10:05	11/30/11 10:15

Detection Limit Exceptions Summary

Client: Sterling Environmental Engineering PC
Project/Site: Ramapo Landfill

TestAmerica Job ID: 480-13301-1

The requested project specific reporting limits listed below were less than lab standard quantitation limits but greater than or equal to the lab MDL. It must be noted that results reported below lab standard quantitation limits (PQL) may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Matrix	Analyte	Units	Client RL	Lab PQL
624	Water	Benzene	ug/L	1.0	5
624	Water	Vinyl chloride	ug/L	2.0	5

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Chain of Custody Record

Temperature on Receipt

Drinking Water? Yes ☒ No ☐

Chain of Custody Number 198463		Date 11/29/11		Page 1 of 1	
Project Manager Liz Davis		Lab Number		Special Instructions/ Conditions of Receipt	
Telephone Number (Area Code) Fax Number 518-456-1900		Analysis (Attach list if more space is needed)			
Site Contact Charlotte Verhoff Denise Giguere		Containers & Preservatives			
Carrier/Manifest Number		Matrix			
State NY		Zip Code 12090			
Project Name and Location (State) Rama po Landfill		Date			
Contract/Purchase Order/Quote No 20010		Time			
Sample ID No. and Description (Containers for each sample may be combined on one line)		Date		Time	
SVWC-93		11/29/11		10:05	
SVWC-94		11/29/11		10:30	
SVWC-96		11/29/11		10:45	
PW-2		11/29/11		11:30	
PW-1		11/29/11		13:25	
TRIP Blank x2					
Passive Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poisonous ☐ Unknown ☐ Return to Client		Sample Disposal			
Turn Around Time Requested ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other: STD TAT		Disposal By Lab ☒ Archive For 1 Month (longer than 1 month)			
1. Requested By Charlotte Verhoff		1. Received By Cut		Date 11/30/11 Time 10:15	
2. Requested By		2. Received By		Date Time	
3. Requested By		3. Received By		Date Time	
Comments					

DISTRIBUTION: 44112 Returned to Client with Report Cautiously: Steps with the Sample: PWK - Field Copy

2030

Temperature on Receipt: _____

Drinking Water? Yes ☐ No ☐

Chain of Custody Record

TAL-4124 (1007)

Client: STERLING ENV. ENG. Project Manager: Liz Davis Date: 11/29/11 Chain of Custody Number: 198-158

Address: 24 Wade Road Telephone Number (Area Code)/Fax Number: 518 456-4900 Page: 7 of 7

City: Latham State: NY Zip Code: 12090 Site Contact: Charlotte Veloz Lab Contact: Denise Uigala

Project Name and Location (State): Ramapo Landfill Container/Purchase Order/Quote No.: 20010

Analysis (Attach list if more space is needed)

Special Instructions/Conditions of Receipt

Containers & Preservatives

Matrix

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix	Containers & Preservatives
9-OS	11/29/11	12:40	X	11/23
9-I	11/29/11	12:10		
9-R	11/29/11	12:50		
DUP	11/29/11	10:45		
MS	11/29/11			
MSD	11/29/11			
TRIP Blank				

1) Reporting Limit
for Arsenic = 30 ppb
or less - Thallium =
15 ppb or less
(2) 1,1 Dichloroethane
Vinyl Chloride - 601
Benzene
Chlorobenzene - 602

Possible Hazard Identification

☒ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poisonous ☐ Unknown ☐ Return to Client ☐ Dispose of by Lab ☒ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other: SID: 141

1) Requested By: Charlotte Veloz Date: 11/29/11 Time: 12:30

2) Requested By: _____ Date: _____ Time: _____

3) Requested By: _____ Date: _____ Time: _____

Comments: _____

DISTRIBUTION: WHITE - Returned to Client with Report. CANARY - Stays with the Sample. PINK - Field Copy

7034

Login Sample Receipt Checklist

Client: Sterling Environmental Engineering PC

Job Number: 480-13301-1

Login Number: 13301

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	False	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	