



Sterling Environmental Engineering, P.C.

May 12, 2009

Mr. Jim Schreyer
Construction Inspector
Division of Environmental Remediation
NYS Department of Environmental Conservation
Region 3
21 South Putt Corners Road
New Paltz, New York 12561-1696

Subject: Town of Ramapo Landfill
2009 Annual Environmental Monitoring Program Results
STERLING File #20010

Dear Mr. Schreyer,

This letter report provides groundwater, drinking water and air monitoring results for the 2009 annual post-closure Environmental Monitoring Program (EMP) event conducted for the Town of Ramapo Landfill, Rockland County, New York. The New York State Department of Environmental Conservation (NYSDEC) approved a variance request on October 27, 2003 reducing the monitoring frequency to annually.

Groundwater samples were collected on March 16 and 17, 2009 by Sterling Environmental Engineering, P.C. (STERLING) from monitoring well locations 1-OS/I, 2-OS, 3-OS/I, 4-OS, 5-OS, 7-OS, 8-OS, 8-I, 8-R, 9-OS, 9-I, 9-R, private water supply wells PW-1 and PW-2, and municipal water supply wells SVWC-93, SVWC-95 and SVWC-96. Municipal water supply well SVWC-94 was out of service during the monitoring event conducted on March 16 and 17, 2009, therefore, no sample was analyzed for this location. Static water level readings were obtained at all of the monitoring well locations mentioned above and at monitoring well locations 1-R, 2-R, 3-R, 4-R, 5-R, 6-I, 6-R and 7-R. Groundwater sampling locations are shown on Figure 1. A representative from United Water New York was present during the sampling of the SVWC water supply wells.

The 2009 air monitoring event was conducted on March 16, 2009. Air monitoring locations are shown on Figure 1 and results are summarized on Table 1.

Results for the 2009 EMP are summarized below.

GROUNDWATER MONITORING

Water Level, Specific Conductivity, Temperature, pH and Oxidation Reduction Potential (ORP) readings were measured in the field and are presented on Table 2, "Field Parameters and Water Levels". All samples were analyzed for approved post-closure 6 NYCRR Part 360 Baseline and Site Related Parameters by Life Science Laboratories, Inc. located in East Syracuse, New York, according to the United States Environmental Protection Agency (USEPA) methodologies and protocols.

The 2009 analytical results are summarized on Table 3, "Post-Closure Groundwater Quality Monitoring Analytical Results." This table also includes analytical data for the previous three (3) sampling events.

"Celebrating 15 Years of Client Service"

Historic analytical data for the target compounds Benzene, Chromium, Iron and Manganese are presented on Tables 3A through 3D. A copy of the laboratory report for the March 2009 sampling event, prepared according to NYSDEC Analytical Services Protocol (ASP) Category B reporting requirements, is attached.

A duplicate sample was collected from groundwater well 7-OS and labeled DUP 3/09 for the 2009 EMP event.

The 2009 analytical results summarized in Tables 2 and 3 are generally consistent with concentrations reported for historical data provided in Tables 3A through 3D. A brief discussion of the 2009 analytical results for each well sample with respect to the NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998) (TOGS 1.1.1) is provided below:

Well 1-OS:

The reported concentrations for Chromium, Iron, Manganese, Nickel and Sodium exceed the applicable groundwater standards in TOGS 1.1.1. The reported exceedances are consistent with historic results. No detected Volatile Organic Compounds (VOCs) are reported for this sample.

Well 2-OS:

Consistent with historic results, the reported concentrations for Chromium, Iron and Manganese exceed the applicable groundwater standards in TOGS 1.1.1. No detected VOCs are reported for this sample.

Well 3-OS/I:

The reported concentrations for Chromium, Iron, Manganese, Nickel, and Sodium exceed the applicable groundwater standards in TOGS 1.1.1 and are consistent with historic data. No detected VOCs are reported for this sample.

Well 4-OS:

The reported concentrations for Chromium, Iron, Manganese and Sodium exceed the applicable groundwater standards in TOGS 1.1.1. Reported Chromium levels occasionally exceed the groundwater standard for samples collected up to March 2004. For samples collected from 2005-2009, all reported Chromium levels exceed TOGS 1.1.1. Reported levels for Iron, Manganese and Sodium are consistent with the historic data. No detected VOCs are reported for this sample.

Well 5-OS:

The reported concentrations for Chromium, Iron and Manganese exceed the applicable groundwater standards in TOGS 1.1.1 and are consistent with historic data. The reported concentration of 3.2 ug/L for Beryllium slightly exceeds the TOGS 1.1.1 standard of 3.0 ug/L. No detected VOCs are reported for this sample.

Well 7-OS:

Reported concentrations for Chromium, Iron and Manganese exceed the applicable groundwater standards in TOGS 1.1.1 and are consistent with historic data. No detected VOCs are reported for this sample.

Well 8-OS:

Reported concentrations for Chromium, Iron and Manganese exceed the applicable groundwater standards in TOGS 1.1.1 and are consistent with historic data. Reported Chromium levels occasionally exceed the groundwater standard for samples collected up to June 2005. For samples collected from 2005-2009, all reported Chromium levels exceed TOGS 1.1.1. Reported levels for Iron, Manganese and Sodium are consistent with historic data. No detected VOCs are reported for this sample.

Well 8-I:

Reported concentrations for Iron, Manganese, and Sodium exceed the applicable groundwater standards in TOGS 1.1.1 and are consistent with historic data. The VOC, Chlorobenzene, is reported at 0.29 ppb but does not exceed the groundwater standard of 5 ppb. No other detected VOCs are reported for this sample.

Well 8-R:

Reported concentrations for Iron, Magnesium, Manganese, and Sodium exceed the applicable groundwater standards in TOGS 1.1.1 and are consistent with historic data. The VOC, 1,1-Dichloroethane, is reported at 0.11 ppb but does not exceed the groundwater standard of 5 ppb. No other detected VOCs are reported for this sample.

Well 9-OS:

Reported concentrations for Chromium and Iron exceed the applicable groundwater standards in TOGS 1.1.1. Reported Chromium concentrations for 1990-2005 do not exceed the groundwater standard of 50 ug/L, but do for the 2006, 2007 and 2009 events. The reported Iron concentration is consistent with historic data. No detected VOCs are reported for this sample.

Well 9-I:

The reported concentration for Iron exceeds the applicable groundwater standard in TOGS 1.1.1 and is consistent with historic data. No detected VOCs are reported for this sample.

Well 9-R:

The reported concentrations for Iron, Manganese and Sodium exceed the applicable groundwater standards in TOGS 1.1.1, which are consistent with historic data. The VOC, Chlorobenzene, is reported at 0.22 ppb, but does not exceed the groundwater standard of 5 ppb.

Well PW-1:

Parameters reported at detectable concentrations do not exceed the applicable groundwater standards in TOGS 1.1.1 for the 2009 monitoring event. No VOCs are reported for the 2005-2009 monitoring events.

Well PW-2:

Parameters reported at detectable concentrations do not exceed the applicable groundwater standards in TOGS 1.1.1 for the 2009 monitoring event. No VOCs are reported for the 2005-2009 monitoring events.

Well SVWC-93:

The reported concentration for Sodium exceeds the applicable groundwater standard in TOGS 1.1.1, which is consistent with historic results. No detected VOCs are reported for the 2005-2009 monitoring events.

Well SVWC-94:

The SVWC-94 location was out of service during the time of the March 2009 monitoring event, therefore, no sample was obtained.

Well SVWC-95:

The reported concentration for Sodium exceeds the applicable groundwater standard in TOGS 1.1.1, which is consistent with historic results. No detected VOCs are reported for the 2005-2009 monitoring events.

Well SVWC-96:

The reported concentration for Sodium exceeds the applicable groundwater standard in TOGS 1.1.1, which is consistent with historic results. No detected VOCs are reported for the 2005-2009 monitoring events.

AIR QUALITY MONITORING

Air quality monitoring consisted of surveying explosive gas (Lower Explosive Limit, or LEL), Hydrogen Sulfide (H₂S) and Volatile Organic Compounds (VOCs) of the headspace of each monitoring well, the baler building, leachate Manhole A-5, lift stations A-10 and W-20, and breathing space of the Landfill perimeter at 100 foot intervals. Air sampling locations are shown on Figure 1 and results are summarized in Table 1. LEL and H₂S measurements were obtained with a QRAE Multi gas monitor, and VOC measurements were obtained with a Photovac 2020 photoionization unit.

The 2009 air quality monitoring survey for explosive gas, H₂S, and VOCs reports no detected readings except for two (2) reported LEL readings, one for the headspace of Well 1-OS (5%) and the other at Lift Station A-10 (3%), which are considered minor detections. Based on the 2009 air quality monitoring results, the Landfill is in compliance with the requirements of 6 NYCRR 360-2.15(k)(4).

The next sampling event is scheduled to occur in the second quarter of 2010. Please contact me should you have any questions or comments.

Very truly yours,

STERLING ENVIRONMENTAL ENGINEERING, P.C.



Jessica Sgambati
Environmental Consultant
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JS/bc

First Class Mail

Attachments (Figure 1, Tables 1-3, 3A through 3D, and Laboratory Report)

cc: George Jacob, USEPA
John Olm, NYDOH*
Ed Moran, Town of Ramapo*
Judy Hunderfund, Rockland County DOH*
Kathy Quinn, Rockland County DOH*
Chris Berke, United Water New York *
Tanyo Parashkevov, United Water New York*
John France, Torne Brook Farm **
Rosie Digianni, 20 Torne Brook Road **
Arlene Lapidos, Ramapo Land Co., Inc. *

* letter, figures and tables only.

** letter, figures, tables and partial lab report enclosure.

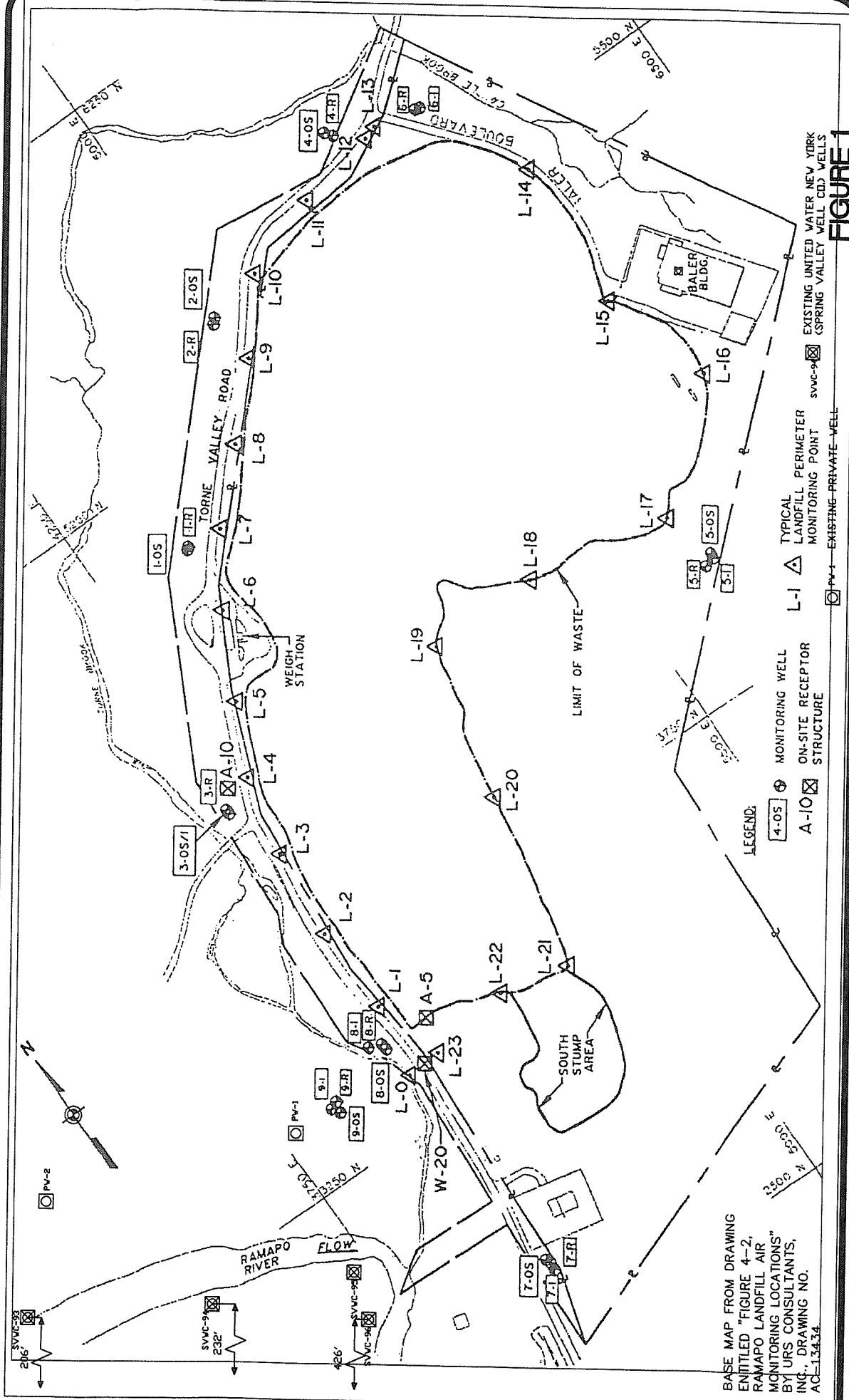


FIGURE 1

STERLING
Sterling Environmental Engineering, P.C.
24 Wade Road • Latham, New York 12110

ROCKLAND CO., N.Y.

2009 AIR QUALITY AND GROUNDWATER MONITORING LOCATIONS
TOWN OF RAMAPO LANDFILL

TOWN OF RAMAPO

PROJ. No.: E20010 DATE: 3-16-09 SCALE: 1"=400'

DWG. NO. 20010013 FIGURE 1

TABLE 1

**TOWN OF RAMAPO LANDFILL
AIR MONITORING RESULTS
March 16 & 17, 2009**

Monitoring Location (1)	LEL Reading (%)	H ₂ S Reading (ppm)	PID Reading (ppm)
Monitoring Wells:			
1-OS/I	5	0	0
1-R	0	0	0
2-OS	0	0	0
2-R	0	0	0
3-OS/I	0	0	0
3-R	0	0	0
4-OS	0	0	0
4-R	0	0	0
5-OS	0	0	0
5-R	0	0	0
6-I	0	0	0
6-R	0	0	0
7-OS	0	0	0
7-R	0	0	0
8-OS	0	0	0
8-I	0	0	0
8-R	0	0	0
9-OS	0	0	0
9-I	0	0	0
9-R	0	0	0
Baler Building (waist high)	0	0	0
Manhole A-5	0	0	0
Lift Station A-10	3	0	0
Lift Station W-20	0	0	0
Landfill Perimeter (every 100-foot location)	0	0	0

NOTES:

LEL = Lower Explosive Limit (for Explosive Gas)

H₂S = Hydrogen Sulfide

PID = Photoionization Detector (measures VOCs)

ppm = parts per million

(1) See Figure 1 for Air Monitoring Locations

TABLE 2
TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER QUALITY MONITORING
FIELD PARAMETERS AND WATER LEVELS
March 2009

Well I.D.	Date	Static Water Level [1] (feet)	pH [2] (pH units)	Specific Conductance (ms/cm ^o)	Temperature (degrees C)	ORP [3] (mV)
1-OS/I	2009-03-17	16.26	6.37	0.978	11.27	-20.1
1-R	2009-03-17	18.31	---	---	---	---
2-I	2009-03-17	---	---	---	---	---
2-OS	2009-03-17	13.48	6.64	0.583	9.60	122.6
2-R	2009-03-17	16.85	---	---	---	---
3-OS/I	2009-03-17	12.49	6.68	0.689	9.56	75.2
3-R	2009-03-17	13.1	---	---	---	---
4-OS	2009-03-17	6.58	5.79	0.437	7.42	160.2
4-R	2009-03-17	8.48	---	---	---	---
5-OS	2009-03-16	7.50	6.54	0.066	7.94	159.4
5-I	2009-03-17	---	---	---	---	---
5-R	2009-03-16	10.80	---	---	---	---
6-I	2009-03-17	18.55	---	---	---	---
6-R	2009-03-17	31.50	---	---	---	---
7-OS	2009-03-16	13.69	6.13	0.376	10.84	130.5
7-R	2009-03-16	16.62	---	---	---	---
8-OS	2009-03-16	13.97	6.37	0.537	9.41	46.5
8-I	2009-03-16	14.85	6.28	0.650	11.50	-38.7
8-R	2009-03-16	14.10	6.55	1.146	11.84	19.2
9-OS	2009-03-16	9.10	6.17	0.108	9.71	44.6
9-I	2009-03-16	11.39	6.14	0.149	11.59	64.9
9-R	2009-03-16	12.23	6.21	0.583	12.63	-65
PW-1	2009-03-16	---	5.94	0.140	11.69	70.5
PW-2	2009-03-16	---	6.09	0.182	11.61	104.6
SVWC-93	2009-03-17	---	6.09	0.445	9.95	147.2
SVWC-94	2009-03-17	---	---	---	---	---
SVWC-95	2009-03-17	---	6.08	0.428	6.38	141.1
SVWC-96	2009-03-17	---	6.22	0.432	7.48	131.8

NOTES: [1] Depth to water surface from top of PVC well riser, measured prior to purging and sampling well.
[2] pH values in **BOLD** indicate an exceedance of the NYSDEC Water Quality Standard for pH: minimum 6.5 pH units, maximum 8.5 pH units (from T.O.G.S. 1.1.1, June 1998).
[3] ORP - Oxidation Reduction Potential

--- Not Measured

TABLE 3

**TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER QUALITY MONITORING
ANALYTICAL RESULTS**

Parameter	ARARs [1]	UNITS	WELL 1-OS//				WELL 2-OS			
			Jun-05 [DUP]	Sep-06	Oct-07	Mar-09	Jun-05	Sep-06	Oct-07	Mar-09
Leachate Indicator Parameters:										
Alkalinity	---	mg/L	224	210	170	140	222	280	250	280
Chemical Oxygen Demand	---	mg/L	32.3	78	75	26	14.5	24	33	17
Total Hardness	---	mg/L	230	710	440	280	259	52	320	280
Total Kjeldhal Nitrogen	---	mg/L	1 UN	0.4 U	1.7	0.31	1 UN	0.4 U	0.32	0.1 J
TAL Metals:										
Aluminum	---	ug/L	765	39,000	47,000	12,000	1,190	4,500	12,000	3,200
Antimony	3	ug/L	0.12 U	3 U	9.6	60 U	0.12 U	3 U	2.4 J	60 U
Arsenic	25	ug/L	8.1 B	43	31	7.1 J	4 B	2.8 J	6.2	10 U
Barium	1000	ug/L	110 B	440	450	150	51.4 B	50 J	110	44 J
Beryllium	3	ug/L	0.4 U	2.2 J	2.6 J	0.61 J	0.4 U	0.44 J	0.66 J	3 U
Cadmium	5	ug/L	0.8 U	4.3	1 U	5 U	0.8 U	1.6	1 U	5 U
Calcium	---	ug/L	69,400	140,000	80,000	82,000	78,200	87,000	97,000	99,000
Chromium	50	ug/L	31.4	2,400	530	140	101	120	250	480
Cobalt	---	ug/L	9.1 B	63	81	28 J	12.4 B	25	47	20 J
Copper	200	ug/L	25.9	130	140	33	15.9 B	15	35	21
Iron	300	ug/L	54,200 N	120,000	160,000	38,000	144 N	12,000	31,000	12,000
Lead	25	ug/L	5.8	94	44	6.3 J	7.6	9.1	22	5.7 J
Magnesium	35000 GV	ug/L	14,000	28,000	30,000	20,000	15,600	18,000	22,000	18,000
Manganese	300	ug/L	4,720	2,800	5,100	9,000	778	1,900	3,500	2,200
Mercury	0.7	ug/L	0.16 U	0.12	0.11 J	0.2 U	0.16 U	0.2 U	0.037 J	0.2 U
Nickel	100	ug/L	9.2 B	270	750	640	52.1	80	150	490
Potassium	---	ug/L	2,670 B	11,000	14,000	5,800	1,870 B	3,000 J	4,600 J	2,100 J
Selenium	10	ug/L	1.6 U	5 U	7.1	10 U	6.9 W	5 U	5 U	10 U
Silver	50	ug/L	2.7 BN	10 U	10 U	10 U	1.9 BN	10 U	10 U	10 U
Sodium	20000	ug/L	37,100 E	62,000	76,000	97,000	8,680 E	11,000	12,000	11,000
Thallium	0.5 GV	ug/L	10.4	20	9.9 J	20 U	5.3 B	16	10 U	20 U
Vanadium	---	ug/L	2 U	120	150	34 J	2.3 B	11 J	31 J	8.5 J
Zinc	2000 GV	ug/L	26.2	220	210	46	31.8	41	53	16 J
VOCs by EPA Method 8260B:										
1,1-Dichloroethane	5	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.1 J	0.5 U
Vinyl Chloride	2	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U

NOTES:

- [1] ARARs Applicable or Relevant and Appropriate Requirements: NYSDEC Water Quality Standards and Guidance Values, T.O.G.S. 1.1.1 (June 1998). Values in **BOLD** indicate an exceedance of applicable water quality standards or guidance values.

All samples were analyzed for NYCRR Part 360 Baseline Parameters and Site Specific Parameters.

Life Science Laboratories, Inc. conducted analyses for the 2006 - 2009 samples. Samples from the 2005 event were analyzed by STL Newburgh.

- [DUP] Duplicate sample obtained at this location. The highest value given for the sample or the duplicate is reported.

NA Not Analyzed.

ND Not Detected.

Laboratory Qualifier Definitions:STL Newburgh

- U The compound was analyzed for, but not detected at the detection limit listed.
 J Indicates an estimated value for tentatively identified compounds.
 B The reported value is less than the Contract Required Detection Limit (CRDL), but greater than the Instrument Detection Limit.
 E Indicates an estimated value because of the possible presence of interference.
 W Indicates post digestion spike for furnace AA analysis is out of control limits (85-110%), while sample absorbance is less than 50% of spike absorbance.
 N Spiked sample recovery not within control limits

Life Science Laboratories, Inc.

- J Analyte detected below Practical Quantitation Limit (PQL)
 U The compound was analyzed for, but not detected at the detection limit listed.
 E Value exceeds the instrument calibration range.

TABLE 3 (Continued)

**TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER QUALITY MONITORING RESULTS
ANALYTICAL RESULTS**

	ARARs [1]	UNITS	WELL 3-OS/I				WELL 4-OS			
			Jun-05	Sep-06	Oct-07	Mar-09	Jun-05	Sep-06	Oct-07	Mar-09
Leachate Indicator Parameters:										
Alkalinity	---	mg/L	206	280	270	NA	101	82	130	60
Chemical Oxygen Demand	---	mg/L	17.5	31	10 U	NA	10 U	10 U	28	15
Total Hardness	---	mg/L	255	580	340	280	201	92	230	110
Total Kjeldhal Nitrogen	---	mg/L	1.02 N	0.4 U	0.23	NA	1 U	0.4 U	0.25	0.2 U
TAL Metals:										
Aluminum	---	ug/L	10.4 U	580	520	870	386	2,500	9,800	3,800
Antimony	3	ug/L	0.12 U	3 U	8.4	60 U	0.12 U	3 U	1.8 J	60 U
Arsenic	25	ug/L	3.1 U	6.9	5 U	10 U	3.1 UN	2.8 J	5 U	10 U
Barium	1000	ug/L	122 B	69 J	34 J	130	32.7 BN	40 J	84 J	44 J
Beryllium	3	ug/L	0.4 U	0.23 J	0.1 J	3 U	0.4 U	0.43 J	0.6 J	3 U
Cadmium	5	ug/L	1.6 B	3.2	1 U	5 U	0.8 U	2.2	1 U	5 U
Calcium	---	ug/L	84,300	98,000	110,000	100,000	52,400	53,000	58,000	23,000
Chromium	50	ug/L	2,020	7,200	3,400	3,900	56.7	1,300	270	230
Cobalt	---	ug/L	9.3 B	56	17	20 J	2 B	14	13	50 U
Copper	200	ug/L	51.8	69	27	44	4.2 B	10	23	11
Iron	300	ug/L	60,500 N	77,000	25,000	30,000	1,230	12,000	24,000	10,000
Lead	25	ug/L	3.1	1.1 J	5 U	10 U	1.9 U	1.2 J	4.2 J	10 U
Magnesium	35000 GV	ug/L	10,700	13,000	14,000	12,000	17,100	18,000	20,000	11,000
Manganese	300	ug/L	6,450	9,200	4,400	14,000	700	860	2,700	400
Mercury	0.7	ug/L	0.16 U	0.2 U	0.2 U	0.2 U	0.16 U	0.2 U	0.2 U	0.2 U
Nickel	100	ug/L	1,460	1,300	730	810	87.8	40 J	68	44 J
Potassium	---	ug/L	4,010 B	3,900 J	3,200 J	3,100 J	1,390 B	2,400 J	4,100 J	1,800 J
Selenium	10	ug/L	1.6 U	5 U	5 U	20 U	3.9 UN	5 U	5 U	10 U
Silver	50	ug/L	23.3 N	10 U	10 U	10 U	3.8 BN	10 U	10 U	10 U
Sodium	20000	ug/L	29,100 E	29,000	23,000	36,000	20,300	33,000	24,000	48,000
Thallium	0.5 GV	ug/L	12.7	16	10 U	40 U	2.9 UN	24	10 U	20 U
Vanadium	---	ug/L	2 U	21 J	11 J	17 J	2 UN	9.8 J	27 J	11 J
Zinc	2000 GV	ug/L	35.7	33	6.5 J	6.6 J	22.5	44	36	17 J
VOCs by EPA Method 8260B:										
1,1-Dichloroethane	5	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.15 J	0.5 U
Vinyl Chloride	2	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U

NOTES:

- [1] ARARs Applicable or Relevant and Appropriate Requirements: NYSDEC Water Quality Standards and Guidance Values, T.O.G.S. 1.1.1 (June 1998).
 [2] The parameters alkalinity, chemical oxygen demand, and total kjeldhal nitrogen were not analyzed due to insufficient water in monitoring well 3OS/I.

Values in **BOLD** indicate an exceedance of applicable water quality standards or guidance values.

All samples were analyzed for NYCRR Part 360 Baseline Parameters and Site Specific Parameters.

Life Science Laboratories, Inc. conducted analyses for the 2006 - 2009 samples. Samples from the 2005 event were analyzed by STL Newburgh.

- [DUP] Duplicate sample obtained at this location. The highest value given for the sample or the duplicate is reported.
 NA Not Analyzed.
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 N Spiked sample recovery not within control limits

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TABLE 3 (Continued)

**TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER QUALITY MONITORING RESULTS
ANALYTICAL RESULTS**

	ARARs	UNITS	WELL 5-OS				WELL 5-I			
	[1]		Jun-05	Sep-06	Oct-07	Mar-09	Jun-05	Sep-06	Oct-07	Mar-09
			[2]					[2]	[2]	[2]
Leachate Indicator Parameters:										
Alkalinity	---	mg/L		22	50	22	41.2			
Chemical Oxygen Demand	---	mg/L		610	10 U	71	10 U			
Total Hardness	---	mg/L	N	5,200	52	48	49.3	N	N	N
Total Kjeldhal Nitrogen	---	mg/L		0.4 U	0.2 U	0.34	1.25 N			
TAL Metals:										
Aluminum	---	ug/L	O	230,000	370	65,000	247	O	O	O
Antimony	3	ug/L	T	3 U	3 U	60 U	0.12 U	T	T	T
Arsenic	25	ug/L		33	5 U	9.8 J	3.1 U			
Barium	1000	ug/L		1,200	7.6 J	290	8.6 B			
Beryllium	3	ug/L		13	3 U	3.2	0.4 U			
Cadmium	5	ug/L	S	11	1 U	5 U	0.8 U	S	S	S
Calcium	---	ug/L		84,000	12,000	21,000	12,300			
Chromium	50	ug/L	A	690	32	170	5.6 B	A	A	A
Cobalt	---	ug/L		210	10 U	46 J	1.9 U			
Copper	200	ug/L	M	500	10 U	110	2.9 B	M	M	M
Iron	300	ug/L		410,000	850	110,000	124 N			
Lead	25	ug/L	P	67	5 U	12	1.9 U	P	P	P
Magnesium	35000 GV	ug/L		80,000	4,600	21,000	4,510 B			
Manganese	300	ug/L	L	5,100	14 J	1,100	13.6	L	L	L
Mercury	0.7	ug/L		0.14	0.026 J	0.2 U	0.16 U			
Nickel	100	ug/L	E	370	14 J	89	2.3 U	E	E	E
Potassium	---	ug/L		38,000	760 J	11,000	799 B			
Selenium	10	ug/L	D	5 U	5 U	10 U	1.6 UW	D	D	D
Silver	50	ug/L		8.1 J	10 U	10 U	1.1 UN			
Sodium	20000	ug/L		14,000	4,100	8,100	2,880 BE			
Thallium	0.5 GV	ug/L		7.8 J	10 U	20 U	5.1 B			
Vanadium	---	ug/L		620	4.7 J	170	3.9 B			
Zinc	2000 GV	ug/L		610	8.8 J	130	5.9 B			
VOCs by EPA Method 8260B:										
1,1-Dichloroethane	5	ug/L		0.5 U	0.5 U	0.5 U	1 U			
Vinyl Chloride	2	ug/L		1 U	1 U	1 U	1 U			
Benzene	1	ug/L		0.5 U	0.5 U	0.5 U	1 U			
Chlorobenzene	5	ug/L		0.5 U	0.5 U	0.5 U	1 U			

NOTES:

- [1] ARARs Applicable or Relevant and Appropriate Requirements: NYSDEC Water Quality Standards and Guidance Values, T.O.G.S. 1.1.1 (June 1998).
 [2] Well 5-I is the alternative sampling location if Well 5-OS has insufficient water volume for sampling.

Values in **BOLD** indicate an exceedance of applicable water quality standards or guidance values.

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Life Science Laboratories, Inc.

- J Analyte detected below Practical Quantitation Limit (PQL)
 U The compound was analyzed for, but not detected at the detection limit listed.
 E Value exceeds the instrument calibration range.

TABLE 3 (Continued)

**TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER QUALITY MONITORING RESULTS
ANALYTICAL RESULTS**

	ARARs [1]	UNITS	WELL 7-OS				WELL 8-OS			
			Jun-05	Sep-06	Oct-07	Mar-09 [DUP]	Jun-05	Sep-06	Oct-07	Mar-09
Leachate Indicator Parameters:										
Alkalinity	---	mg/L	123	98	110	98	21.4	64	74	66
Chemical Oxygen Demand	---	mg/L	10 U	24	10 U	6 J	10 U	10 U	10 U	55
Total Hardness	---	mg/L	169	230	130	170	47.6	130	80	140
Total Kjeldhal Nitrogen	---	mg/L	1 U	0.4 U	0.36	0.27	1 U	0.4 U	0.31	0.12 J
TAL Metals:										
Aluminum	---	ug/L	1,520	11,000	7,900	4,000	735	140	89	100 U
Antimony	3	ug/L	0.12 U	3 U	3 U	60 U	0.13 B	3 U	3 U	60 U
Arsenic	25	ug/L	3.1 UN	4.7 J	5 U	10 U	3.7 BN	5 U	5 U	10 U
Barium	1000	ug/L	102 BN	95 J	75 J	49 J	56.9 BN	8.9 J	14 J	13 J
Beryllium	3	ug/L	0.4 U	0.73 J	0.51 J	0.24 J	0.51 B	0.16 J	3 U	3 U
Cadmium	5	ug/L	0.8 UN	1	1 U	5 U	0.8 UN	0.92 J	1 U	5 U
Calcium	---	ug/L	48,800	35,000	39,000	49,000	14,200	17,000	24,000	41,000
Chromium	50	ug/L	5.7 B	87	96	61	29.6	140	85	680
Cobalt	---	ug/L	25.7 B	34	110	7.4 J	15.4 B	4.2 J	10 U	50 U
Copper	200	ug/L	5.2 B	28	18	10	32.1	2 J	10 U	11
Iron	300	ug/L	1,310	17,000	13,000	5,800	3,150	1,200	780	3,800
Lead	25	ug/L	2.5 B	6.3	5 U	10 U	1.9 U	5 U	5 U	10 U
Magnesium	35000 GV	ug/L	11,500	9,800	10,000	12,000	2,950 B	4,200	5,100	9,100
Manganese	300	ug/L	222	1,300	920	450	691	110	2,000	610
Mercury	0.7	ug/L	0.16 U	0.2 U	0.049 J	0.2 U	0.16 U	0.2 U	0.2 U	0.2 U
Nickel	100	ug/L	2.3 U	26 J	26 J	11 J	61.9	5.8 J	14 J	17 J
Potassium	---	ug/L	4,930 B	5,600	5,700	4,600 J	1,370 B	1,800 J	2,000 J	1,900 J
Selenium	10	ug/L	3.9 UN	5 U	5 U	10 U	3.9 UN	5 U	5 U	10 U
Silver	50	ug/L	2 BN	10 U	10 U	10 U	3.7 BN	10 U	10 U	10 U
Sodium	20000	ug/L	9,190	7,000	7,700	9,700	8,400	28,000	15,000	41,000
Thallium	0.5 GV	ug/L	2.9 UN	7.6 J	10 U	20 U	2.9 UN	9.8 J	10 U	20 U
Vanadium	---	ug/L	2.8 BN	21 J	17 J	8.3 J	2.4 BN	50 U	50 U	3 J
Zinc	2000 GV	ug/L	13.4 B	53	24	13 J	56.7	20	5.2 J	5.4 J
VOCs by EPA Method 8260B:										
1,1-Dichloroethane	5	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Vinyl Chloride	2	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U

NOTES:

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- J Analyte detected below Practical Quantitation Limit (PQL)
 U The compound was analyzed for, but not detected at the detection limit listed.
 E Value exceeds the instrument calibration range.

TABLE 3 (Continued)

**TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER QUALITY MONITORING RESULTS
ANALYTICAL RESULTS**

	ARARs [1]	UNITS	WELL 8-I				WELL 8-R			
			Jun-05	Sep-06	Oct-07	Mar-09	Jun-05	Sep-06	Oct-07	Mar-09
Leachate Indicator Parameters:										
Alkalinity	---	mg/L	564	260	230	190	505	520	490	480
Chemical Oxygen Demand	---	mg/L	50.1	41	53	44	10 U	14	11	10
Total Hardness	---	mg/L	360	460	190	170	600	460	570	560
Total Kjeldhal Nitrogen	---	mg/L	10.2	18 E	14	7.8	1.78	1.6	3	1.7
TAL Metals:										
Aluminum	---	ug/L	184 B	8,700	10,000	8,300	10.4 U	1,200	66	100 U
Antimony	3	ug/L	0.12 U	3 U	3 U	60 U	0.12 U	3 U	3 U	60 U
Arsenic	25	ug/L	8.6 BN	26	15	12	3.1 UN	3.1 J	5 U	10 U
Barium	1000	ug/L	111 BN	110	110	95 J	20.8 BN	29 J	19 J	16 J
Beryllium	3	ug/L	0.4 U	0.66 J	0.67 J	0.46 J	0.4 U	0.28 J	3 U	3 U
Cadmium	5	ug/L	0.8 UN	1.5	1 U	5 U	0.8 UN	1.2	1 U	5 U
Calcium	---	ug/L	93,200	55,000	51,000	49,000	169,000	170,000	160,000	160,000
Chromium	50	ug/L	3.3 B	30	41	27	2.5 B	42	11	11
Cobalt	---	ug/L	8.6 B	19	15	9.5 J	13.8 B	26	9.3 J	6.7 J
Copper	200	ug/L	1.2 U	23	29	27	3 B	84	2.9 J	5 J
Iron	300	ug/L	13,900	43,000	39,000	33,000	751	4,700	1,300	1,300
Lead	25	ug/L	1.9 U	3.5 J	5 U	10 U	3.5	4 J	5 U	10 U
Magnesium	35000 GV	ug/L	31,000	21,000	18,000	16,000	43,000	44,000	39,000	40,000
Manganese	300	ug/L	3,090	1,900	2,200	3,100	2,190	2,200	1,900	1,900
Mercury	0.7	ug/L	0.16 U	0.2 U	0.033 J	0.2 U	0.16 U	0.2 U	0.2 U	0.2 U
Nickel	100	ug/L	15.6 B	20 J	24 J	18 J	11.5 B	36 J	15 J	15 J
Potassium	---	ug/L	52,500	31,000	23,000	17,000	7,630	5,700	5,600	4,400 J
Selenium	10	ug/L	3.9 UN	5 U	5 U	10 U	3.9 UN	5 U	5 U	10 U
Silver	50	ug/L	2.2 BN	10 U	10 U	10 U	4.3 BN	10 U	10 U	10 U
Sodium	20000	ug/L	124,000	73,000	55,000	50,000	42,200	46,000	48,000	42,000
Thallium	0.5 GV	ug/L	4.6 BN	12	10 U	20 U	4.6 BN	9.4 J	10 U	20 U
Vanadium	---	ug/L	2 UN	24 J	26 J	20 J	2 UN	4.1 J	50 U	50 U
Zinc	2000 GV	ug/L	5.4 B	55	35	32	8.6 B	31	10 U	20 U
VOCs by EPA Method 8260B:										
1,1-Dichloroethane	5	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.24	0.14 J	0.11 J
Vinyl Chloride	2	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	ug/L	1.6	0.67	0.52	0.29 J	1 U	0.5 U	0.13 J	0.5 U

NOTES:

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J Analyte detected below Practical Quantitation Limit (PQL)

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E Value exceeds the instrument calibration range.

TABLE 3 (Continued)

**TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER QUALITY MONITORING RESULTS
ANALYTICAL RESULTS**

	ARARs [1]	UNITS	WELL 9-OS				WELL 9-I			
			Jun-05	Sep-06	Oct-07	Mar-09	Jun-05	Sep-06	Oct-07	Mar-09
Leachate Indicator Parameters:										
Alkalinity	---	mg/L	15.5	20	14	12	10.8	18	18	18
Chemical Oxygen Demand	---	mg/L	47.2	54	120	120	10 U	54	10 U	37
Total Hardness	---	mg/L	25.8	60	32	40	31.3	76	32	44
Total Kjeldhal Nitrogen	---	mg/L	1.05	0.4 U	3.2	5.4	1 U	0.4 U	0.2 U	0.099 J
TAL Metals:										
Aluminum	---	ug/L	291	1,000	4,000	3900	173 B	12,000	21,000	13,000
Antimony	3	ug/L	0.15 B	3 U	2 J	60 U	0.12 U	3 U	3 U	60 U
Arsenic	25	ug/L	3.1 UN	5 U	4.2 J	10 U	3.1 UN	4.5 J	4.4 J	10 U
Barium	1000	ug/L	11.7 BN	17 J	33 J	37 J	9.2 BN	110	180	120
Beryllium	3	ug/L	0.4 U	0.14 J	0.34 J	0.25 J	0.4 U	0.77 J	1.2 J	0.71 J
Cadmium	5	ug/L	0.8 UN	0.67 J	1 U	5 U	0.8 UN	0.73 J	1 U	5 U
Calcium	---	ug/L	7,100	7,600	8,100	9700	8,840	8,100	12,000	12,000
Chromium	50	ug/L	2.4 B	55	330	300	1.4 B	36	150	38
Cobalt	---	ug/L	1.9 U	2.2 J	10 U	50 U	1.9 U	14	27	11 J
Copper	200	ug/L	1.2 U	3.6 J	14	16	1.2 U	27	44	27
Iron	300	ug/L	453	1,600	6,300	7800	318	24,000	41,000	23,000
Lead	25	ug/L	1.9 U	1 J	6.1	10 U	1.9 U	3.5 J	4.8 J	10 U
Magnesium	35000 GV	ug/L	1,950 B	2,000	2,500	3300	2,230 B	5,100	7,900	5,900
Manganese	300	ug/L	27.7	51	140	150	11.6	290	560	290
Mercury	0.7	ug/L	0.16 U	0.2 U	0.049 J	0.2 U	0.16 U	0.2 U	0.078 J	0.2 U
Nickel	100	ug/L	2.3 U	6.7 J	34 J	28 J	2.3 U	18 J	31 J	19 J
Potassium	---	ug/L	3,320 B	5,100	1,700 J	5700	608 B	3,900 J	6,200	3,900 J
Selenium	10	ug/L	3.9 UN	5 U	5 U	10 U	3.9 UN	5 U	5 U	10 U
Silver	50	ug/L	1.1 UN	10 U	10 U	10 U	1.1 UN	10 U	10 U	10 U
Sodium	20000	ug/L	4,160 B	5.3	7,200	8300	5,530	9,400	9,800	15,000
Thallium	0.5 GV	ug/L	2.9 UN	10 U	10 U	20 U	2.9 UN	10 U	10 U	20 U
Vanadium	---	ug/L	2 UN	2.7 J	8.6 J	10 J	2 UN	25 J	43 J	24 J
Zinc	2000 GV	ug/L	9.3 B	36	13	21	5.6 B	65	56	35
VOCs by EPA Method 8260B:										
1,1-Dichloroethane	5	ug/L	1 U	0.5 U	0.5 U	0.50 U	1 U	0.5 U	0.5 U	0.5 U
Vinyl Chloride	2	ug/L	1 U	1 U	1 U	1.00 U	1 U	1 U	1 U	1 U
Benzene	1	ug/L	1 U	0.5 U	0.5 U	0.50 U	1 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	ug/L	1 U	0.5 U	0.5 U	0.50 U	1 U	0.5 U	0.5 U	0.5 U

NOTES:

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Life Science Laboratories, Inc.

- J Analyte detected below Practical Quantitation Limit (PQL)
 U The compound was analyzed for, but not detected at the detection limit listed.
 E Value exceeds the instrument calibration range.

TABLE 3 (Continued)

**TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER QUALITY MONITORING RESULTS
ANALYTICAL RESULTS**

	ARARs [1]	UNITS	WELL 9-R			
			Jun-05	Sep-06 [DUP]	Oct-07 [DUP]	Mar-09
Leachate Indicator Parameters:						
Alkalinity	---	mg/L	5 U	110	130	150
Chemical Oxygen Demand	---	mg/L	10 U	10 U	10 U	10 U
Total Hardness	---	mg/L	102	120	120	160
Total Kjeldhal Nitrogen	---	mg/L	6.78	4.9	5.9	5.6
TAL Metals:						
Aluminum	---	ug/L	26.5 B	73	140	100 U
Antimony	3	ug/L	0.12 U	3 U	3 U	60 U
Arsenic	25	ug/L	3.1 UN	5.9	6.1	5.7 J
Barium	1000	ug/L	23.3 BN	21 J	24 J	28 J
Beryllium	3	ug/L	0.4 U	1 U	0.1 J	3 U
Cadmium	5	ug/L	0.8 UN	0.53 J	1 U	5 U
Calcium	---	ug/L	26,700	27,000	31,000	38000
Chromium	50	ug/L	1.9 B	4.1 J	4.3 J	10 U
Cobalt	---	ug/L	2.8 B	3.7 J	10 U	50 U
Copper	200	ug/L	1.2 U	10 U	10 U	10 U
Iron	300	ug/L	6,430	7,000	8,500	9400
Lead	25	ug/L	1.9 U	5 U	5 U	10 U
Magnesium	35000 GV	ug/L	8,520	8,300	9,300	11000
Manganese	300	ug/L	2,730	2,800	2,900	3700
Mercury	0.7	ug/L	0.16 U	0.2 U	0.2 U	0.2 U
Nickel	100	ug/L	2.3 U	1.8 J	3.2 J	2.5 J
Potassium	---	ug/L	10,100	11,000	11,000	12000
Selenium	10	ug/L	3.9 UN	5 U	5 U	10 U
Silver	50	ug/L	1.4 BN	10 U	10 U	10 U
Sodium	20000	ug/L	22,500	28,000	35,000	44000
Thallium	0.5 GV	ug/L	2.9 UN	10 U	10 U	20 U
Vanadium	---	ug/L	2 UN	50 U	50 U	50 U
Zinc	2000 GV	ug/L	3.2 B	28	10 U	8.1 J
VOCs by EPA Method 8260B:						
1,1-Dichloroethane	5	ug/L	1 U	0.5 U	0.5 U	0.5 U
Vinyl Chloride	2	ug/L	1 U	1 U	1 U	1.00 U
Benzene	1	ug/L	1 U	0.5 U	0.5 U	0.50 U
Chlorobenzene	5	ug/L	1 U	0.24	0.5 U	0.22 J

NOTES:

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TABLE 3 (Continued)

**TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER QUALITY MONITORING RESULTS
ANALYTICAL RESULTS**

	ARARs [1]	UNITS	WELL PW-1				WELL PW-2			
			Jun-05	Sep-06	Oct-07	Mar-09	Jun-05	Sep-06	Oct-07	Mar-09
Leachate Indicator Parameters:										
Alkalinity	---	mg/L	13.5	24	20	18	37.9	58	50	46
Chemical Oxygen Demand	---	mg/L	10 U	10 U	55	10 U	10 U	10 U	10 U	10 U
Total Hardness	---	mg/L	66.7	48	32	40	56.6	92	64	60
Total Kjeldhal Nitrogen	---	mg/L	1 U	0.49 U	0.2 U	0.2 U	1 U	0.4 U	0.2 U	0.2 U
TAL Metals:										
Aluminum	---	ug/L	10.4 U	76	50 U	100 U	10.4 U	67	50 U	100 U
Antimony	3	ug/L	0.12 U	3 U	3 U	60 U	0.12 U	3 U	3 U	60 U
Arsenic	25	ug/L	3.1 UN	5 U	5 U	100 U	3.1 UN	5 U	5 U	10 U
Barium	1000	ug/L	11.2 BN	7.2 J	5.5 J	5.9 J	7.1 UN	2.6 J	2.4 J	2.6 J
Beryllium	3	ug/L	0.4 U	3 U	3 U	3 U	0.4 U	0.12 J	3 U	3 U
Cadmium	5	ug/L	0.8 UN	0.53 J	1 U	5 U	0.8 UN	0.62 J	1 U	5 U
Calcium	---	ug/L	18,400	10,000	8,200	10,000	18,800	28,000	21,000	25,000
Chromium	50	ug/L	0.9 U	2.7 J	10 U	10 U	0.9 U	2.8 J	10 U	10 U
Cobalt	---	ug/L	1.9 U	2.1 J	10 U	50 U	1.9 U	2.4 J	10 U	50 U
Copper	200	ug/L	83.4	69	60	100	197	50	200	61
Iron	300 [2]	ug/L	18.6 B	15 J	17 J	12 J	115	34 J	130	140
Lead	25	ug/L	1.9 U	5 U	5 U	10 U	1.9 U	2.1 J	5 U	10 U
Magnesium	35000 GV	ug/L	5,070	2,700	2,300	2,800	2,320 B	3,200	2,400	2,900
Manganese	300 [2]	ug/L	2.1 U	0.75 J	50 U	50 U	2.1 U	1.4 J	5.6 J	1.8 J
Mercury	0.7	ug/L	0.16 U	0.2 U	0.047 J	0.2 U	0.16 U	0.2 U	0.2 U	0.2 U
Nickel	100	ug/L	2.3 U	50	50 U	50 U	2.3 U	50 U	7 J	50 U
Potassium	---	ug/L	1,260 B	1,200 J	910 J	880 J	871 B	1,100 J	880 J	960 J
Selenium	10	ug/L	3.9 UN	3 J	5 U	10 U	3.9 UN	5 U	5 U	10 U
Silver	50	ug/L	1.1 UN	10 U	10 U	10 U	1.7 BN	10 U	10 U	10 U
Sodium	20000	ug/L	11,500	14,000	12,000	12,000	5,400	7,400	6,100	7,400
Thallium	0.5 GV	ug/L	2.9 UN	10 U	10 U	20 U	2.9 UN	8.8 J	10 U	20 U
Vanadium	---	ug/L	2 UN	50 U	50 U	50 U	2 UN	50 U	50 U	50 U
Zinc	2000 GV	ug/L	13.6 B	46	24	22	44.1	41	140	47
VOCs by EPA Method 8260B:										
1,1-Dichloroethane	5	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Vinyl Chloride	5	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U

NOTES:

- [1] ARARs Applicable or Relevant and Appropriate Requirements: NYSDEC Water Quality Standards and Guidance Values, T.O.G.S. 1.1.1 (June 1998). Values in **BOLD** indicate an exceedance of applicable water quality standards or guidance values.

All samples were analyzed for NYCRR Part 360 Baseline Parameters and Site Specific Parameters.

Life Science Laboratories, Inc. conducted analyses for the 2006 - 2009 samples. Samples from the 2005 event were analyzed by STL Newburgh.

- [DUP] Duplicate sample obtained at this location. The highest value given for the sample or the duplicate is reported.

NA Not Analyzed.

ND Not Detected.

Laboratory Qualifier Definitions:STL Newburgh

- U The compound was analyzed for, but not detected at the detection limit listed.
 J Indicates an estimated value for tentatively identified compounds.
 B The reported value is less than the Contract Required Detection Limit (CRDL), but greater than the Instrument Detection Limit.
 E Indicates an estimated value because of the possible presence of interference.
 W Indicates post digestion spike for furnace AA analysis is out of control limits (85-110%), while sample absorbance is less than 50% of spike absorbance.
 N Spiked sample recovery not within control limits

Life Science Laboratories, Inc.

- J Analyte detected below Practical Quantitation Limit (PQL)
 U The compound was analyzed for, but not detected at the detection limit listed.
 E Value exceeds the instrument calibration range.

TABLE 3 (Continued)

**TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER QUALITY MONITORING RESULTS
ANALYTICAL RESULTS**

	ARARs	UNITS	SVWC-93				SVWC-94			
	[1]		Jun-05	Sep-06	Oct-07	Mar-09	Jun-05	Sep-06	Oct-07	Mar-09
Leachate Indicator Parameters:			[3]							
Alkalinity	---	mg/L	39.1	46	58	40	41.9	44	52	
Chemical Oxygen Demand	---	mg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Total Hardness	---	mg/L	84.1	76	88	76	88.2	72	92	N
Total Kjeldhal Nitrogen	---	mg/L	1 U	0.4 U	0.2 U	0.2 U	1 U	0.4 U	0.2 U	
TAL Metals:										
Aluminum	---	ug/L	10.4 U	63	50 U	100 U	10.4 U	56	50 U	O
Antimony	3	ug/L	0.14 B	3 U	3 U	60 U	0.12 U	3 U	3 U	T
Arsenic	25	ug/L	4.2 BN	1.2 J	5 U	10 U	3.1 UN	5 U	5 U	
Barium	1000	ug/L	9.7 BN	9.6 J	11 J	8.8 J	13.6 BN	13 J	14 J	
Beryllium	3	ug/L	0.4 U	0.14 J	3 U	3 U	0.4 U	3 U	3 U	
Cadmium	5	ug/L	0.8 UN	0.59 J	1 U	5 U	0.8 UN	1 U	1 U	S
Calcium	---	ug/L	23,500	21,000	25,000	23,000	24,600	21,000	23,000	
Chromium	50	ug/L	0.9 U	3.2 J	10 U	10 U	0.93 B	2 J	10 U	A
Cobalt	---	ug/L	1.9 U	2.2 J	10 U	50 U	1.9 U	10 U	10 U	
Copper	200	ug/L	3.9 B	7.6 J	8 J	3.9 J	5.4 B	7 J	12	M
Iron	300 [2]	ug/L	14.4 B	21 J	46 J	29 J	7.7 U	50 U	12 J	
Lead	25	ug/L	2 B	5 U	5 U	10 U	1.9 U	5 U	5 U	P
Magnesium	35000 GV	ug/L	6,170	5,200	6,100	5,900	6,520	5,300	5,900	
Manganese	300 [2]	ug/L	2.1 U	0.62 J	50 U	50 U	6.5 B	3.2 J	3.8 J	L
Mercury	0.7	ug/L	0.16 U	0.2 U	0.027 J	0.2 U	0.16 U	0.2 U	0.2 U	
Nickel	100	ug/L	2.3 U	50 U	5.5 J	50 U	2.3 U	50 U	50 U	E
Potassium	---	ug/L	2,240 B	2,000 J	2,000 J	1,500 J	1,950 B	1,700 J	1,600 J	
Selenium	10	ug/L	6.8 N	5 U	5 U	10 U	3.9 UN	5 U	5 U	D
Silver	50	ug/L	1.5 BN	10 U	10 U	10 U	1.1 UN	10 U	10 U	
Sodium	20000	ug/L	44,100	52,000	60,000	52,000	42,300	47,000	52,000	
Thallium	0.5 GV	ug/L	2.9 UN	7.6 J	10 U	20 U	2.9 UN	10 U	10 U	
Vanadium	---	ug/L	2 UN	50 U	50 U	50 U	2 UN	50 U	50 U	
Zinc	2000 GV	ug/L	5.1 B	36	13	12 J	3.8 B	36	10	
VOCs by EPA Method 8260B:										
1,1-Dichloroethane	5	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	
Vinyl Chloride	5	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
Benzene	1	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	
Chlorobenzene	5	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	

NOTES:

- [1] ARARs Applicable or Relevant and Appropriate Requirements: NYSDEC Water Quality Standards and Guidance Values, T.O.G.S. 1.1.1 (June 1998).
 [3] SVWC-94 Out of Service During March 2009 Sampling Event
 Values in **BOLD** indicate an exceedance of applicable water quality standards or guidance values.

All samples were analyzed for NYCRR Part 360 Baseline Parameters and Site Specific Parameters.

Life Science Laboratories, Inc. conducted analyses for the 2006 - 2009 samples. Samples from the 2005 event were analyzed by STL Newburgh.

- [DUP] Duplicate sample obtained at this location. The highest value given for the sample or the duplicate is reported.
 NA Not Analyzed.
 ND Not Detected.

Laboratory Qualifier Definitions:STL Newburgh

- U The compound was analyzed for, but not detected at the detection limit listed.
 J Indicates an estimated value for tentatively identified compounds.
 B The reported value is less than the Contract Required Detection Limit (CRDL), but greater than the Instrument Detection Limit.
 E Indicates an estimated value because of the possible presence of interference.
 W Indicates post digestion spike for furnace AA analysis is out of control limits (85-110%), while sample absorbance is less than 50% of spike absorbance.
 N Spiked sample recovery not within control limits

Life Science Laboratories, Inc.

- J Analyte detected below Practical Quantitation Limit (PQL)
 U The compound was analyzed for, but not detected at the detection limit listed.
 E Value exceeds the instrument calibration range.

TABLE 3 (Continued)

**TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER QUALITY MONITORING RESULTS
ANALYTICAL RESULTS**

	ARARs [1]	UNITS	SVWC-95				SVWC-96			
			Jun-05	Sep-06	Oct-07	Mar-09	Jun-05	Sep-06	Oct-07	Mar-09
Leachate Indicator Parameters:										
Alkalinity	---	mg/L	53.5	54	62	40	47.6	44	50	40
Chemical Oxygen Demand	---	mg/L	10 U	0.1 U	10 U	10 U	10 U	0.1 U	10 U	10 U
Total Hardness	---	mg/L	80.6	84	100	88	83.2	76	80	88
Total Kjeldhal Nitrogen	---	mg/L	1 U	0.4 U	0.2 U	0.2 U	1 U	0.4 U	0.2 U	0.1 J
TAL Metals:										
Aluminum	---	ug/L	10.4 U	37	50 U	100 U	10.4 U	14 J	50 U	100 U
Antimony	3	ug/L	0.12 U	3 U	3 U	60 U	0.12 U	3 U	3 U	60 U
Arsenic	25	ug/L	3.1 UN	2 J	5 U	10 U	3.1 UN	1.3 J	5 U	10 U
Barium	1000	ug/L	13.7 BN	10 J	16 J	13 J	10 BN	7.2 J	9.4 J	8.6 J
Beryllium	3	ug/L	0.4 U	3 U	3 U	3 U	0.4 U	3 U	3 U	3 U
Cadmium	5	ug/L	0.8 UN	1 U	1 U	5 U	0.8 UN	1 U	1 U	5 U
Calcium	---	ug/L	22,300	20,000	25,000	24,000	22,400	18,000	22,000	23,000
Chromium	50	ug/L	0.9 U	10 U	10 U	10 U	0.94 B	10 U	10 U	10 U
Cobalt	---	ug/L	1.9 U	10 U	10 U	50 U	1.9 U	10 U	10 U	50 U
Copper	200	ug/L	3 B	6.1 J	4.4 J	5.4 J	3.9 B	6.8 J	4.3 J	6.3 J
Iron	300 [2]	ug/L	17.2 B	260	76	33 J	7.7 U	50 U	50 U	16 J
Lead	25	ug/L	1.9 U	5 U	5 U	10 U	1.9 U	5 U	5 U	10 U
Magnesium	35000 GV	ug/L	6,030	5,100	6,500	6,700	6,250	4,900	5,800	6,300
Manganese	300 [2]	ug/L	86	25 J	96	140	2.1 U	50 U	50 U	50 U
Mercury	0.7	ug/L	0.16 U	0.2 U	0.057 J	0.2 U	0.16 U	0.2 U	0.036 J	0.2 U
Nickel	100	ug/L	2.3 U	1.4 J	1.2 J	50 U	2.3 U	50 U	50 U	50 U
Potassium	---	ug/L	2,320 B	1,700 J	2,200 J	1,600 J	2,120 B	1,300 J	1,600 J	1,300 J
Selenium	10	ug/L	3.9 UN	5 U	5 U	10 U	3.9 UN	5 U	5 U	10 U
Silver	50	ug/L	1.1 UN	1.5 J	10 U	10 U	1.1 UN	10 U	10 U	10 U
Sodium	20000	ug/L	41,700	36,000	53,000	49,000	47,400	47,000	56,000	54,000
Thallium	0.5 GV	ug/L	2.9 UN	10 U	10 U	10 U	2.9 UN	10 U	10 U	20 U
Vanadium	---	ug/L	2 UN	50 U	50 U	2 U	2 UN	50 U	50 U	50 U
Zinc	2000 GV	ug/L	9.3 B	25	8.2 J	11 J	6 B	24	8.8 J	14 J
VOCs by EPA Method 8260B:										
1,1-Dichloroethane	5	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Vinyl Chloride	5	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	ug/L	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U

NOTES:

- [1] ARARs Applicable or Relevant and Appropriate Requirements: NYSDEC Water Quality Standards and Guidance Values, T.O.G.S. 1.1.1 (June 1998). Values in **BOLD** indicate an exceedance of applicable water quality standards or guidance values.

All samples were analyzed for NYCRR Part 360 Baseline Parameters and Site Specific Parameters.

Life Science Laboratories, Inc. conducted analyses for the 2006 - 2009 samples. Samples from the 2005 event were analyzed by STL Newburgh.

[DUP] Duplicate sample obtained at this location. The highest value given for the sample or the duplicate is reported.

NA Not Analyzed.

ND Not Detected.

Laboratory Qualifier Definitions:STL Newburgh

- U The compound was analyzed for, but not detected at the detection limit listed.
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 W Indicates post digestion spike for furnace AA analysis is out of control limits (85-110%), while sample absorbance is less than 50% of spike absorbance.
 N Spiked sample recovery not within control limits

Life Science Laboratories, Inc.

- J Analyte detected below Practical Quantitation Limit (PQL)
 U The compound was analyzed for, but not detected at the detection limit listed.
 E Value exceeds the instrument calibration range.

TABLE 3A

**TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER MONITORING DATA
COMPOUND: Benzene**

Sample ID	Jan-90	Sep-90	Jan-93	Apr-93	Sep-93	Dec-93	Mar-94	Jun-94	Sep-94	Dec-94	Mar-95	Jun-95	Sep-95	Dec-95	Mar-96	Jun-96
1-OS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA
2-OS	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA
3-OS/I	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA
4-OS	ND	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA
5-OS	2.0	ND	ND	ND	NA	NA	NA	ND	NA	NA	NA	ND	NA	NA	ND	NA
5-I	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	NA	NA	ND	NA	NA
7-OS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	NA	NA
8-OS	2.0	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8-I	2.0	2.9	NA	ND	ND	ND	ND	ND	ND	2.0	ND	ND	ND	1.2	1.0	2.0
8-R	3.0	0.4	ND	0.9	ND	ND	ND	ND	ND	ND	2.0	0.9	ND	0.65	ND	ND
9-OS	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
9-I	NA	0.2	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9-R	NA	0.9	ND	ND	ND	NA	ND	ND	ND	1.0	ND	ND	ND	ND	ND	ND
PW-1	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PW-2	NA	NA	ND	ND	ND	NA	NA	NA	ND	ND	NA	0.5	ND	ND	ND	ND
SVWC-93	NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVWC-94	NA	NA	ND	ND	NA	NA	ND	ND	ND	1.0	ND	ND	ND	ND	ND	ND
SVWC-95	NA	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVWC-96	NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

NOTES:

Concentrations reported in µg/L (ppb).

ND = Not Detected

NA = Not Analyzed

Values in **BOLD** indicate an exceedance of groundwater quality standard for Benzene, 1.0 µg/L.

TABLE 3A (Continued)

**TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER MONITORING DATA
COMPOUND: Benzene**

Sample ID	Sample Date														
	Sep-96	Dec-96	Mar-97	Jun-97	Sep-97	Dec-97	Mar-98	Jun-98	Sep-98	Mar-99	Jun-99	Sep-99	May-00	Sep-00	Dec-00
1-OS	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	NA	ND	ND	NA	ND
2-OS	NA	NA	ND	NA	ND	NA	ND	NA	ND	ND	NA	ND	ND	NA	ND
3-OS/I	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	NA	ND	ND	NA	ND
4-OS	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	NA	ND	ND	NA	ND
5-OS	NA	NA	ND	NA	NA	NA	NA	NA	NA	ND	NA	ND	ND	NA	ND
5-I	ND	NA	NA	NA	ND	NA	ND	NA	ND	NA	NA	ND	NA	NA	NA
7-OS	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	NA	ND	ND	NA	ND
8-OS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8-I	2.0	3.0	ND	ND	2.0	ND	ND	ND	ND	NA	ND	ND	0.5 J	ND	ND
8-R	ND	ND	ND	ND	ND	2.0	ND	ND	ND	ND	ND	ND	ND	ND	ND
9-OS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9-I	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9-R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PW-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PW-2	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVWC-93	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND
SVWC-94	ND	ND	ND	ND	ND	NA	ND	ND	ND	NA	ND	NA	ND	ND	ND
SVWC-95	ND	ND	ND	ND	ND	NA	ND	ND	ND	NA	ND	NA	ND	ND	ND
SVWC-96	ND	NA	NA	ND	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND	ND

NOTES:

Concentrations reported in µg/L (ppb).

ND = Not Detected

NA = Not Analyzed

Values in **BOLD** indicate an exceedance of groundwater quality standard for Benzene, 1.0 µg/L.

TABLE 3A

TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER QUALITY MONITORING
COMPOUND: BENZENE

Sample ID	Sample Date		Sample Date		Sep-06	Oct-07	Mar-09
	Oct-03	Mar-04	Jun-05	Mar-04			
1-OS/I	NA	NA	1.0	U	0.5	U	0.5
2-OS	1.0	1.0	1.0	U	0.5	U	0.5
3-OS/I	1.0	1.0	1.0	U	0.5	U	0.5
4-OS	1.0	1.0	1.0	U	0.5	U	0.5
5-OS	NA	1.0	NA	U	0.5	U	0.5
5-I	1.0	NA	1.0	U	NA	NA	NA
7-OS	1.0	1.0	1.0	U	0.5	U	0.5
8-OS	1.0	1.0	1.0	U	0.5	U	0.5
8-I	1.0	0.6 J	1.0	U	0.5	U	0.5
8-R	1.0	1.0	1.0	U	0.5	U	0.5
9-OS	1.0	1.0	1.0	U	0.5	U	0.5
9-I	1.0	1.0	1.0	U	0.5	U	0.5
9-R	1.0	1.0	1.0	U	0.5	U	0.5
PW-1	1.0	1.0	1.0	U	0.5	U	0.5
PW-2	1.0	1.0	1.0	U	0.5	U	0.5
SVWC-93	1.0	1.0	1.0	U	0.5	U	0.5
SVWC-94	1.0	1.0	1.0	U	0.5	U	NA
SVWC-95	1.0	1.0	1.0	U	0.5	U	0.5
SVWC-96	1.0	1.0	1.0	U	0.5	U	0.5

NOTES:

Concentrations reported in ug/L (ppb).

NA = Not Analyzed

Values in **BOLD** indicate an exceedance of groundwater quality standard for Benzene, 1.0 mg/L.

Life Science Laboratories, Inc. conducted analyses for the 2006 - 2009 events. STL Newburgh conducted analyses for the 2003 - 2005 events.

Life Science Laboratories

U = Analyte not detected at listed detection limit.

STL Newburgh

J = Indicates an estimated value for Tentatively Identified Compounds

TABLE 3B

**TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER MONITORING DATA
COMPOUND: Chromium**

Sample ID	Jan-90	Sep-90	Jan-93	Apr-93	Sep-93	Dec-93	Mar-94	Jun-94	Sep-94	Dec-94	Mar-95	Jun-95	Sep-95	Dec-95	Mar-96	Jun-96
1-OS	153	57.3	8	ND	60	257	65.5	7.2	284	134	727	17	102	70.5	127	NA
2-OS	180	141	NA	ND	50.2	95.9	11.8	89.3	45.9	25.1	39.7	34.1	137	50.3	83.6	NA
3-OS/I	587	1,290	807	40.4	1,350	1,100	784	304	561	1,020	144	406	589	253	372	NA
4-OS	139	40.1	5.8	ND	10.8	11.2	15.1	25.4	23.1	53.1	21.1	ND	38.8	12.2	11	NA
5-OS	90	35.6	48.8	ND	NA	NA	NA	NA	NA	NA	NA	39	NA	NA	216	NA
5-I	NA	NA	NA	NA	NA	80	30.2	7.2	40	63.1	109	NA	17.4	22.4	NA	NA
7-OS	33.5	40.1	24.2	13	1,890	218	31	210	571	258	324	NA	NA	37	125	NA
8-OS	34.8	16.7	ND	ND	ND	7.6	86.6	28.7	13.2	4.2	129	40.4	13.9	7.2	62.2	35.8
8-I	215	32.5	NA	ND	ND	ND	29	17	12.8	8.4	8	3.4	24.1	29.2	12.3	26.2
8-R	20	23.1	9.9	ND	17.7	18.2	7.5	17	10.4	6.8	6.3	10.1	13.4	8.5	6.7	23.8
9-OS	NA	6.8	ND	ND	ND	ND	22.9	27.1	14.8	2.9	6.6	7.6	NA	NA	9.8	11.2
9-I	NA	8.1	NA	NA	NA	NA	28	ND	2.4	5.8	3.9	8	34.6	25.3	8.1	11.4
9-R	NA	8.8	3.9	16.4	16.7	11.6	35.4	48.2	29.9	10.5	16.9	26.5	66.7	45.4	43.8	12.8
PW-1	NA	ND	ND	ND	ND	ND	ND	ND	0.6	ND	0.8	ND	ND	ND	ND	ND
PW-2	NA	ND	ND	ND	ND	4.9	NA	ND	ND	ND	NA	ND	ND	ND	ND	0.94
SVWC-93	NA	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
SVWC-94	NA	NA	ND	ND	NA	NA	ND	ND	ND	0.97	ND	ND	NA	ND	ND	ND
SVWC-95	NA	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
SVWC-96	NA	NA	ND	ND	NA	ND	ND	ND	ND	0.87	ND	1.7	NA	ND	ND	ND

NOTES:

Concentrations reported in µg/L (ppb).

ND = Not Detected

NA = Not Analyzed

Values in **BOLD** indicate an exceedance of groundwater quality standard for Chromium, 50 µg/L.

TABLE 3B (Continued)

**TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER MONITORING DATA
COMPOUND: Chromium**

Sample ID	Sep-96	Dec-96	Mar-97	Jun-97	Sep-97	Dec-97	Mar-98	Jun-98	Sep-98	Mar-99	Jun-99	Sep-99	May-00	Sep-00	Dec-00	Mar-01
1-OS	102	NA	88	NA	220	NA	1,180	NA	52.1	496	NA	1,850	2,100	NA	405	253
2-OS	NA	NA	ND	NA	ND	NA	241	NA	121	13.6	NA	285	415	NA	120	128
3-OS/I	29.7	NA	25	NA	190	NA	433	NA	804	270	NA	321	687	NA	453	522
4-OS	6.2	NA	ND	NA	ND	NA	34.7	NA	8.6	2.2	NA	87.7	36.8	NA	17.9	13.2
5-OS	NA	NA	19	NA	NA	NA	NA	NA	NA	15.3	NA	NA	69.3	NA	165	38.6
5-I	8	NA	NA	NA	ND	NA	2.3	NA	9.6	NA	NA	10.6	NA	NA	NA	NA
7-OS	4.4	NA	41	NA	60	NA	188	NA	96.2	48.1	NA	59.2	200	NA	34.7	51.9
8-OS	15.9	20	ND	ND	ND	ND	4	9.6	4.5	79.4	20.2	31	30.1	16.9	8.8	25.8
8-I	17.4	110	17	10	ND	20	4.6	4.8	55.6	NA	56.8	ND	10	17.3	22.9	49.9
8-R	20.4	ND	ND	20	20	ND	ND	5.2	6.3	3.4	2	ND	1.1	2.2	3.6	7.7
9-OS	5.2	ND	ND	10	ND	ND	ND	2.3	0.64	9.8	1.1	ND	34.5	7.4	20.1	17
9-I	4.8	ND	ND	ND	ND	ND	1.7	8	2.8	1.7	6.8	ND	10.8	5.0	4.1	28.8
9-R	23.8	90	ND	20	ND	ND	15.2	1.9	23.4	8.5	15	47.3	3	1.6	2.4	4.1
PW-1	0.43	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.75	ND	ND	ND
PW-2	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.69	ND	ND	ND	ND	ND	ND
SVWC-93	0.89	ND	ND	ND	ND	ND	ND	ND	0.78	NA	ND	NA	ND	ND	1.4	ND
SVWC-94	ND	ND	ND	ND	ND	NA	ND	ND	ND	NA	ND	NA	0.53	ND	ND	ND
SVWC-95	ND	ND	ND	ND	ND	NA	ND	ND	0.96	NA	ND	NA	ND	ND	ND	ND
SVWC-96	1.3	NA	NA	ND	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND

NOTES:

Concentrations reported in µg/L (ppb).

ND = Not Detected

NA = Not Analyzed

Values in **BOLD** indicate an exceedance of groundwater quality standard for Chromium, 50 µg/L.

TABLE 3B

TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER QUALITY MONITORING
COMPOUND: CHROMIUM

Sample ID	Sample Date		Sample Date		Oct-07	Mar-09
	Oct-03	Mar-04	Jun-05	Sep-06		
1-OS/I	NA	NA	31.4	2,400	530	140
2-OS	52.9	87.1	101	120	250	480
3-OS/I	2,810	816	2,020	7,200	3,400	3,900
4-OS	5	9.4 B	56.7	1,300	270	230
5-OS	NA	237	NA	690	32	170
5-I	29.8	NA	5.6 B	NA	NA	NA
7-OS	2.4	133	5.7 B	87	96	61
8-OS	2.2	10.3	29.6	140	85	680
8-I	1.4	19.4	3.3 B	30	41	27
8-R	10 U	2 B	2.5 B	42	11	11
9-OS	5	10.4	2.4 B	55	330	300
9-I	2	2.8 B	1.4 B	36	150	38
9-R	1.1	2.6 B	1.9 B	4.1 J	4.3 J	10 U
PW-1	0.73	1.3 B	10 U	2.7 J	10 U	10 U
PW-2	1.9	1.5 B	10 U	2.8 J	10 U	10 U
SVWC-93	1.3	1.4 B	10 U	3.2 J	10 U	10 U
SVWC-94	0.75	1.9 B	0.93 B	2 J	10 U	NA
SVWC-95	10 U	1.5 B	10 U	10 U	10 U	10 U
SVWC-96	10 U	1.2 B	0.94 B	10 U	10 U	10 U

NOTES:

Concentrations reported in ug/L (ppb).

NA = Not Analyzed

Values in **BOLD** indicate an exceedance of groundwater quality standard for Chromium, 50 mg/L.

Life Science Laboratories, Inc. conducted analyses for the 2006 - 2009 events. STL Newburgh conducted analyses for the 2003-2005 events.

Life Science Laboratories

J = Analyte detected below the Practical Quantitation Limit (PQL)

U = Analyte not detected at listed detection limit.

STL Newburgh

B = The reported value is less than the Contract Required Detection Limit (CRDL), but greater than the Instrument Detection Limit.

TABLE 3C

**TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER MONITORING DATA
COMPOUND: Iron**

Sample ID	Jan-90	Sep-90	Jan-93	Apr-93	Sep-93	Dec-93	Mar-94	Jun-94	Sample Date	Sep-94	Dec-94	Mar-95	Jun-95	Sep-95	Dec-95	Mar-96	Jun-96
1-OS	45,000	17,500	1,870	884	32,300	162,000	12,200	69.6	4,950	47,700	5,970	2,820	27,900	23,400	21,700	NA	NA
2-OS	912	41,800	NA	186	11,800	9,800	946	5,080	14,700	4,120	1,310	1,730	24,300	5,660	1,770	NA	NA
3-OS/I	6,830	9,750	5,110	333	21,300	37,900	19,400	29,900	14,400	37,500	54,600	16,600	31,400	3,710	7,750	NA	NA
4-OS	15,600	12,400	529	520	5,560	10,600	5,720	17,600	16,900	15,200	6,110	3,010	28,600	7,460	7,470	NA	NA
5-OS	27,000	11,200	11,100	4,700	NA	NA	NA	NA	NA	NA	NA	17,100	NA	NA	60,000	NA	NA
5-I	NA	NA	NA	NA	NA	2,030	2,080	2,380	8,990	30,700	56,200	NA	2,200	1,870	NA	NA	NA
7-OS	981	24,500	1,250	521	619,000	2,200	2,340	15,600	14,500	14,400	12,200	NA	NA	1,870	11,400	NA	NA
8-OS	229,000	43,800	3,230	2,080	6,180	12,000	20,300	6,240	7,490	6,740	13,500	5,760	46,900	0.116	4,870	4,370	4,370
8-I	15,700	30,500	NA	ND	ND	ND	22,300	41,200	24,200	18,200	24,300	21,100	32,300	28,500	27,300	38,700	38,700
8-R	1,360	2,940	11,600	2,590	9,160	4,710	2,510	11,100	22,000	10,200	24,900	25,700	26,600	124,000	18,400	14,300	14,300
9-OS	NA	249	50.7	1,200	383	393	2,210	1,040	1,020	1,490	1,340	788	468	NA	2,330	1,350	1,350
9-I	NA	145	NA	NA	NA	NA	2,040	62.3	84	260	NA	NA	4,530	762	232	443	443
9-R	NA	20,200	2,680	8,250	11,500	10,800	8,850	19,400	9,110	2,700	1,080	2,230	4,080	1,370	2,060	2,270	2,270
PW-1	NA	64	186	130	1,260	916	85.3	11.2	561	39.7	283	400	238	252	53.9	38.1	38.1
PW-2	NA	11	41.8	49.5	ND	22.7	NA	ND	53.5	13.6	NA	253	276	225	ND	ND	ND
SVWC-93	NA	NA	32.6	10.6	NA	553	179	ND	17.2	20.7	19	154	NA	585	ND	ND	ND
SVWC-94	NA	NA	40.3	19.1	NA	NA	49.4	ND	6.1	13.8	ND	143	NA	124	ND	ND	ND
SVWC-95	NA	NA	51.7	74.4	ND	NA	45.5	ND	274	40.3	279	161	NA	148	ND	ND	ND
SVWC-96	NA	NA	22.3	17.3	NA	22.6	14.9	ND	61.5	66.8	ND	173	NA	136	ND	ND	ND

NOTES:

Concentrations reported in µg/L (ppb):

ND = Not Detected

NA = Not Analyzed

Values in **BOLD** indicate an exceedance of groundwater quality standard for Iron, 300 µg/L.

TABLE 3C (Continued)

**TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER MONITORING DATA
COMPOUND: Iron**

Sample ID	Sample Date	Mar-96	Dec-96	Mar-97	Jun-97	Sep-97	Dec-97	Mar-98	Jun-98	Sep-98	Mar-99	Jun-99	Sep-99	May-00	Sep-00	Dec-00	Mar-01
1-OS	48,000	NA	NA	19,000	NA	49,000	NA	62,100	NA	3,150	74,400	NA	76,200	40,500	NA	43,800	54,100
2-OS	NA	NA	NA	140	NA	900	NA	15,100	NA	24,900	536	NA	6,910	32,900	NA	32,800	37,700
3-OS/I	303	NA	NA	1,500	NA	5,400	NA	29,800	NA	23,600	1,620	NA	1,990	3,310	NA	3,620	5,810
4-OS	1,300	NA	NA	2,700	NA	600	NA	8,490	NA	6,840	1,100	NA	50,200	16,300	NA	11,300	7,690
5-OS	NA	NA	NA	8,100	NA	NA	NA	NA	NA	NA	8,180	NA	NA	41,500	NA	101,000	22,800
5-I	2,170	NA	NA	NA	NA	600	NA	3,150	NA	851	NA	NA	700	NA	NA	NA	NA
7-OS	305	NA	NA	9,700	NA	9,700	NA	36,300	NA	21,900	1,950	NA	11,300	4,300	NA	12,400	4,170
8-OS	997	2,100	2,100	ND	1,500	1,800	2,800	795	1,820	153	1,000	473	747	1,200	8,900	4,450	6,020
8-I	26,400	80,000	80,000	18,000	26,000	14,000	15,000	15,700	6,000	37,200	NA	19,100	4,270	9,870	22,900	26,400	47,600
8-R	11,700	2,700	2,700	1,400	5,400	9,200	12,000	4,880	4,150	1,940	2,440	1,140	5,260	1,180	2,230	2,580	2,500
9-OS	1,030	460	460	1,400	6,500	200	300	0.105	392	126	912	515	198	1,880	2,230	2,640	3,660
9-I	80.5	100	ND	ND	ND	ND	ND	113	400	91.3	86.4	949	ND	2,820	3,920	2,570	24,000
9-R	1,640	3,200	13,000	4,700	7,800	7,800	4,600	5,040	3,660	3,900	670	4,360	3,110	1,340	9,110	8,280	8,080
PW-1	40.2	30,000	ND	ND	ND	ND	ND	ND	94.4	38.8	42.2	163	ND	18	ND	4.5	15.3
PW-2	ND	ND	ND	ND	ND	ND	ND	27.7	36.9	22.2	35.3	114	ND	59.4	36.8	62	10.8
SVWC-93	ND	ND	ND	ND	ND	ND	ND	26.4	253	50.2	NA	169	NA	8.8	4.2	36.5	62.4
SVWC-94	ND	ND	ND	ND	ND	ND	NA	ND	90.9	ND	NA	83.1	NA	3.9	ND	20.5	22.2
SVWC-95	98.8	ND	ND	ND	ND	ND	NA	ND	61	27	NA	90.1	NA	23.2	ND	14.4	24.9
SVWC-96	147	NA	NA	NA	ND	ND	ND	ND	NA	289	NA	67.8	NA	4.6	ND	52.9	27.8

NOTES:

Concentrations reported in µg/L (ppb).

ND = Not Detected

NA = Not Analyzed

Values in **BOLD** indicate an exceedance of groundwater quality standard for Iron, 300 µg/L.

TABLE 3C

TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER MONITORING
COMPOUND: IRON

Sample ID	Oct-03	Sample Date		Jun-05	Sep-06	Oct-07	Mar-09
1-OS/I	NA	Mar-04	NA	54,200 N	120,000	160,000	38,000
2-OS	14,700		14,700	144 N	12,000	31,000	12,000
3-OS/I	39,000		12,900	60,500 N	77,000	25,000	30,000
4-OS	2,470		3,050	3,050	12,000	24,000	10,000
5-OS	NA		150,000	NA	410,000	850	110,000
5-I	21,800		NA	124	NA	NA	NA
7-OS	633		38,500	1,310	17,000	13,000	5,800
8-OS	705		1,030	3,150	1,200	780	3,800
8-I	8,310		29,700	13,900	43,000	39,000	33,000
8-R	1,090		1,160	751	4,700	1,300	1,300
9-OS	656		506	453	1,600	6,300	7,800
9-I	514		1,630	318	24,000	41,000	23,000
9-R	4,660		4,890	6,430	7,000	8,500	9,400
PW-1	50 U	20 B	18.6 B	15 J	15 J	17 J	12 J
PW-2	50 U	27.5 B	115	34 J	130	140	140
SVWC-93	50 U	203	14.4 B	21 J	46 J	29 J	29 J
SVWC-94	50 U	30.3 B	7.7 U	50 U	12 J	NA	NA
SVWC-95	50 U	157	17.2 B	260	76	33 J	33 J
SVWC-96	50 U	16.8 U	7.7 U	50 U	50 U	16 J	16 J

NOTES:

Concentrations reported in ug/L (ppb).

NA = Not Analyzed

Values in **BOLD** indicate an exceedance of groundwater quality standard for Iron, 300 mg/L.

Life Science Laboratories, Inc. conducted analyses for the 2006 - 2009 events. STL Newburgh conducted analyses for the 2003-2005 events.

Life Science Laboratories

J = Analyte detected below the Practical Quantitation Limit (PQL)

U = Analyte not detected at listed detection limit.

STL Newburgh

B = The reported value is less than the Contract Required Detection Limit (CRDL), but greater than the Instrument Detection Limit.

TABLE 3D

**TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER MONITORING DATA
COMPOUND: Manganese**

Sample ID	Jan-90	Sep-90	Jan-93	Apr-93	Sep-93	Dec-93	Mar-94	Jun-94	Sep-94	Dec-94	Mar-95	Jun-95	Sep-95	Dec-95	Mar-96	Jun-96
1-OS	3,790	3,700	809	1,410	4,010	5,590	3,510	26.8	5,150	4,770	2,950	2,010	4,930	3,130	2,020	NA
2-OS	298	4,770	NA	27	4,850	1,580	92.5	985	2,450	827	221	982	5,570	883	280	NA
3-OS/I	8,700	18,100	3,450	1,690	9,590	8,780	5,640	10,300	2,240	5,540	3,590	3,270	3,860	6,090	11,900	NA
4-OS	4,210	5,020	547	506	2,080	995	598	2,850	3,050	1,130	602	2,860	7,080	682	636	NA
5-OS	981	530	192	43.2	NA	NA	NA	NA	NA	NA	1410	NA	49.5	NA	616	NA
5-I	NA	NA	NA	NA	NA	52.8	40.6	215	221	474	NA	248	NA	53.6	NA	NA
7-OS	1,240	3,260	48.3	46.1	45,100	122	67.4	1,580	9,820	992	1,180	NA	NA	56.8	390	NA
8-OS	2,830	2,750	1,680	1,640	3,330	1,910	4,090	1,790	3,230	1,840	2,050	2,690	1,420	903	2,460	3,120
8-I	4,230	1,110	NA	ND	ND	ND	877	1,180	692	862	1,480	1,110	2,430	945	1,860	3,200
8-R	872	181	1,660	2,600	2,440	2,650	2,220	1,890	1,740	1,980	3,290	1,300	2,500	2,610	4,040	3,230
9-OS	NA	14.6	ND	21.1	9.6	8.7	74.8	34.7	26.2	40.8	32.9	3.9	NA	NA	75.7	70.9
9-I	NA	377	NA	NA	NA	NA	40.6	3.2	21.7	9.8	40.5	10.9	129	15.9	5.2	13.1
9-R	NA	3,270	2,320		2,540	1,890	1,660	1,830	1,650	1,460	1,590	1,790	1,810	1,070	738	1,840
PW-1	NA	ND	1.2	1.8	ND	3.6	5.4	ND	5.1	15.3	18.1	5.2	83.1	57.7	83.7	25.7
PW-2	NA	ND	4.7	7.5	6.3	6.6	NA	2.4	8.7	6.1	NA	6.1	11.6	7.7	2.6	5
SVWC-93	NA	NA	ND	1.7	NA	72.2	ND	ND	2	0.37	9.6	0.95	NA	11.9	ND	3.4
SVWC-94	NA	NA	7.3	ND	NA	NA	6.3	ND	10.4	11.9	6.7	11.4	NA	ND	3.1	ND
SVWC-95	NA	NA	56.4	1.8	ND	NA	91.6	108	273	85.9	29	49.7	NA	22.1	47.4	67.4
SVWC-96	NA	NA	ND	ND	NA	ND	ND	ND	2.1	11.9	1.3	ND	NA	48	ND	ND

NOTES:

Concentrations reported in µg/L (ppb).

ND = Not Detected

NA = Not Analyzed

Values in **BOLD** indicate an exceedance of groundwater quality standard for Manganese, 300 µg/L.

TABLE 3D (Continued)

**TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER MONITORING DATA
COMPOUND: Manganese**

Sample ID	Sep-96	Dec-96	Mar-97	Jun-97	Sep-97	Dec-97	Mar-98	Jun-98	Sep-98	Mar-99	Jun-99	Sep-99	May-00	Sep-00	Dec-00	Mar-01
1-OS	4,710	NA	2,200	NA	5,500	NA	4,530	NA	1,600	5,600	NA	9,830	5,740	NA	5,810	4,940
2-OS	NA	NA	18	NA	650	NA	1,060	NA	3,320	69.6	NA	936	4,110	NA	3,370	3,450
3-OS/I	4,880	NA	3,000	NA	4,500	NA	12,100	NA	8,880	948	NA	577	5,720	NA	5,070	3,750
4-OS	59.6	NA	140	NA	940	NA	430	NA	1,600	220	NA	1,720	1,340	NA	1,930	440
5-OS	NA	NA	NA	NA	20	NA	57.8	NA	18.7	NA	NA	27.2	533	NA	1,080	323
5-I	77.7	NA	160	NA	NA	NA	NA	NA	NA	88.6	NA	NA	NA	NA	NA	NA
7-OS	43.1	NA	1,400	NA	550	NA	2,480	NA	2,190	211	NA	755	305	NA	1,270	638
8-OS	679	2,200	570	670	830	570	124	466	2,640	119	1,400	860	525	3,820	2,410	6,760
8-I	2,100	3,100	1,200	1,800	910	840	937	692	1,500	NA	1,050	1,570	789	2,810	2,560	3,430
8-R	4,310	3,400	3,500	3,100	2,000	1,500	2,130	2,340	952	NA	1,900	2,780	2,640	2,390	2,120	2,250
9-OS	43.3	20	49	170	ND	20	28	14.7	3.5	28.6	15.1	11.7	40.1	54.6	58.9	93.2
9-I	5.6	6	ND	ND	ND	ND	4.8	11.8	3.6	2.8	18	5.4	109	66.7	49.2	561
9-R	1,930	2,200	2,600	2,400	2,000	1,500	1,650	1,150	1,810	771	1,620	1,320	1,500	3,020	3,100	2,860
PW-1	4.4	80	ND	ND	ND	ND	9.4	0.99	7	1.4	1.9	ND	0.81	0.74	1.4	13.6
PW-2	3.8	ND	ND	ND	ND	ND	9.1	5.1	0.61	6.6	6.6	ND	1.8	2.5	3.9	6
SVWC-93	2	ND	ND	ND	ND	ND	12.8	0.79	3.6	NA	2.5	NA	0.49	2.1	ND	2.2
SVWC-94	5.3	6	ND	ND	10	NA	8.1	5.8	7.6	NA	4.3	NA	3.6	7.1	9.6	4.7
SVWC-95	26.4	70	82	80	130	NA	58.6	64.4	21	NA	40.6	NA	40.4	49.7	47.5	49.8
SVWC-96	10.1	NA	NA	ND	ND	ND	ND	NA	22	NA	1.6	NA	ND	<0.70	ND	ND

NOTES:

Concentrations reported in µg/L (ppb).

ND = Not Detected

NA = Not Analyzed

Values in **BOLD** indicate an exceedance of groundwater quality standard for Manganese, 300 µg/L.

TABLE 3D

TOWN OF RAMAPO LANDFILL
POST-CLOSURE GROUNDWATER QUALITY MONITORING
COMPOUND: MANGANESE

Sample ID	Oct-03	Mar-04	Jun-05	Sep-06	Oct-07	Mar-09
1-OS/I	NA	NA	4,720	2,800	5,100	9,000
2-OS	1,310	2,300	778	1,900	3,500	2,200
3-OS/I	14,200	7,200	6,450	9,200	4,400	14,000
4-OS	690	338	700	860	2,700	400
5-OS	NA	2,040	NA	5,100	14 J	1,100
5-I	577	NA	13.6	NA	NA	NA
7-OS	76.4	2,140	222	1,300	920	450
8-OS	235	1,590	691	110	2,000	610
8-I	2,590	4,650	3,090	1,900	2,200	3,100
8-R	2,040	2,150	2,190	2,200	1,900	1,900
9-OS	15.5	4.4 B	27.7	51	140	150
9-I	15.1	19	11.6	290	560	290
9-R	2,090	1,980	2,730	2,800	2,900	3,700
PW-1	0.69	0.9 U	2.1 U	0.75 J	50 U	50 U
PW-2	1.6	0.9 U	2.1 U	1.4 J	5.6 J	1.8 J
SVWC-93	0.65	0.9 U	2.1 U	0.62 J	50 U	50 U
SVWC-94	4.3	3.3 B	6.5 B	3.2 J	3.8 J	NA
SVWC-95	84.6	88	86	25 J	96	140
SVWC-96	0.9 U	0.9 U	2.1 U	50 U	50 U	50 U

NOTES:

Concentrations reported in ug/L (ppb).

NA = Not Analyzed

Values in **BOLD** indicate an exceedance of groundwater quality standard for Manganese, 300 mg/L.

Life Science Laboratories, Inc. conducted analyses for the 2006 - 2009 events. STL Newburgh conducted analyses for the 2003-2005 events.

Life Science Laboratories

J = Analyte detected below the Practical Quantitation Limit (PQL)

U = Analyte not detected at listed detection limit.

STL NewburghB = The reported value is less than the Contract Required Detection Limit (CRDL).
but greater than the Instrument Detection Limit.

Project Management Case Narrative

INTRODUCTION/ANALYTICAL RESULTS

This report summarizes the laboratory results for samples from Sterling Environmental Engineering, P.C. New York State Department of Environmental Conservation forms are included in the Sample Data Summary Package and in the Sample Data Package.

CONDITION UPON RECEIPT/CHAIN OF CUSTODY

The cooler(s) were received intact. When the cooler(s) were received by the laboratory, the sample custodian(s) opened and inspected the shipment(s) for damage, custody inconsistencies, and proper preservation. Chain of custody documenting receipt are presented in the chain of custody section. Each sample was assigned a unique laboratory number and a custody file created. The samples were placed in a secured walk-in cooler and signed in and out by the chemists performing the tests. The sign out record, or lab chronicle, is presented in the chain of custody section.

Discrepancies noted upon receipt are documented on the Sample Receipt Checklist included in the chain of custody section. The temperatures of the iced coolers were 2.2°C, and 2.4°C.

METHODOLOGY

The following methods were used to perform the analyses:

PARAMETER	METHOD	REFERENCE
GC/MS Volatile Organics	8260B	1
ICP Metals	6010B	1
Mercury	SW7470A	1
Chemical Oxygen Demand	EPA410.4	1
Kjeldahl Nitrogen	EPA351.2	1
Alkalinity	SM 2320B	2
Hardness	SM 2340C	2
Antimony	200.8	1

- 1) New York State Department of Environmental Conservation Analytical Services Protocol, 2000.
- 2) Standard Methods for the Examination of Water and Wastewater, 18th to 20th Edition

QUALITY CONTROL

QA/QC results are summarized in the Sample Data Summary Package and are also included in the raw data.

RAW DATA

The raw data is organized in the New York State Department of Environmental Conservation Analytical Services Protocol Category B order of data.

MISCELLANEOUS

The methodology requested for Antimony was 200.8 with a detection limit of 0.3 ppb. Antimony was analyzed by both methods 6010B and 200.8. The method 6010B is reported down to a MDL of 3 ppb. Method 200.8 is reported to a reporting limit (CRDL) of 2 ppb and a MDL of .1 ppb. Due to the interferences experienced and the limited sensitivity of non drinking water analysis by method 200.8, the results detected below the 2 ppb CRDL are reported as estimated.



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: GENESYS 20

ColumnID:

Revision: 03/19/09 11:27

Col Type:

Sample Size: NA

%Moisture:

TestCode: COD410.4

Lab ID: 0903097-001A

Client Sample ID: 9-R

Collection Date: 03/16/09 12:40

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16725

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
COD					EPA 410.4		
Chemical Oxygen Demand	ND	10		3.6	mg/L	1	03/19/09 11:54

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434743

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: AA3

Sample Size: 20 mL

ColumnID:

%Moisture:

Revision: 03/18/09 14:58

TestCode: TKN351.2

Col Type:

Lab ID: 0903097-001A

Client Sample ID: 9-R

Collection Date: 03/16/09 12:40

Date Received: 03/17/09 10:16

PrepDate: 03/18/09 0:00

BatchNo: 9133/R16714

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	5.6 E	0.20		0.056	mg/L	1	03/18/09 13:12

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434627

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

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East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	Sterling Environmental Engineering, P.C.	Lab ID:	0903097-001ADL
Project:	Ramapo	Client Sample ID:	9-R
W Order:	0903097	Collection Date:	03/16/09 12:40
Matrix:	GROUNDWATER	Date Received:	03/17/09 10:16
Inst. ID:	AA3	Sample Size:	20 mL
ColumnID:		%Moisture:	
Revision:	03/18/09 14:58	PrepDate:	03/18/09 0:00
Col Type:		BatchNo:	9133/R16714
		FileID:	1-DL-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	5.6	0.40		0.11	mg/L	2	03/18/09 13:12

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
	J Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
	P Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434642

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

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(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: pH meter

ColumnID:

Revision: 03/18/09 9:43

Col Type:

Sample Size: NA

%Moisture:

TestCode: ALKT 2320B

Lab ID: 0903097-001B

Client Sample ID: 9-R

Collection Date: 03/16/09 12:40

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16700

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
ALKALINITY, AS CaCO3							
Alkalinity, as CaCO3	150	10		10	mg/L	1	03/17/09

SM 18-20 2320 B

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434355

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: FIMS 100

ColumnID:

Revision: 03/20/09 15:31

Col Type:

Sample Size: 50 mL

%Moisture:

TestCode: HG7470W

Lab ID: 0903097-001C

Client Sample ID: 9-R

Collection Date: 03/16/09 12:40

Date Received: 03/17/09 10:16

PrepDate: 03/19/09 0:00

BatchNo: 9141/R16742

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7470A		(SW7470A)
Mercury	ND		0.00020	0.000050	mg/L	1	03/20/09 11:48

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435035

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: Buret Type A

ColumnID:

Revision: 04/03/09 14:18

Col Type:

Sample Size: NA

%Moisture:

TestCode: HARD2340C

Lab ID: 0903097-001C

Client Sample ID: 9-R

Collection Date: 03/16/09 12:40

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16791

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
HARDNESS-TOTAL, AS CaCO3					SM 18-20 2340 C		
Hardness-Total, as CaCO3	160	10		10	mg/L	1	03/26/09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435761

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: ICAP 61E

Sample Size: 50 mL

ColumnID:

%Moisture:

Revision: 04/06/09 11:41

TestCode: 6010W05

Lab ID: 0903097-001C

Client Sample ID: 9-R

Collection Date: 03/16/09 12:40

Date Received: 03/17/09 10:16

PrepDate: 03/18/09 0:00

BatchNo: 9136/R16868

FileID: 1-SAMP-102810

Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Aluminum	ND		0.10	0.060	mg/L	1	04/03/09 11:20
Antimony	ND		0.060	0.0030	mg/L	1	04/03/09 11:20
Arsenic	0.0057	J	0.010	0.0040	mg/L	1	04/03/09 11:20
Barium	0.028	J	0.10	0.0020	mg/L	1	04/03/09 11:20
Beryllium	ND		0.0030	0.00020	mg/L	1	04/03/09 11:20
Cadmium	ND		0.0050	0.0010	mg/L	1	04/03/09 11:20
Calcium	38		1.0	0.040	mg/L	1	04/03/09 11:20
Chromium	ND		0.010	0.0028	mg/L	1	04/03/09 11:20
Cobalt	ND		0.050	0.0060	mg/L	1	04/03/09 11:20
Copper	ND		0.010	0.0028	mg/L	1	04/03/09 11:20
Iron	9.4		0.050	0.010	mg/L	1	04/03/09 11:20
Lead	ND		0.010	0.0040	mg/L	1	04/03/09 11:20
Magnesium	11		1.0	0.040	mg/L	1	04/03/09 11:20
Manganese	3.7		0.050	0.0015	mg/L	1	04/03/09 11:20
Nickel	0.0025	J	0.050	0.0020	mg/L	1	04/03/09 11:20
Potassium	12		5.0	0.20	mg/L	1	04/03/09 11:20
Selenium	ND		0.010	0.0050	mg/L	1	04/03/09 11:20
Silver	ND		0.010	0.0020	mg/L	1	04/03/09 11:20
Sodium	44		1.0	0.040	mg/L	1	04/03/09 11:20
Thallium	ND		0.020	0.010	mg/L	1	04/03/09 11:20
Vanadium	ND		0.050	0.0020	mg/L	1	04/03/09 11:20
Zinc	0.0081	J	0.020	0.0040	mg/L	1	04/03/09 11:20

Qualifiers:

* Value exceeds Maximum Contaminant Level
 E Value exceeds the instrument calibration range
 J Analyte detected below the PQL
 P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Practical Quantitation Limit (PQL)
 S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

437062

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: MS02_12

Sample Size: 25 mL

ColumnID: Rtx-502.2

%Moisture:

Revision: 03/23/09 13:26

TestCode: 8260W

Col Type:

Lab ID: 0903097-001D

Client Sample ID: 9-R

Collection Date: 03/16/09 12:40

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16745

FileID: 1-SAMP-M5900.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	ND	0.50	0.10	µg/L	1	03/20/09 20:07	
Benzene	ND	0.50	0.10	µg/L	1	03/20/09 20:07	
Chlorobenzene	0.22 J	0.50	0.10	µg/L	1	03/20/09 20:07	
Vinyl chloride	ND	1.00	0.33	µg/L	1	03/20/09 20:07	
Surr: 1,2-Dichloroethane-d4	111	75-134	0.16	%REC	1	03/20/09 20:07	
Surr: 4-Bromofluorobenzene	102	75-125	0.10	%REC	1	03/20/09 20:07	
Surr: Toluene-d8	109	75-125	0.10	%REC	1	03/20/09 20:07	

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435136

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: GENESYS 20

ColumnID:

Revision: 03/19/09 11:27

Col Type:

Sample Size: NA

%Moisture:

TestCode: COD410.4

Lab ID: 0903097-002A

Client Sample ID: 9-OS

Collection Date: 03/16/09 12:50

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16725

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
COD					EPA 410.4		
Chemical Oxygen Demand	120	10		3.6	mg/L	1	03/19/09 11:54

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434744

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: AA3

ColumnID:

Revision: 03/18/09 14:58

Col Type:

Sample Size: 20 mL

%Moisture:

TestCode: TKN351.2

Lab ID: 0903097-002A

Client Sample ID: 9-OS

Collection Date: 03/16/09 12:50

Date Received: 03/17/09 10:16

PrepDate: 03/18/09 0:00

BatchNo: 9133/R16714

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	5.5 E	0.20		0.056	mg/L	1	03/18/09 13:12

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434628

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	Sterling Environmental Engineering, P.C.	Lab ID:	0903097-002ADL
Project:	Ramapo	Client Sample ID:	9-OS
W Order:	0903097	Collection Date:	03/16/09 12:50
Matrix:	GROUNDWATER	Date Received:	03/17/09 10:16
Inst. ID:	AA3	PrepDate:	03/18/09 0:00
ColumnID:		BatchNo:	9133/R16714
Revision:	03/18/09 14:58	FileID:	1-DL-
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	5.4	0.40		0.11	mg/L	2	03/18/09 13:12

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
	J Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
	P Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434643

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: pH meter

ColumnID:

Revision: 03/18/09 9:43

Col Type:

Sample Size: NA

%Moisture:

TestCode: ALKT 2320B

Lab ID: 0903097-002B

Client Sample ID: 9-OS

Collection Date: 03/16/09 12:50

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16700

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
ALKALINITY, AS CaCO ₃					SM 18-20 2320 B		
Alkalinity, as CaCO ₃	12	10		10	mg/L	1	03/17/09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434356

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: FIMS 100

ColumnID:

Revision: 03/20/09 15:31

Col Type:

Sample Size: 50 mL

%Moisture:

TestCode: HG7470W

Lab ID: 0903097-002C

Client Sample ID: 9-OS

Collection Date: 03/16/09 12:50

Date Received: 03/17/09 10:16

PrepDate: 03/19/09 0:00

BatchNo: 9141/R16742

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7470A		(SW7470A)
Mercury	ND	0.00020		0.000050	mg/L	1	03/20/09 11:50

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435036

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: Buret Type A

ColumnID:

Revision: 04/03/09 14:18

Col Type:

Sample Size: NA

%Moisture:

TestCode: HARD2340C

Lab ID: 0903097-002C

Client Sample ID: 9-OS

Collection Date: 03/16/09 12:50

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16791

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
HARDNESS-TOTAL, AS CaCO3					SM 18-20 2340 C		
Hardness-Total, as CaCO3	40	10		10	mg/L	1	03/26/09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435762

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903097
Matrix: GROUNDWATER
Inst. ID: ICAP 61E **Sample Size:** 50 mL
ColumnID: **%Moisture:**
Revision: 04/06/09 11:41 **TestCode:** 6010W05
Col Type:

Lab ID: 0903097-002C
Client Sample ID: 9-OS
Collection Date: 03/16/09 12:50
Date Received: 03/17/09 10:16
PrepDate: 03/18/09 0:00
BatchNo: 9136/R16868
FileID: 1-SAMP-102811

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Aluminum	3.9		0.10	0.060	mg/L	1	04/03/09 11:23
Antimony	ND		0.060	0.0030	mg/L	1	04/03/09 11:23
Arsenic	ND		0.010	0.0040	mg/L	1	04/03/09 11:23
Barium	0.037 J		0.10	0.0020	mg/L	1	04/03/09 11:23
Beryllium	0.00025 J		0.0030	0.00020	mg/L	1	04/03/09 11:23
Cadmium	ND		0.0050	0.0010	mg/L	1	04/03/09 11:23
Calcium	9.7		1.0	0.040	mg/L	1	04/03/09 11:23
Chromium	0.30		0.010	0.0028	mg/L	1	04/03/09 11:23
Cobalt	ND		0.050	0.0060	mg/L	1	04/03/09 11:23
Copper	0.016		0.010	0.0028	mg/L	1	04/03/09 11:23
Iron	7.8		0.050	0.010	mg/L	1	04/03/09 11:23
Lead	ND		0.010	0.0040	mg/L	1	04/03/09 11:23
Magnesium	3.3		1.0	0.040	mg/L	1	04/03/09 11:23
Manganese	0.15		0.050	0.0015	mg/L	1	04/03/09 11:23
Nickel	0.028 J		0.050	0.0020	mg/L	1	04/03/09 11:23
Potassium	5.7		5.0	0.20	mg/L	1	04/03/09 11:23
Selenium	ND		0.010	0.0050	mg/L	1	04/03/09 11:23
Silver	ND		0.010	0.0020	mg/L	1	04/03/09 11:23
Sodium	8.3		1.0	0.040	mg/L	1	04/03/09 11:23
Thallium	ND		0.020	0.010	mg/L	1	04/03/09 11:23
Vanadium	0.010 J		0.050	0.0020	mg/L	1	04/03/09 11:23
Zinc	0.021		0.020	0.0040	mg/L	1	04/03/09 11:23

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

437063

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: MS02_12

Sample Size: 25 mL

ColumnID: Rtx-502.2

%Moisture:

Revision: 03/23/09 13:26

TestCode: 8260W

Lab ID: 0903097-002D

Client Sample ID: 9-OS

Collection Date: 03/16/09 12:50

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16745

FileID: 1-SAMP-M5901.D

Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	ND	0.50	0.10	µg/L	1		03/20/09 20:48
Benzene	ND	0.50	0.10	µg/L	1		03/20/09 20:48
Chlorobenzene	ND	0.50	0.10	µg/L	1		03/20/09 20:48
Vinyl chloride	ND	1.00	0.33	µg/L	1		03/20/09 20:48
Surr: 1,2-Dichloroethane-d4	111	75-134	0.16	%REC	1		03/20/09 20:48
Surr: 4-Bromofluorobenzene	102	75-125	0.10	%REC	1		03/20/09 20:48
Surr: Toluene-d8	109	75-125	0.10	%REC	1		03/20/09 20:48

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435137

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903097
Matrix: GROUNDWATER
Inst. ID: AA3
ColumnID:
Revision: 03/18/09 14:58
Col Type:

Lab ID: 0903097-003A
Client Sample ID: 9-I
Collection Date: 03/16/09 13:00
Date Received: 03/17/09 10:16
PrepDate: 03/18/09 0:00
BatchNo: 9133/R16714
FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	0.099	J	0.20	0.056	mg/L	1	03/18/09 13:12

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
	J Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
	P Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434629

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903097
Matrix: GROUNDWATER
Inst. ID: GENESYS 20
ColumnID:
Revision: 03/19/09 11:27
Col Type:

Lab ID: 0903097-003A
Client Sample ID: 9-I
Collection Date: 03/16/09 13:00
Date Received: 03/17/09 10:16
PrepDate:
BatchNo: R16725
FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
COD					EPA 410.4		
Chemical Oxygen Demand	37	10		3.6	mg/L	1	03/19/09 11:54

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434745

Project Supervisor: Anthony Crescenzi



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East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: pH meter

ColumnID:

Revision: 03/18/09 9:43

Col Type:

Sample Size: NA

%Moisture:

TestCode: ALKT 2320B

Lab ID: 0903097-003B

Client Sample ID: 9-I

Collection Date: 03/16/09 13:00

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16700

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
ALKALINITY, AS CaCO3					SM 18-20 2320 B		
Alkalinity, as CaCO3	18	10		10	mg/L	1	03/17/09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434357

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: FIMS 100

ColumnID:

Revision: 03/20/09 15:31

Col Type:

Sample Size: 50 mL

%Moisture:

TestCode: HG7470W

Lab ID: 0903097-003C

Client Sample ID: 9-I

Collection Date: 03/16/09 13:00

Date Received: 03/17/09 10:16

PrepDate: 03/19/09 0:00

BatchNo: 9141/R16742

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7470A		(SW7470A)
Mercury	ND		0.00020	0.000050	mg/L	1	03/20/09 11:52

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435037

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

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East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903097
Matrix: GROUNDWATER
Inst. ID: ICAP 61E
ColumnID:
Revision: 04/06/09 11:41
Col Type:

Lab ID: 0903097-003C
Client Sample ID: 9-I
Collection Date: 03/16/09 13:00
Date Received: 03/17/09 10:16
PrepDate: 03/18/09 0:00
BatchNo: 9136/R16868
FileID: 1-SAMP-102812

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Aluminum	13		0.10	0.060	mg/L	1	04/03/09 11:27
Antimony	ND		0.060	0.0030	mg/L	1	04/03/09 11:27
Arsenic	ND		0.010	0.0040	mg/L	1	04/03/09 11:27
Barium	0.12		0.10	0.0020	mg/L	1	04/03/09 11:27
Beryllium	0.00071 J		0.0030	0.00020	mg/L	1	04/03/09 11:27
Cadmium	ND		0.0050	0.0010	mg/L	1	04/03/09 11:27
Calcium	12		1.0	0.040	mg/L	1	04/03/09 11:27
Chromium	0.038		0.010	0.0028	mg/L	1	04/03/09 11:27
Cobalt	0.011 J		0.050	0.0060	mg/L	1	04/03/09 11:27
Copper	0.027		0.010	0.0028	mg/L	1	04/03/09 11:27
Iron	23		0.050	0.010	mg/L	1	04/03/09 11:27
Lead	ND		0.010	0.0040	mg/L	1	04/03/09 11:27
Magnesium	5.9		1.0	0.040	mg/L	1	04/03/09 11:27
Manganese	0.29		0.050	0.0015	mg/L	1	04/03/09 11:27
Nickel	0.019 J		0.050	0.0020	mg/L	1	04/03/09 11:27
Potassium	3.9 J		5.0	0.20	mg/L	1	04/03/09 11:27
Selenium	ND		0.010	0.0050	mg/L	1	04/03/09 11:27
Silver	ND		0.010	0.0020	mg/L	1	04/03/09 11:27
Sodium	15		1.0	0.040	mg/L	1	04/03/09 11:27
Thallium	ND		0.020	0.010	mg/L	1	04/03/09 11:27
Vanadium	0.024 J		0.050	0.0020	mg/L	1	04/03/09 11:27
Zinc	0.035		0.020	0.0040	mg/L	1	04/03/09 11:27

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

437064

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

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East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: Buret Type A

ColumnID:

Revision: 04/03/09 14:18

Col Type:

Sample Size: NA

%Moisture:

TestCode: HARD2340C

Lab ID: 0903097-003C

Client Sample ID: 9-I

Collection Date: 03/16/09 13:00

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16791

FileID: I-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
HARDNESS-TOTAL, AS CaCO₃					SM 18-20 2340 C		
Hardness-Total, as CaCO ₃	44	10		10	mg/L	1	03/26/09

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435763

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903097
Matrix: GROUNDWATER
Inst. ID: MS02_12
ColumnID: Rtx-502.2
Revision: 03/23/09 13:26
Col Type:

Lab ID: 0903097-003D
Client Sample ID: 9-I
Collection Date: 03/16/09 13:00
Date Received: 03/17/09 10:16
PrepDate:
BatchNo: R16745
FileID: 1-SAMP-M5902.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	ND	0.50	0.10	µg/L	1		03/20/09 21:29
Benzene	ND	0.50	0.10	µg/L	1		03/20/09 21:29
Chlorobenzene	ND	0.50	0.10	µg/L	1		03/20/09 21:29
Vinyl chloride	ND	1.00	0.33	µg/L	1		03/20/09 21:29
Surr: 1,2-Dichloroethane-d4	112	75-134	0.16	%REC	1		03/20/09 21:29
Surr: 4-Bromofluorobenzene	102	75-125	0.10	%REC	1		03/20/09 21:29
Surr: Toluene-d8	109	75-125	0.10	%REC	1		03/20/09 21:29

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
	J Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
	P Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435138

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: AA3

ColumnID:

Revision: 03/18/09 14:58

Col Type:

Sample Size: 20 mL

%Moisture:

TestCode: TKN351.2

Lab ID: 0903097-004A

Client Sample ID: 8-J

Collection Date: 03/16/09 17:30

Date Received: 03/17/09 10:16

PrepDate: 03/18/09 0:00

BatchNo: 9133/R16714

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	7.8 E	0.20		0.056	mg/L	1	03/18/09 13:12

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434630

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: GENESYS 20

ColumnID:

Revision: 03/19/09 11:27

Col Type:

Sample Size: NA

%Moisture:

TestCode: COD410.4

Lab ID: 0903097-004A

Client Sample ID: 8-I

Collection Date: 03/16/09 17:30

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16725

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
COD					EPA 410.4		
Chemical Oxygen Demand	44	10		3.6	mg/L	1	03/19/09 11:54

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434746

Project Supervisor: Anthony Crescenzi



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East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	Sterling Environmental Engineering, P.C.	Lab ID:	0903097-004ADL
Project:	Ramapo	Client Sample ID:	8-I
W Order:	0903097	Collection Date:	03/16/09 17:30
Matrix:	GROUNDWATER	Date Received:	03/17/09 10:16
Inst. ID:	AA3	Sample Size:	20 mL
ColumnID:		%Moisture:	
Revision:	03/18/09 14:58	TestCode:	TKN351.2
Col Type:		BatchNo:	9133/R16714
		FileID:	1-DL-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	7.8	0.40		0.11	mg/L	2	03/18/09 13:12

Qualifiers:

* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434644

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: pH meter

ColumnID:

Revision: 03/18/09 9:43

Col Type:

Lab ID: 0903097-004B

Client Sample ID: 8-J

Collection Date: 03/16/09 17:30

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16700

FileID: 1-SAMP-

Sample Size: NA

%Moisture:

TestCode: ALKT 2320B

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
ALKALINITY, AS CaCO3							
Alkalinity, as CaCO3	190	10		10	mg/L	1	03/17/09

SM 18-20 2320 B

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434358

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903097
Matrix: GROUNDWATER
Inst. ID: ICAP 61E **Sample Size:** 50 mL
ColumnID: **%Moisture:**
Revision: 04/06/09 11:41 **TestCode:** 6010W05
Col Type:

Lab ID: 0903097-004C
Client Sample ID: 8-I
Collection Date: 03/16/09 17:30
Date Received: 03/17/09 10:16
PrepDate: 03/18/09 0:00
BatchNo: 9136/R16868
FileID: 1-SAMP-102813

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Aluminum	8.3		0.10	0.060	mg/L	1	04/03/09 11:31
Antimony	ND		0.060	0.0030	mg/L	1	04/03/09 11:31
Arsenic	0.012		0.010	0.0040	mg/L	1	04/03/09 11:31
Barium	0.095 J		0.10	0.0020	mg/L	1	04/03/09 11:31
Beryllium	0.00046 J		0.0030	0.00020	mg/L	1	04/03/09 11:31
Cadmium	ND		0.0050	0.0010	mg/L	1	04/03/09 11:31
Calcium	49		1.0	0.040	mg/L	1	04/03/09 11:31
Chromium	0.027		0.010	0.0028	mg/L	1	04/03/09 11:31
Cobalt	0.0095 J		0.050	0.0060	mg/L	1	04/03/09 11:31
Copper	0.027		0.010	0.0028	mg/L	1	04/03/09 11:31
Iron	33		0.050	0.010	mg/L	1	04/03/09 11:31
Lead	ND		0.010	0.0040	mg/L	1	04/03/09 11:31
Magnesium	16		1.0	0.040	mg/L	1	04/03/09 11:31
Manganese	3.1		0.050	0.0015	mg/L	1	04/03/09 11:31
Nickel	0.018 J		0.050	0.0020	mg/L	1	04/03/09 11:31
Potassium	17		5.0	0.20	mg/L	1	04/03/09 11:31
Selenium	ND		0.010	0.0050	mg/L	1	04/03/09 11:31
Silver	ND		0.010	0.0020	mg/L	1	04/03/09 11:31
Sodium	50		1.0	0.040	mg/L	1	04/03/09 11:31
Thallium	ND		0.020	0.010	mg/L	1	04/03/09 11:31
Vanadium	0.020 J		0.050	0.0020	mg/L	1	04/03/09 11:31
Zinc	0.032		0.020	0.0040	mg/L	1	04/03/09 11:31

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

437065

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: FIMS 100

ColumnID:

Revision: 03/20/09 15:31

Col Type:

Sample Size: 50 mL

%Moisture:

TestCode: HG7470W

Lab ID: 0903097-004C

Client Sample ID: 8-I

Collection Date: 03/16/09 17:30

Date Received: 03/17/09 10:16

PrepDate: 03/19/09 0:00

BatchNo: 9141/R16742

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7470A		(SW7470A)
Mercury	ND		0.00020	0.000050	mg/L	1	03/20/09 11:54

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435038

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT:	Sterling Environmental Engineering, P.C.	Lab ID:	0903097-004C
Project:	Ramapo	Client Sample ID:	8-I
W Order:	0903097	Collection Date:	03/16/09 17:30
Matrix:	GROUNDWATER	Date Received:	03/17/09 10:16
Inst. ID:	Buret Type A	Sample Size:	NA
ColumnID:		PrepDate:	
Revision:	04/03/09 14:18	BatchNo:	R16791
Col Type:		FileID:	1-SAMP-
		%Moisture:	
		TestCode:	HARD2340C

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
HARDNESS-TOTAL, AS CaCO3					SM 18-20 2340 C		
Hardness-Total, as CaCO3	170	10		10	mg/L	1	03/26/09

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
	J Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
	P Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435764

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903097
Matrix: GROUNDWATER
Inst. ID: MS02_12
ColumnID: Rtx-502.2
Revision: 03/23/09 13:26
Col Type:

Lab ID: 0903097-004D
Client Sample ID: 8-I
Collection Date: 03/16/09 17:30
Date Received: 03/17/09 10:16
PrepDate:
BatchNo: R16745
FileID: 1-SAMP-M5903.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	ND	0.50	0.10	µg/L	1	03/20/09 22:10	
Benzene	ND	0.50	0.10	µg/L	1	03/20/09 22:10	
Chlorobenzene	0.29 J	0.50	0.10	µg/L	1	03/20/09 22:10	
Vinyl chloride	ND	1.00	0.33	µg/L	1	03/20/09 22:10	
Surr: 1,2-Dichloroethane-d4	111	75-134	0.16	%REC	1	03/20/09 22:10	
Surr: 4-Bromofluorobenzene	106	75-125	0.10	%REC	1	03/20/09 22:10	
Surr: Toluene-d8	108	75-125	0.10	%REC	1	03/20/09 22:10	

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435139

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: GENESYS 20

ColumnID:

Revision: 03/19/09 11:27

Col Type:

Sample Size: NA

%Moisture:

TestCode: COD410.4

Lab ID: 0903097-005A

Client Sample ID: 8-R

Collection Date: 03/16/09 18:10

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16725

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
COD					EPA 410.4		
Chemical Oxygen Demand	10	10		3.6	mg/L	1	03/19/09 11:55

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434747

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903097
Matrix: GROUNDWATER
Inst. ID: AA3
ColumnID:
Revision: 03/18/09 14:58
Col Type:

Lab ID: 0903097-005A
Client Sample ID: 8-R
Collection Date: 03/16/09 18:10
Date Received: 03/17/09 10:16
PrepDate: 03/18/09 0:00
BatchNo: 9133/R16714
FileID: 1-SAMP-

Sample Size: 20 mL
%Moisture:
TestCode: TKN351.2

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	1.7	0.20		0.056	mg/L	1	03/18/09 13:12

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434631

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: pH meter

ColumnID:

Revision: 03/18/09 9:43

Col Type:

Sample Size: NA

%Moisture:

TestCode: ALKT 2320B

Lab ID: 0903097-005B

Client Sample ID: 8-R

Collection Date: 03/16/09 18:10

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16700

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
ALKALINITY, AS CaCO3							
Alkalinity, as CaCO3	480	10		10	mg/L	1	03/17/09

SM 18-20 2320 B

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434359

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: FIMS 100

ColumnID:

Revision: 03/20/09 15:31

Col Type:

Sample Size: 50 mL

%Moisture:

TestCode: HG7470W

Lab ID: 0903097-005C

Client Sample ID: 8-R

Collection Date: 03/16/09 18:10

Date Received: 03/17/09 10:16

PrepDate: 03/19/09 0:00

BatchNo: 9141/R16742

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7470A		(SW7470A)
Mercury	ND	0.00020		0.000050	mg/L	1	03/20/09 11:57

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435039

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: Buret Type A

ColumnID:

Revision: 04/03/09 14:18

Col Type:

Sample Size: NA

%Moisture:

TestCode: HARD2340C

Lab ID: 0903097-005C

Client Sample ID: 8-R

Collection Date: 03/16/09 18:10

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16791

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
HARDNESS-TOTAL, AS CaCO3					SM 18-20	2340 C	
Hardness-Total, as CaCO3	560	10		10	mg/L	1	03/26/09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435765

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903097
Matrix: GROUNDWATER
Inst. ID: ICAP 61E **Sample Size:** 50 mL
ColumnID: **%Moisture:**
Revision: 04/06/09 11:41 **TestCode:** 6010W05
Col Type:

Lab ID: 0903097-005C
Client Sample ID: 8-R
Collection Date: 03/16/09 18:10
Date Received: 03/17/09 10:16
PrepDate: 03/18/09 0:00
BatchNo: 9136/R16868
FileID: 1-SAMP-102817

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Aluminum	ND		0.10	0.060	mg/L	1	04/03/09 11:47
Antimony	ND		0.060	0.0030	mg/L	1	04/03/09 11:47
Arsenic	ND		0.010	0.0040	mg/L	1	04/03/09 11:47
Barium	0.016 J		0.10	0.0020	mg/L	1	04/03/09 11:47
Beryllium	ND		0.0030	0.00020	mg/L	1	04/03/09 11:47
Cadmium	ND		0.0050	0.0010	mg/L	1	04/03/09 11:47
Calcium	160		1.0	0.040	mg/L	1	04/03/09 11:47
Chromium	0.011		0.010	0.0028	mg/L	1	04/03/09 11:47
Cobalt	0.0067 J		0.050	0.0060	mg/L	1	04/03/09 11:47
Copper	0.0050 J		0.010	0.0028	mg/L	1	04/03/09 11:47
Iron	1.3		0.050	0.010	mg/L	1	04/03/09 11:47
Lead	ND		0.010	0.0040	mg/L	1	04/03/09 11:47
Magnesium	40		1.0	0.040	mg/L	1	04/03/09 11:47
Manganese	1.9		0.050	0.0015	mg/L	1	04/03/09 11:47
Nickel	0.015 J		0.050	0.0020	mg/L	1	04/03/09 11:47
Potassium	4.4 J		5.0	0.20	mg/L	1	04/03/09 11:47
Selenium	ND		0.010	0.0050	mg/L	1	04/03/09 11:47
Silver	ND		0.010	0.0020	mg/L	1	04/03/09 11:47
Sodium	42		1.0	0.040	mg/L	1	04/03/09 11:47
Thallium	ND		0.020	0.010	mg/L	1	04/03/09 11:47
Vanadium	ND		0.050	0.0020	mg/L	1	04/03/09 11:47
Zinc	ND		0.020	0.0040	mg/L	1	04/03/09 11:47

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

437069

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: MS02_12

Sample Size: 25 mL

ColumnID: Rtx-502.2

%Moisture:

Revision: 03/24/09 9:07

TestCode: 8260W

Col Type:

Lab ID: 0903097-005D

Client Sample ID: 8-R

Collection Date: 03/16/09 18:10

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16752

FileID: 1-SAMP-M5912.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	0.11	J	0.50	0.10	µg/L	1	03/23/09 15:35
Benzene	ND		0.50	0.10	µg/L	1	03/23/09 15:35
Chlorobenzene	ND		0.50	0.10	µg/L	1	03/23/09 15:35
Vinyl chloride	ND		1.00	0.33	µg/L	1	03/23/09 15:35
Surr: 1,2-Dichloroethane-d4	110		75-134	0.16	%REC	1	03/23/09 15:35
Surr: 4-Bromofluorobenzene	98		75-125	0.10	%REC	1	03/23/09 15:35
Surr: Toluene-d8	111		75-125	0.10	%REC	1	03/23/09 15:35

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435194

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: GENESYS 20

ColumnID:

Revision: 03/19/09 11:27

Col Type:

Sample Size: NA

%Moisture:

TestCode: COD410.4

Lab ID: 0903097-006A

Client Sample ID: 8-OS

Collection Date: 03/16/09 17:50

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16725

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
COD					EPA 410.4		
Chemical Oxygen Demand	55	10		3.6	mg/L	1	03/19/09 11:55

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434748

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: AA3

ColumnID:

Revision: 03/18/09 14:58

Col Type:

Sample Size: 20 mL

%Moisture:

TestCode: TKN351.2

Lab ID: 0903097-006A

Client Sample ID: 8-OS

Collection Date: 03/16/09 17:50

Date Received: 03/17/09 10:16

PrepDate: 03/18/09 0:00

BatchNo: 9133/R16714

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	0.12	J	0.20	0.056	mg/L	1	03/18/09 13:12

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434632

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: pH meter

ColumnID:

Revision: 03/18/09 9:43

Col Type:

Sample Size: NA

%Moisture:

TestCode: ALKT 2320B

Lab ID: 0903097-006B

Client Sample ID: 8-OS

Collection Date: 03/16/09 17:50

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16700

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
ALKALINITY, AS CaCO ₃							
Alkalinity, as CaCO ₃	66	10		10	mg/L	1	03/17/09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434360

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903097
Matrix: GROUNDWATER
Inst. ID: FIMS 100
ColumnID:
Revision: 03/20/09 15:31
Col Type:

Lab ID: 0903097-006C
Client Sample ID: 8-OS
Collection Date: 03/16/09 17:50
Date Received: 03/17/09 10:16
PrepDate: 03/19/09 0:00
BatchNo: 9141/R16742
FileID: 1-SAMP-

Sample Size: 50 mL
%Moisture:
TestCode: HG7470W

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7470A		(SW7470A)
Mercury	ND	0.00020		0.000050	mg/L	1	03/20/09 11:59

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435040

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: Buret Type A

ColumnID:

Revision: 04/03/09 14:18

Col Type:

Sample Size: NA

%Moisture:

TestCode: HARD2340C

Lab ID: 0903097-006C

Client Sample ID: 8-QS

Collection Date: 03/16/09 17:50

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16791

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
HARDNESS-TOTAL, AS CaCO3							
Hardness-Total, as CaCO3	140	10		10	mg/L	1	03/26/09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435767

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903097
Matrix: GROUNDWATER
Inst. ID: ICAP 61E
ColumnID:
Revision: 04/06/09 11:41
Col Type:

Lab ID: 0903097-006C
Client Sample ID: 8-OS
Collection Date: 03/16/09 17:50
Date Received: 03/17/09 10:16
PrepDate: 03/18/09 0:00
BatchNo: 9136/R16868
FileID: 1-SAMP-102818

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Aluminum	ND		0.10	0.060	mg/L	1	04/03/09 11:51
Antimony	ND		0.060	0.0030	mg/L	1	04/03/09 11:51
Arsenic	ND		0.010	0.0040	mg/L	1	04/03/09 11:51
Barium	0.013	J	0.10	0.0020	mg/L	1	04/03/09 11:51
Beryllium	ND		0.0030	0.00020	mg/L	1	04/03/09 11:51
Cadmium	ND		0.0050	0.0010	mg/L	1	04/03/09 11:51
Calcium	41		1.0	0.040	mg/L	1	04/03/09 11:51
Chromium	0.68		0.010	0.0028	mg/L	1	04/03/09 11:51
Cobalt	ND		0.050	0.0060	mg/L	1	04/03/09 11:51
Copper	0.011		0.010	0.0028	mg/L	1	04/03/09 11:51
Iron	3.8		0.050	0.010	mg/L	1	04/03/09 11:51
Lead	ND		0.010	0.0040	mg/L	1	04/03/09 11:51
Magnesium	9.1		1.0	0.040	mg/L	1	04/03/09 11:51
Manganese	0.61		0.050	0.0015	mg/L	1	04/03/09 11:51
Nickel	0.017	J	0.050	0.0020	mg/L	1	04/03/09 11:51
Potassium	1.9	J	5.0	0.20	mg/L	1	04/03/09 11:51
Selenium	ND		0.010	0.0050	mg/L	1	04/03/09 11:51
Silver	ND		0.010	0.0020	mg/L	1	04/03/09 11:51
Sodium	41		1.0	0.040	mg/L	1	04/03/09 11:51
Thallium	ND		0.020	0.010	mg/L	1	04/03/09 11:51
Vanadium	0.0030	J	0.050	0.0020	mg/L	1	04/03/09 11:51
Zinc	0.0054	J	0.020	0.0040	mg/L	1	04/03/09 11:51

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

437070

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: MS02_12

Sample Size: 25 mL

ColumnID: Rtx-502.2

%Moisture:

Revision: 03/24/09 9:07

TestCode: 8260W

Lab ID: 0903097-006D

Client Sample ID: 8-OS

Collection Date: 03/16/09 17:50

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16752

FileID: 1-SAMP-M5913.D

Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	ND	0.50	0.10	µg/L	1		03/23/09 16:16
Benzene	ND	0.50	0.10	µg/L	1		03/23/09 16:16
Chlorobenzene	ND	0.50	0.10	µg/L	1		03/23/09 16:16
Vinyl chloride	ND	1.00	0.33	µg/L	1		03/23/09 16:16
Surr: 1,2-Dichloroethane-d4	108	75-134	0.16	%REC	1		03/23/09 16:16
Surr: 4-Bromofluorobenzene	100	75-125	0.10	%REC	1		03/23/09 16:16
Surr: Toluene-d8	108	75-125	0.10	%REC	1		03/23/09 16:16

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435195

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: AA3

ColumnID:

Revision: 03/18/09 14:58

Col Type:

Sample Size: 20 mL

%Moisture:

TestCode: TKN351.2

Lab ID: 0903097-007A

Client Sample ID: 7-OS

Collection Date: 03/16/09 14:15

Date Received: 03/17/09 10:16

PrepDate: 03/18/09 0:00

BatchNo: 9133/R16714

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	0.27	0.20		0.056	mg/L	1	03/18/09 13:12

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434633

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: GENESYS 20

ColumnID:

Revision: 03/19/09 11:27

Col Type:

Sample Size: NA

%Moisture:

TestCode: COD410.4

Lab ID: 0903097-007A

Client Sample ID: 7-OS

Collection Date: 03/16/09 14:15

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16725

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
COD					EPA 410.4		
Chemical Oxygen Demand	6.0	J	10	3.6	mg/L	1	03/19/09 11:55

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
	J Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
	P Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434749

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: pH meter

ColumnID:

Revision: 03/18/09 9:43

Col Type:

Sample Size: NA

%Moisture:

TestCode: ALKT 2320B

Lab ID: 0903097-007B

Client Sample ID: 7-OS

Collection Date: 03/16/09 14:15

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16700

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
ALKALINITY, AS CaCO3					SM 18-20 2320 B		
Alkalinity, as CaCO3	98	10		10	mg/L	1	03/17/09

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
	J Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
	P Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434361

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: Buret Type A

ColumnID:

Revision: 04/03/09 14:18

Col Type:

Sample Size: NA

%Moisture:

TestCode: HARD2340C

Lab ID: 0903097-007C

Client Sample ID: 7-OS

Collection Date: 03/16/09 14:15

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16791

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
HARDNESS-TOTAL, AS CaCO3							
Hardness-Total, as CaCO3	170	10		10	mg/L	1	03/26/09

SM 18-20 2340 C

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435768

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903097
Matrix: GROUNDWATER
Inst. ID: ICAP 61E
ColumnID:
Revision: 04/06/09 11:41
Col Type:

Lab ID: 0903097-007C
Client Sample ID: 7-OS
Collection Date: 03/16/09 14:15
Date Received: 03/17/09 10:16
PrepDate: 03/18/09 0:00
BatchNo: 9136/R16868
FileID: 1-SAMP-102819

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Aluminum	4.0		0.10	0.060	mg/L	1	04/03/09 11:55
Antimony	ND		0.060	0.0030	mg/L	1	04/03/09 11:55
Arsenic	ND		0.010	0.0040	mg/L	1	04/03/09 11:55
Barium	0.049 J		0.10	0.0020	mg/L	1	04/03/09 11:55
Beryllium	0.00024 J		0.0030	0.00020	mg/L	1	04/03/09 11:55
Cadmium	ND		0.0050	0.0010	mg/L	1	04/03/09 11:55
Calcium	49		1.0	0.040	mg/L	1	04/03/09 11:55
Chromium	0.061		0.010	0.0028	mg/L	1	04/03/09 11:55
Cobalt	0.0074 J		0.050	0.0060	mg/L	1	04/03/09 11:55
Copper	0.010		0.010	0.0028	mg/L	1	04/03/09 11:55
Iron	5.8		0.050	0.010	mg/L	1	04/03/09 11:55
Lead	ND		0.010	0.0040	mg/L	1	04/03/09 11:55
Magnesium	12		1.0	0.040	mg/L	1	04/03/09 11:55
Manganese	0.45		0.050	0.0015	mg/L	1	04/03/09 11:55
Nickel	0.011 J		0.050	0.0020	mg/L	1	04/03/09 11:55
Potassium	4.6 J		5.0	0.20	mg/L	1	04/03/09 11:55
Selenium	ND		0.010	0.0050	mg/L	1	04/03/09 11:55
Silver	ND		0.010	0.0020	mg/L	1	04/03/09 11:55
Sodium	9.7		1.0	0.040	mg/L	1	04/03/09 11:55
Thallium	ND		0.020	0.010	mg/L	1	04/03/09 11:55
Vanadium	0.0083 J		0.050	0.0020	mg/L	1	04/03/09 11:55
Zinc	0.013 J		0.020	0.0040	mg/L	1	04/03/09 11:55

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

437071

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: FIMS 100

ColumnID:

Revision: 03/20/09 15:31

Col Type:

Sample Size: 50 mL

%Moisture:

TestCode: HG7470W

Lab ID: 0903097-007C

Client Sample ID: 7-OS

Collection Date: 03/16/09 14:15

Date Received: 03/17/09 10:16

PrepDate: 03/19/09 0:00

BatchNo: 9141/R16742

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7470A		(SW7470A)
Mercury	ND	0.00020		0.000050	mg/L	1	03/20/09 12:01

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
	J Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
	P Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435041

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: MS02_12

Sample Size: 25 mL

ColumnID: Rtx-502.2

%Moisture:

Revision: 03/24/09 9:07

TestCode: 8260W

Lab ID: 0903097-007D

Client Sample ID: 7-OS

Collection Date: 03/16/09 14:15

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16752

FileID: 1-SAMP-M5911.D

Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	ND	0.50	0.10	µg/L	1		03/23/09 14:54
Benzene	ND	0.50	0.10	µg/L	1		03/23/09 14:54
Chlorobenzene	ND	0.50	0.10	µg/L	1		03/23/09 14:54
Vinyl chloride	ND	1.00	0.33	µg/L	1		03/23/09 14:54
Surr: 1,2-Dichloroethane-d4	111	75-134	0.16	%REC	1		03/23/09 14:54
Surr: 4-Bromofluorobenzene	101	75-125	0.10	%REC	1		03/23/09 14:54
Surr: Toluene-d8	108	75-125	0.10	%REC	1		03/23/09 14:54

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435193

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: AA3

Sample Size: 20 mL

ColumnID:

%Moisture:

Revision: 03/18/09 14:58

TestCode: TKN351.2

Col Type:

Lab ID: 0903097-008A

Client Sample ID: DUP-3/09

Collection Date: 03/16/09 14:30

Date Received: 03/17/09 10:16

PrepDate: 03/18/09 0:00

BatchNo: 9133/R16714

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	0.22		0.20	0.056	mg/L	1	03/18/09 13:12

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
	J Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
	P Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434638

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: GENESYS 20

ColumnID:

Revision: 03/19/09 11:27

Col Type:

Sample Size: NA

%Moisture:

TestCode: COD410.4

Lab ID: 0903097-008A

Client Sample ID: DUP-3/09

Collection Date: 03/16/09 14:30

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16725

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
COD					EPA 410.4		
Chemical Oxygen Demand	ND	10		3.6	mg/L	1	03/19/09 11:57

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434754

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: pH meter

ColumnID:

Revision: 03/18/09 9:43

Col Type:

Sample Size: NA

%Moisture:

TestCode: ALKT 2320B

Lab ID: 0903097-008B

Client Sample ID: DUP-3/09

Collection Date: 03/16/09 14:30

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16700

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
ALKALINITY, AS CaCO3							
Alkalinity, as CaCO3	100	10		10	mg/L	1	03/17/09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434363

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: FIMS 100

ColumnID:

Revision: 03/20/09 15:31

Col Type:

Sample Size: 50 mL

%Moisture:

TestCode: HG7470W

Lab ID: 0903097-008C

Client Sample ID: DUP-3/09

Collection Date: 03/16/09 14:30

Date Received: 03/17/09 10:16

PrepDate: 03/19/09 0:00

BatchNo: 9141/R16742

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7470A		(SW7470A)
Mercury	ND		0.00020	0.000050	mg/L	1	03/20/09 12:12

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435046

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: Buret Type A

ColumnID:

Revision: 04/03/09 14:18

Col Type:

Sample Size: NA

%Moisture:

TestCode: HARD2340C

Lab ID: 0903097-008C

Client Sample ID: DUP-3/09

Collection Date: 03/16/09 14:30

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16791

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
HARDNESS-TOTAL, AS CaCO3							
Hardness-Total, as CaCO3	160	10		10	mg/L	1	03/26/09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435769

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903097
Matrix: GROUNDWATER
Inst. ID: ICAP 61E **Sample Size:** 50 mL
ColumnID: **%Moisture:**
Revision: 04/06/09 11:41 **TestCode:** 6010W05
Col Type:

Lab ID: 0903097-008C
Client Sample ID: DUP-3/09
Collection Date: 03/16/09 14:30
Date Received: 03/17/09 10:16
PrepDate: 03/18/09 0:00
BatchNo: 9136/R16868
FileID: 1-SAMP-102824

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Aluminum	2.6		0.10	0.060	mg/L	1	04/03/09 12:14
Antimony	ND		0.060	0.0030	mg/L	1	04/03/09 12:14
Arsenic	ND		0.010	0.0040	mg/L	1	04/03/09 12:14
Barium	0.039 J		0.10	0.0020	mg/L	1	04/03/09 12:14
Beryllium	0.00020 J		0.0030	0.00020	mg/L	1	04/03/09 12:14
Cadmium	ND		0.0050	0.0010	mg/L	1	04/03/09 12:14
Calcium	48		1.0	0.040	mg/L	1	04/03/09 12:14
Chromium	0.051		0.010	0.0028	mg/L	1	04/03/09 12:14
Cobalt	ND		0.050	0.0060	mg/L	1	04/03/09 12:14
Copper	0.0072 J		0.010	0.0028	mg/L	1	04/03/09 12:14
Iron	3.7		0.050	0.010	mg/L	1	04/03/09 12:14
Lead	ND		0.010	0.0040	mg/L	1	04/03/09 12:14
Magnesium	11		1.0	0.040	mg/L	1	04/03/09 12:14
Manganese	0.33		0.050	0.0015	mg/L	1	04/03/09 12:14
Nickel	0.0076 J		0.050	0.0020	mg/L	1	04/03/09 12:14
Potassium	4.4 J		5.0	0.20	mg/L	1	04/03/09 12:14
Selenium	ND		0.010	0.0050	mg/L	1	04/03/09 12:14
Silver	ND		0.010	0.0020	mg/L	1	04/03/09 12:14
Sodium	9.6		1.0	0.040	mg/L	1	04/03/09 12:14
Thallium	ND		0.020	0.010	mg/L	1	04/03/09 12:14
Vanadium	0.0054 J		0.050	0.0020	mg/L	1	04/03/09 12:14
Zinc	0.0083 J		0.020	0.0040	mg/L	1	04/03/09 12:14

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

437076

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: MS02_12

Sample Size: 25 mL

ColumnID: Rtx-502.2

%Moisture:

Revision: 03/24/09 9:07

TestCode: 8260W

Col Type:

Lab ID: 0903097-008D

Client Sample ID: DUP-3/09

Collection Date: 03/16/09 14:30

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16752

FileID: 1-SAMP-M5914.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	ND	0.50	0.10	µg/L	1		03/23/09 16:57
Benzene	ND	0.50	0.10	µg/L	1		03/23/09 16:57
Chlorobenzene	ND	0.50	0.10	µg/L	1		03/23/09 16:57
Vinyl chloride	ND	1.00	0.33	µg/L	1		03/23/09 16:57
Surr: 1,2-Dichloroethane-d4	109	75-134	0.16	%REC	1		03/23/09 16:57
Surr: 4-Bromofluorobenzene	101	75-125	0.10	%REC	1		03/23/09 16:57
Surr: Toluene-d8	108	75-125	0.10	%REC	1		03/23/09 16:57

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435196

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: AA3

ColumnID:

Revision: 03/18/09 14:58

Col Type:

Sample Size: 20 mL

%Moisture:

TestCode: TKN351.2

Lab ID: 0903097-009A

Client Sample ID: PW-1

Collection Date: 03/16/09 13:15

Date Received: 03/17/09 10:16

PrepDate: 03/18/09 0:00

BatchNo: 9133/R16714

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	ND	0.20		0.056	mg/L	1	03/18/09 13:12

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434639

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: GENESYS 20

ColumnID:

Revision: 03/19/09 11:27

Col Type:

Sample Size: NA

%Moisture:

TestCode: COD410.4

Lab ID: 0903097-009A

Client Sample ID: PW-1

Collection Date: 03/16/09 13:15

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16725

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
COD					EPA 410.4		
Chemical Oxygen Demand	ND	10		3.6	mg/L	1	03/19/09 11:58

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434755

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: pH meter

ColumnID:

Revision: 03/18/09 9:43

Col Type:

Sample Size: NA

%Moisture:

TestCode: ALKT 2320B

Lab ID: 0903097-009B

Client Sample ID: PW-1

Collection Date: 03/16/09 13:15

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16700

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
ALKALINITY, AS CaCO ₃					SM 18-20 2320 B		
Alkalinity, as CaCO ₃	18	10		10	mg/L	1	03/17/09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434364

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: FIMS 100

ColumnID:

Revision: 03/20/09 15:31

Col Type:

Sample Size: 50 mL

%Moisture:

TestCode: HG7470W

Lab ID: 0903097-009C

Client Sample ID: PW-1

Collection Date: 03/16/09 13:15

Date Received: 03/17/09 10:16

PrepDate: 03/19/09 0:00

BatchNo: 9141/R16742

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7470A		(SW7470A)
Mercury	ND	0.00020		0.000050	mg/L	1	03/20/09 12:14

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435047

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: Buret Type A

ColumnID:

Revision: 04/03/09 14:18

Col Type:

Sample Size: NA

%Moisture:

TestCode: HARD2340C

Lab ID: 0903097-009C

Client Sample ID: PW-1

Collection Date: 03/16/09 13:15

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16791

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
HARDNESS-TOTAL, AS CaCO3							
Hardness-Total, as CaCO3	40	10		10	mg/L	1	03/26/09

SM 18-20 2340 C

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435770

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: ICAP 61E

ColumnID:

Revision: 04/06/09 11:41

Col Type:

Sample Size: 50 mL

%Moisture:

TestCode: 6010W05

Lab ID: 0903097-009C

Client Sample ID: PW-1

Collection Date: 03/16/09 13:15

Date Received: 03/17/09 10:16

PrepDate: 03/18/09 0:00

BatchNo: 9136/R16868

FileID: 1-SAMP-102825

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Aluminum	ND		0.10	0.060	mg/L	1	04/03/09 12:18
Antimony	ND		0.060	0.0030	mg/L	1	04/03/09 12:18
Arsenic	ND		0.010	0.0040	mg/L	1	04/03/09 12:18
Barium	0.0059 J		0.10	0.0020	mg/L	1	04/03/09 12:18
Beryllium	ND		0.0030	0.00020	mg/L	1	04/03/09 12:18
Cadmium	ND		0.0050	0.0010	mg/L	1	04/03/09 12:18
Calcium	10		1.0	0.040	mg/L	1	04/03/09 12:18
Chromium	ND		0.010	0.0028	mg/L	1	04/03/09 12:18
Cobalt	ND		0.050	0.0060	mg/L	1	04/03/09 12:18
Copper	0.10		0.010	0.0028	mg/L	1	04/03/09 12:18
Iron	0.012 J		0.050	0.010	mg/L	1	04/03/09 12:18
Lead	ND		0.010	0.0040	mg/L	1	04/03/09 12:18
Magnesium	2.8		1.0	0.040	mg/L	1	04/03/09 12:18
Manganese	ND		0.050	0.0015	mg/L	1	04/03/09 12:18
Nickel	ND		0.050	0.0020	mg/L	1	04/03/09 12:18
Potassium	0.88 J		5.0	0.20	mg/L	1	04/03/09 12:18
Selenium	ND		0.010	0.0050	mg/L	1	04/03/09 12:18
Silver	ND		0.010	0.0020	mg/L	1	04/03/09 12:18
Sodium	12		1.0	0.040	mg/L	1	04/03/09 12:18
Thallium	ND		0.020	0.010	mg/L	1	04/03/09 12:18
Vanadium	ND		0.050	0.0020	mg/L	1	04/03/09 12:18
Zinc	0.022		0.020	0.0040	mg/L	1	04/03/09 12:18

Qualifiers:

* Value exceeds Maximum Contaminant Level
 E Value exceeds the instrument calibration range
 J Analyte detected below the PQL
 P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Practical Quantitation Limit (PQL)
 S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

437077

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903097
Matrix: GROUNDWATER
Inst. ID: MS02_12
ColumnID: Rtx-502.2
Revision: 03/24/09 9:07
Col Type:

Lab ID: 0903097-009D
Client Sample ID: PW-1
Collection Date: 03/16/09 13:15
Date Received: 03/17/09 10:16
PrepDate:
BatchNo: R16752
FileID: 1-SAMP-M5915.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	ND	0.50	0.10	µg/L	1	03/23/09 17:38	
Benzene	ND	0.50	0.10	µg/L	1	03/23/09 17:38	
Chlorobenzene	ND	0.50	0.10	µg/L	1	03/23/09 17:38	
Vinyl chloride	ND	1.00	0.33	µg/L	1	03/23/09 17:38	
Surr: 1,2-Dichloroethane-d4	110	75-134	0.16	%REC	1	03/23/09 17:38	
Surr: 4-Bromofluorobenzene	102	75-125	0.10	%REC	1	03/23/09 17:38	
Surr: Toluene-d8	107	75-125	0.10	%REC	1	03/23/09 17:38	

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435197

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: AA3

Sample Size: 20 mL

ColumnID:

%Moisture:

Revision: 03/18/09 14:58

TestCode: TKN351.2

Col Type:

Lab ID: 0903097-010A

Client Sample ID: PW-2

Collection Date: 03/16/09 13:30

Date Received: 03/17/09 10:16

PrepDate: 03/18/09 0:00

BatchNo: 9133/R16714

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	ND		0.20	0.056	mg/L	1	03/18/09 13:12

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434640

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: GENESYS 20

ColumnID:

Revision: 03/19/09 11:27

Col Type:

Sample Size: NA

%Moisture:

TestCode: COD410.4

Lab ID: 0903097-010A

Client Sample ID: PW-2

Collection Date: 03/16/09 13:30

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16725

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
COD					EPA 410.4		
Chemical Oxygen Demand	ND	10		3.6	mg/L	1	03/19/09 11:58

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434756

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: pH meter

ColumnID:

Revision: 03/18/09 9:43

Col Type:

Sample Size: NA

%Moisture:

TestCode: ALKT 2320B

Lab ID: 0903097-010B

Client Sample ID: PW-2

Collection Date: 03/16/09 13:30

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16700

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
ALKALINITY, AS CaCO3							
Alkalinity, as CaCO3	46	10		10	mg/L	1	03/17/09

SM 18-20 2320 B

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434365

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: FIMS 100

ColumnID:

Revision: 03/20/09 15:31

Col Type:

Sample Size: 50 mL

%Moisture:

TestCode: HG7470W

Lab ID: 0903097-010C

Client Sample ID: PH-2

Collection Date: 03/16/09 13:30

Date Received: 03/17/09 10:16

PrepDate: 03/19/09 0:00

BatchNo: 9141/R16742

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7470A		(SW7470A)
Mercury	ND		0.00020	0.000050	mg/L	1	03/20/09 12:16

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435048

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: Buret Type A

ColumnID:

Revision: 04/03/09 14:18

Col Type:

Sample Size: NA

%Moisture:

TestCode: HARD2340C

Lab ID: 0903097-010C

Client Sample ID: PW-2

Collection Date: 03/16/09 13:30

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16791

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
HARDNESS-TOTAL, AS CaCO3							
Hardness-Total, as CaCO3	60	10		10	mg/L	1	03/26/09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435771

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903097
Matrix: GROUNDWATER
Inst. ID: ICAP 61E **Sample Size:** 50 mL
ColumnID: **%Moisture:**
Revision: 04/06/09 11:41 **TestCode:** 6010W05
Col Type:

Lab ID: 0903097-010C
Client Sample ID: PW-2
Collection Date: 03/16/09 13:30
Date Received: 03/17/09 10:16
PrepDate: 03/18/09 0:00
BatchNo: 9136/R16868
FileID: 1-SAMP-102826

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Aluminum	ND		0.10	0.060	mg/L	1	04/03/09 12:22
Antimony	ND		0.060	0.0030	mg/L	1	04/03/09 12:22
Arsenic	ND		0.010	0.0040	mg/L	1	04/03/09 12:22
Barium	0.0026 J		0.10	0.0020	mg/L	1	04/03/09 12:22
Beryllium	ND		0.0030	0.00020	mg/L	1	04/03/09 12:22
Cadmium	ND		0.0050	0.0010	mg/L	1	04/03/09 12:22
Calcium	25		1.0	0.040	mg/L	1	04/03/09 12:22
Chromium	ND		0.010	0.0028	mg/L	1	04/03/09 12:22
Cobalt	ND		0.050	0.0060	mg/L	1	04/03/09 12:22
Copper	0.061		0.010	0.0028	mg/L	1	04/03/09 12:22
Iron	0.14		0.050	0.010	mg/L	1	04/03/09 12:22
Lead	ND		0.010	0.0040	mg/L	1	04/03/09 12:22
Magnesium	2.9		1.0	0.040	mg/L	1	04/03/09 12:22
Manganese	0.0018 J		0.050	0.0015	mg/L	1	04/03/09 12:22
Nickel	ND		0.050	0.0020	mg/L	1	04/03/09 12:22
Potassium	0.96 J		5.0	0.20	mg/L	1	04/03/09 12:22
Selenium	ND		0.010	0.0050	mg/L	1	04/03/09 12:22
Silver	ND		0.010	0.0020	mg/L	1	04/03/09 12:22
Sodium	7.4		1.0	0.040	mg/L	1	04/03/09 12:22
Thallium	ND		0.020	0.010	mg/L	1	04/03/09 12:22
Vanadium	ND		0.050	0.0020	mg/L	1	04/03/09 12:22
Zinc	0.047		0.020	0.0040	mg/L	1	04/03/09 12:22

Qualifiers:

* Value exceeds Maximum Contaminant Level
 E Value exceeds the instrument calibration range
 J Analyte detected below the PQL
 P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Practical Quantitation Limit (PQL)
 S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

437078

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903097
Matrix: GROUNDWATER
Inst. ID: MS02_12
ColumnID: Rtx-502.2
Revision: 03/24/09 9:07
Col Type:

Lab ID: 0903097-010D
Client Sample ID: PW-2
Collection Date: 03/16/09 13:30
Date Received: 03/17/09 10:16
PrepDate:
BatchNo: R16752
FileID: 1-SAMP-M5916.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	ND	0.50	0.10	µg/L	1		03/23/09 18:19
Benzene	ND	0.50	0.10	µg/L	1		03/23/09 18:19
Chlorobenzene	ND	0.50	0.10	µg/L	1		03/23/09 18:19
Vinyl chloride	ND	1.00	0.33	µg/L	1		03/23/09 18:19
Surr: 1,2-Dichloroethane-d4	111	75-134	0.16	%REC	1		03/23/09 18:19
Surr: 4-Bromofluorobenzene	104	75-125	0.10	%REC	1		03/23/09 18:19
Surr: Toluene-d8	106	75-125	0.10	%REC	1		03/23/09 18:19

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435198

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: AA3

ColumnID:

Revision: 03/18/09 14:58

Col Type:

Sample Size: 20 mL

%Moisture:

TestCode: TKN351.2

Lab ID: 0903097-011A

Client Sample ID: 5-OS

Collection Date: 03/16/09 15:50

Date Received: 03/17/09 10:16

PrepDate: 03/18/09 0:00

BatchNo: 9133/R16714

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	0.34		0.20	0.056	mg/L	1	03/18/09 13:12

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434641

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: GENESYS 20

ColumnID:

Revision: 03/19/09 11:27

Col Type:

Sample Size: NA

%Moisture:

TestCode: COD410.4

Lab ID: 0903097-011A

Client Sample ID: 5-OS

Collection Date: 03/16/09 15:50

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16725

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
COD					EPA 410.4		
Chemical Oxygen Demand	71	10		3.6	mg/L	1	03/19/09 11:59

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434757

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: pH meter

ColumnID:

Revision: 03/18/09 9:43

Col Type:

Sample Size: NA

%Moisture:

TestCode: ALKT 2320B

Lab ID: 0903097-011B

Client Sample ID: 5-OS

Collection Date: 03/16/09 15:50

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16700

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
ALKALINITY, AS CaCO3							
Alkalinity, as CaCO3	22	10		10	mg/L	1	03/17/09

SM 18-20 2320 B

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

434366

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: FIMS 100

ColumnID:

Revision: 03/20/09 15:31

Col Type:

Sample Size: 50 mL

%Moisture:

TestCode: HG7470W

Lab ID: 0903097-011C

Client Sample ID: 5-OS

Collection Date: 03/16/09 15:50

Date Received: 03/17/09 10:16

PrepDate: 03/19/09 0:00

BatchNo: 9141/R16742

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7470A		(SW7470A)
Mercury	ND		0.00020	0.000050	mg/L	1	03/20/09 12:18

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
	J Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
	P Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435049

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: Buret Type A

ColumnID:

Revision: 04/03/09 14:18

Col Type:

Sample Size: NA

%Moisture:

TestCode: HARD2340C

Lab ID: 0903097-011C

Client Sample ID: 5-OS

Collection Date: 03/16/09 15:50

Date Received: 03/17/09 10:16

PrepDate:

BatchNo: R16791

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
HARDNESS-TOTAL, AS CaCO3					SM 18-20 2340 C		
Hardness-Total, as CaCO3	48	10		10	mg/L	1	03/26/09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435772

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903097

Matrix: GROUNDWATER

Inst. ID: ICAP 61E

Sample Size: 50 mL

ColumnID:

%Moisture:

Revision: 04/06/09 11:41

TestCode: 6010W05

Lab ID: 0903097-011C

Client Sample ID: 5-OS

Collection Date: 03/16/09 15:50

Date Received: 03/17/09 10:16

PrepDate: 03/18/09 0:00

BatchNo: 9136/R16868

FileID: 1-SAMP-102830

Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Aluminum	65		0.10	0.060	mg/L	1	04/03/09 12:38
Antimony	ND		0.060	0.0030	mg/L	1	04/03/09 12:38
Arsenic	0.0098 J		0.010	0.0040	mg/L	1	04/03/09 12:38
Barium	0.29		0.10	0.0020	mg/L	1	04/03/09 12:38
Beryllium	0.0032		0.0030	0.00020	mg/L	1	04/03/09 12:38
Cadmium	ND		0.0050	0.0010	mg/L	1	04/03/09 12:38
Calcium	21		1.0	0.040	mg/L	1	04/03/09 12:38
Chromium	0.17		0.010	0.0028	mg/L	1	04/03/09 12:38
Cobalt	0.046 J		0.050	0.0060	mg/L	1	04/03/09 12:38
Copper	0.11		0.010	0.0028	mg/L	1	04/03/09 12:38
Iron	110		0.050	0.010	mg/L	1	04/03/09 12:38
Lead	0.012		0.010	0.0040	mg/L	1	04/03/09 12:38
Magnesium	21		1.0	0.040	mg/L	1	04/03/09 12:38
Manganese	1.1		0.050	0.0015	mg/L	1	04/03/09 12:38
Nickel	0.089		0.050	0.0020	mg/L	1	04/03/09 12:38
Potassium	11		5.0	0.20	mg/L	1	04/03/09 12:38
Selenium	ND		0.010	0.0050	mg/L	1	04/03/09 12:38
Silver	ND		0.010	0.0020	mg/L	1	04/03/09 12:38
Sodium	8.1		1.0	0.040	mg/L	1	04/03/09 12:38
Thallium	ND		0.020	0.010	mg/L	1	04/03/09 12:38
Vanadium	0.17		0.050	0.0020	mg/L	1	04/03/09 12:38
Zinc	0.13		0.020	0.0040	mg/L	1	04/03/09 12:38

Qualifiers:

* Value exceeds Maximum Contaminant Level
 E Value exceeds the instrument calibration range
 J Analyte detected below the PQL
 P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Practical Quantitation Limit (PQL)
 S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

437083

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903097
Matrix: GROUNDWATER
Inst. ID: MS02_12
ColumnID: Rtx-502.2
Revision: 03/24/09 9:07
Col Type:

Lab ID: 0903097-011D
Client Sample ID: 5-OS
Collection Date: 03/16/09 15:50
Date Received: 03/17/09 10:16
PrepDate:
BatchNo: R16752
FileID: 1-SAMP-M5917.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	ND	0.50	0.10	µg/L	1		03/23/09 19:00
Benzene	ND	0.50	0.10	µg/L	1		03/23/09 19:00
Chlorobenzene	ND	0.50	0.10	µg/L	1		03/23/09 19:00
Vinyl chloride	ND	1.00	0.33	µg/L	1		03/23/09 19:00
Surr: 1,2-Dichloroethane-d4	111	75-134	0.16	%REC	1		03/23/09 19:00
Surr: 4-Bromofluorobenzene	102	75-125	0.10	%REC	1		03/23/09 19:00
Surr: Toluene-d8	109	75-125	0.10	%REC	1		03/23/09 19:00

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435199

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903097
Matrix: WATER Q
Inst. ID: MS02_12
ColumnID: Rtx-502.2
Revision: 03/24/09 9:07
Col Type:

Lab ID: 0903097-012D
Client Sample ID: Trip Blank
Collection Date: 03/16/09 12:40
Date Received: 03/17/09 10:16
PrepDate:
BatchNo: R16752
FileID: 1-SAMP-M5918.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	ND	0.50	0.10	µg/L	1		03/23/09 19:41
Benzene	ND	0.50	0.10	µg/L	1		03/23/09 19:41
Chlorobenzene	ND	0.50	0.10	µg/L	1		03/23/09 19:41
Vinyl chloride	ND	1.00	0.33	µg/L	1		03/23/09 19:41
Surr: 1,2-Dichloroethane-d4	112	75-134	0.16	%REC	1		03/23/09 19:41
Surr: Toluene-d8	108	75-125	0.10	%REC	1		03/23/09 19:41
Surr: 4-Bromofluorobenzene	103	75-125	0.10	%REC	1		03/23/09 19:41

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim /Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:27

435200

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: AA3

ColumnID:

Revision: 03/31/09 5:59

Col Type:

Sample Size: 20 mL

%Moisture:

TestCode: TKN351.2

Lab ID: 0903109-001A

Client Sample ID: 4-OS

Collection Date: 03/17/09 9:10

Date Received: 03/18/09 10:20

PrepDate: 03/30/09 0:00

BatchNo: 9187/R16820

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	ND		0.20	0.10	mg/L	1	03/30/09 16:00

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

436408

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: GENESYS 20

ColumnID:

Revision: 03/19/09 11:27

Col Type:

Sample Size: NA

%Moisture:

TestCode: COD410.4

Lab ID: 0903109-001A

Client Sample ID: 4-OS

Collection Date: 03/17/09 9:10

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16725

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
COD					EPA 410.4		
Chemical Oxygen Demand	15	10		3.6	mg/L	1	03/19/09 12:00

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

434758

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: pH meter

ColumnID:

Revision: 03/20/09 14:11

Col Type:

Sample Size: NA

%Moisture:

TestCode: ALKT 2320B

Lab ID: 0903109-001B

Client Sample ID: 4-OS

Collection Date: 03/17/09 9:10

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16741

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
ALKALINITY, AS CaCO ₃					SM 18-20 2320 B		
Alkalinity, as CaCO ₃	60	10		10	mg/L	1	03/20/09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435008

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: FIMS 100

ColumnID:

Revision: 03/20/09 15:31

Col Type:

Sample Size: 50 mL

%Moisture:

TestCode: HG7470W

Lab ID: 0903109-001C

Client Sample ID: 4-OS

Collection Date: 03/17/09 9:10

Date Received: 03/18/09 10:20

PrepDate: 03/19/09 0:00

BatchNo: 9141/R16742

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7470A		(SW7470A)
Mercury	ND	0.00020		0.000050	mg/L	1	03/20/09 12:20

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435050

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: Buret Type A

ColumnID:

Revision: 04/03/09 14:18

Col Type:

Sample Size: NA

%Moisture:

TestCode: HARD2340C

Lab ID: 0903109-001C

Client Sample ID: 4-OS

Collection Date: 03/17/09 9:10

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16791

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
HARDNESS-TOTAL, AS CaCO3					SM 18-20 2340 C		
Hardness-Total, as CaCO3	110	10		10	mg/L	1	03/26/09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435773

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903109
Matrix: GROUNDWATER
Inst. ID: ICAP 61E **Sample Size:** 50 mL
ColumnID: **%Moisture:**
Revision: 04/06/09 11:41 **TestCode:** 6010W05
Col Type:

Lab ID: 0903109-001C
Client Sample ID: 4-OS
Collection Date: 03/17/09 9:10
Date Received: 03/18/09 10:20
PrepDate: 03/18/09 0:00
BatchNo: 9136/R16868
FileID: 1-SAMP-102831

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Aluminum	3.8		0.10	0.060	mg/L	1	04/03/09 12:41
Antimony	ND		0.060	0.0030	mg/L	1	04/03/09 12:41
Arsenic	ND		0.010	0.0040	mg/L	1	04/03/09 12:41
Barium	0.044 J		0.10	0.0020	mg/L	1	04/03/09 12:41
Beryllium	ND		0.0030	0.00020	mg/L	1	04/03/09 12:41
Cadmium	ND		0.0050	0.0010	mg/L	1	04/03/09 12:41
Calcium	23		1.0	0.040	mg/L	1	04/03/09 12:41
Chromium	0.23		0.010	0.0028	mg/L	1	04/03/09 12:41
Cobalt	ND		0.050	0.0060	mg/L	1	04/03/09 12:41
Copper	0.011		0.010	0.0028	mg/L	1	04/03/09 12:41
Iron	10		0.050	0.010	mg/L	1	04/03/09 12:41
Lead	ND		0.010	0.0040	mg/L	1	04/03/09 12:41
Magnesium	11		1.0	0.040	mg/L	1	04/03/09 12:41
Manganese	0.40		0.050	0.0015	mg/L	1	04/03/09 12:41
Nickel	0.044 J		0.050	0.0020	mg/L	1	04/03/09 12:41
Potassium	1.8 J		5.0	0.20	mg/L	1	04/03/09 12:41
Selenium	ND		0.010	0.0050	mg/L	1	04/03/09 12:41
Silver	ND		0.010	0.0020	mg/L	1	04/03/09 12:41
Sodium	48		1.0	0.040	mg/L	1	04/03/09 12:41
Thallium	ND		0.020	0.010	mg/L	1	04/03/09 12:41
Vanadium	0.011 J		0.050	0.0020	mg/L	1	04/03/09 12:41
Zinc	0.017 J		0.020	0.0040	mg/L	1	04/03/09 12:41

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

437084

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: MS02_12

Sample Size: 25 mL

ColumnID: Rtx-502.2

%Moisture:

Revision: 03/24/09 9:07

TestCode: 8260W

Lab ID: 0903109-001D

Client Sample ID: 4-OS

Collection Date: 03/17/09 9:10

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16752

FileID: 1-SAMP-M5919.D

Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	ND	0.50	0.10	µg/L	1	03/23/09 20:22	
Benzene	ND	0.50	0.10	µg/L	1	03/23/09 20:22	
Chlorobenzene	ND	0.50	0.10	µg/L	1	03/23/09 20:22	
Vinyl chloride	ND	1.00	0.33	µg/L	1	03/23/09 20:22	
Surr: 1,2-Dichloroethane-d4	110	75-134	0.16	%REC	1	03/23/09 20:22	
Surr: 4-Bromofluorobenzene	100	75-125	0.10	%REC	1	03/23/09 20:22	
Surr: Toluene-d8	106	75-125	0.10	%REC	1	03/23/09 20:22	

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435201

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: GENESYS 20

ColumnID:

Revision: 03/19/09 11:27

Col Type:

Sample Size: NA

%Moisture:

TestCode: COD410.4

Lab ID: 0903109-002A

Client Sample ID: SVWL No. 93

Collection Date: 03/17/09 9:35

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16725

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
COD					EPA 410.4		
Chemical Oxygen Demand	ND	10		3.6	mg/L	1	03/19/09 12:00

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

434759

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: AA3

ColumnID:

Revision: 03/31/09 5:59

Col Type:

Sample Size: 20 mL

%Moisture:

TestCode: TKN351.2

Lab ID: 0903109-002A

Client Sample ID: SVWL No. 93

Collection Date: 03/17/09 9:35

Date Received: 03/18/09 10:20

PrepDate: 03/30/09 0:00

BatchNo: 9187/R16820

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	ND	0.20		0.10	mg/L	1	03/30/09 16:00

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
	J Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
	P Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

436409

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: pH meter

ColumnID:

Revision: 03/20/09 14:11

Col Type:

Sample Size: NA

%Moisture:

TestCode: ALKT 2320B

Lab ID: 0903109-002B

Client Sample ID: SVWL No. 93

Collection Date: 03/17/09 9:35

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16741

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
ALKALINITY, AS CaCO ₃					SM 18-20 2320 B		
Alkalinity, as CaCO ₃	40	10		10	mg/L	1	03/20/09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435009

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: FIMS 100

ColumnID:

Revision: 03/20/09 15:31

Col Type:

Sample Size: 50 mL

%Moisture:

TestCode: HG7470W

Lab ID: 0903109-002C

Client Sample ID: *SVWL No. 93*

Collection Date: 03/17/09 9:35

Date Received: 03/18/09 10:20

PrepDate: 03/19/09 0:00

BatchNo: 9141/R16742

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7470A		(SW7470A)
Mercury	ND	0.00020		0.000050	mg/L	1	03/20/09 12:23

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435051

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: Buret Type A

ColumnID:

Revision: 04/03/09 14:18

Col Type:

Sample Size: NA

%Moisture:

TestCode: HARD2340C

Lab ID: 0903109-002C

Client Sample ID: *SVWL No. 93*

Collection Date: 03/17/09 9:35

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16791

FileID: I-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
HARDNESS-TOTAL, AS CaCO3							
Hardness-Total, as CaCO3	76	10		10	mg/L	1	03/26/09

SM 18-20 2340 C

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435774

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903109
Matrix: GROUNDWATER
Inst. ID: ICAP 61E
ColumnID:
Revision: 04/06/09 11:41
Col Type:

Lab ID: 0903109-002C
Client Sample ID: SVWL No. 93
Collection Date: 03/17/09 9:35
Date Received: 03/18/09 10:20
PrepDate: 03/18/09 0:00
BatchNo: 9136/R16868
FileID: 1-SAMP-102832

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Aluminum	ND		0.10	0.060	mg/L	1	04/03/09 12:45
Antimony	ND		0.060	0.0030	mg/L	1	04/03/09 12:45
Arsenic	ND		0.010	0.0040	mg/L	1	04/03/09 12:45
Barium	0.0088 J		0.10	0.0020	mg/L	1	04/03/09 12:45
Beryllium	ND		0.0030	0.00020	mg/L	1	04/03/09 12:45
Cadmium	ND		0.0050	0.0010	mg/L	1	04/03/09 12:45
Calcium	23		1.0	0.040	mg/L	1	04/03/09 12:45
Chromium	ND		0.010	0.0028	mg/L	1	04/03/09 12:45
Cobalt	ND		0.050	0.0060	mg/L	1	04/03/09 12:45
Copper	0.0039 J		0.010	0.0028	mg/L	1	04/03/09 12:45
Iron	0.029 J		0.050	0.010	mg/L	1	04/03/09 12:45
Lead	ND		0.010	0.0040	mg/L	1	04/03/09 12:45
Magnesium	5.9		1.0	0.040	mg/L	1	04/03/09 12:45
Manganese	ND		0.050	0.0015	mg/L	1	04/03/09 12:45
Nickel	ND		0.050	0.0020	mg/L	1	04/03/09 12:45
Potassium	1.5 J		5.0	0.20	mg/L	1	04/03/09 12:45
Selenium	ND		0.010	0.0050	mg/L	1	04/03/09 12:45
Silver	ND		0.010	0.0020	mg/L	1	04/03/09 12:45
Sodium	52		1.0	0.040	mg/L	1	04/03/09 12:45
Thallium	ND		0.020	0.010	mg/L	1	04/03/09 12:45
Vanadium	ND		0.050	0.0020	mg/L	1	04/03/09 12:45
Zinc	0.012 J		0.020	0.0040	mg/L	1	04/03/09 12:45

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

437085

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: MS02_12

Sample Size: 25 mL

ColumnID: Rtx-502.2

%Moisture:

Revision: 03/24/09 9:07

TestCode: 8260W

Lab ID: 0903109-002D

Client Sample ID: SVWL No. 93

Collection Date: 03/17/09 9:35

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16752

FileID: 1-SAMP-M5920.D

Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	ND	0.50	0.10	µg/L	1		03/23/09 21:04
Benzene	ND	0.50	0.10	µg/L	1		03/23/09 21:04
Chlorobenzene	ND	0.50	0.10	µg/L	1		03/23/09 21:04
Vinyl chloride	ND	1.00	0.33	µg/L	1		03/23/09 21:04
Surr: 1,2-Dichloroethane-d4	111	75-134	0.16	%REC	1		03/23/09 21:04
Surr: 4-Bromofluorobenzene	106	75-125	0.10	%REC	1		03/23/09 21:04
Surr: Toluene-d8	108	75-125	0.10	%REC	1		03/23/09 21:04

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435202

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: GENESYS 20

ColumnID:

Revision: 03/19/09 11:27

Col Type:

Sample Size: NA

%Moisture:

TestCode: COD410.4

Lab ID: 0903109-003A

Client Sample ID: *SVWL No. 95*

Collection Date: 03/17/09 9:52

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16725

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
COD					EPA 410.4		
Chemical Oxygen Demand	ND		10	3.6	mg/L	1	03/19/09 12:00

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

434760

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: AA3

ColumnID:

Revision: 03/31/09 5:59

Col Type:

Sample Size: 20 mL

%Moisture:

TestCode: TKN351.2

Lab ID: 0903109-003A

Client Sample ID: SVWL No. 95

Collection Date: 03/17/09 9:52

Date Received: 03/18/09 10:20

PrepDate: 03/30/09 0:00

BatchNo: 9187/R16820

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	ND	0.20		0.10	mg/L	1	03/30/09 16:00

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

436410

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: pH meter

ColumnID:

Revision: 03/20/09 14:11

Col Type:

Sample Size: NA

%Moisture:

TestCode: ALKT 2320B

Lab ID: 0903109-003B

Client Sample ID: SVWL No. 95

Collection Date: 03/17/09 9:52

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16741

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
ALKALINITY, AS CaCO3							
Alkalinity, as CaCO3	40	10		10	mg/L	1	03/20/09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435010

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903109
Matrix: GROUNDWATER
Inst. ID: FIMS 100
ColumnID:
Revision: 03/20/09 15:31
Col Type:

Lab ID: 0903109-003C
Client Sample ID: *SVWL No. 95*
Collection Date: 03/17/09 9:52
Date Received: 03/18/09 10:20
PrepDate: 03/19/09 0:00
BatchNo: 9141/R16742
FileID: 1-SAMP-

Sample Size: 50 mL
%Moisture:
TestCode: HG7470W

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7470A		(SW7470A)
Mercury	ND		0.00020	0.000050	mg/L	1	03/20/09 12:25

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435052

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: Buret Type A

ColumnID:

Revision: 04/03/09 14:18

Col Type:

Sample Size: NA

%Moisture:

TestCode: HARD2340C

Lab ID: 0903109-003C

Client Sample ID: SVWL No. 95

Collection Date: 03/17/09 9:52

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16791

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
HARDNESS-TOTAL, AS CaCO3							
Hardness-Total, as CaCO3	88	10		10	mg/L	1	03/26/09

SM 18-20 2340 C

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435775

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903109
Matrix: GROUNDWATER
Inst. ID: ICAP 61E
ColumnID:
Revision: 04/06/09 11:41
Col Type:

Lab ID: 0903109-003C
Client Sample ID: *SVWL No. 95*
Collection Date: 03/17/09 9:52
Date Received: 03/18/09 10:20
PrepDate: 03/18/09 0:00
BatchNo: 9136/R16868
FileID: 1-SAMP-102833

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Aluminum	ND		0.10	0.060	mg/L	1	04/03/09 12:49
Antimony	ND		0.060	0.0030	mg/L	1	04/03/09 12:49
Arsenic	ND		0.010	0.0040	mg/L	1	04/03/09 12:49
Barium	0.013	J	0.10	0.0020	mg/L	1	04/03/09 12:49
Beryllium	ND		0.0030	0.00020	mg/L	1	04/03/09 12:49
Cadmium	ND		0.0050	0.0010	mg/L	1	04/03/09 12:49
Calcium	24		1.0	0.040	mg/L	1	04/03/09 12:49
Chromium	ND		0.010	0.0028	mg/L	1	04/03/09 12:49
Cobalt	ND		0.050	0.0060	mg/L	1	04/03/09 12:49
Copper	0.0054	J	0.010	0.0028	mg/L	1	04/03/09 12:49
Iron	0.033	J	0.050	0.010	mg/L	1	04/03/09 12:49
Lead	ND		0.010	0.0040	mg/L	1	04/03/09 12:49
Magnesium	6.7		1.0	0.040	mg/L	1	04/03/09 12:49
Manganese	0.14		0.050	0.0015	mg/L	1	04/03/09 12:49
Nickel	ND		0.050	0.0020	mg/L	1	04/03/09 12:49
Potassium	1.6	J	5.0	0.20	mg/L	1	04/03/09 12:49
Selenium	ND		0.010	0.0050	mg/L	1	04/03/09 12:49
Silver	ND		0.010	0.0020	mg/L	1	04/03/09 12:49
Sodium	49		1.0	0.040	mg/L	1	04/03/09 12:49
Thallium	ND		0.020	0.010	mg/L	1	04/03/09 12:49
Vanadium	ND		0.050	0.0020	mg/L	1	04/03/09 12:49
Zinc	0.011	J	0.020	0.0040	mg/L	1	04/03/09 12:49

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

437086

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: MS02_12

Sample Size: 25 mL

ColumnID: Rtx-502.2

%Moisture:

Revision: 03/24/09 9:07

TestCode: 8260W

Col Type:

Lab ID: 0903109-003D

Client Sample ID: *SVWL No. 95*

Collection Date: 03/17/09 9:52

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16752

FileID: 1-SAMP-M5921.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	ND	0.50	0.10	µg/L	1	03/23/09 21:45	
Benzene	ND	0.50	0.10	µg/L	1	03/23/09 21:45	
Chlorobenzene	ND	0.50	0.10	µg/L	1	03/23/09 21:45	
Vinyl chloride	ND	1.00	0.33	µg/L	1	03/23/09 21:45	
Surr: 1,2-Dichloroethane-d4	111	75-134	0.16	%REC	1	03/23/09 21:45	
Surr: 4-Bromofluorobenzene	107	75-125	0.10	%REC	1	03/23/09 21:45	
Surr: Toluene-d8	108	75-125	0.10	%REC	1	03/23/09 21:45	

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435203

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: AA3

ColumnID:

Revision: 03/31/09 5:59

Col Type:

Sample Size: 20 mL

%Moisture:

TestCode: TKN351.2

Lab ID: 0903109-004A

Client Sample ID: *SVWL No. 96*

Collection Date: 03/17/09 10:00

Date Received: 03/18/09 10:20

PrepDate: 03/30/09 0:00

BatchNo: 9187/R16820

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	0.10	J	0.20	0.10	mg/L	1	03/30/09 16:00

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

436411

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: GENESYS 20

ColumnID:

Revision: 03/19/09 11:27

Col Type:

Sample Size: NA

%Moisture:

TestCode: COD410.4

Lab ID: 0903109-004A

Client Sample ID: SVWL No. 96

Collection Date: 03/17/09 10:00

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16725

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
COD					EPA 410.4		
Chemical Oxygen Demand	ND		10	3.6	mg/L	1	03/19/09 12:00

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

434761

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: pH meter

ColumnID:

Revision: 03/20/09 14:11

Col Type:

Sample Size: NA

%Moisture:

TestCode: ALKT 2320B

Lab ID: 0903109-004B

Client Sample ID: SVWL No. 96

Collection Date: 03/17/09 10:00

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16741

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
ALKALINITY, AS CaCO3							
Alkalinity, as CaCO3	40	10		10	mg/L	1	03/20/09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435011

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: FIMS 100

ColumnID:

Revision: 03/20/09 15:31

Col Type:

Sample Size: 50 mL

%Moisture:

TestCode: HG7470W

Lab ID: 0903109-004C

Client Sample ID: SVWL No. 96

Collection Date: 03/17/09 10:00

Date Received: 03/18/09 10:20

PrepDate: 03/19/09 0:00

BatchNo: 9141/R16742

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7470A		(SW7470A)
Mercury	ND	0.00020		0.000050	mg/L	1	03/20/09 12:27

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435053

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: Buret Type A

ColumnID:

Revision: 04/03/09 14:18

Col Type:

Sample Size: NA

%Moisture:

TestCode: HARD2340C

Lab ID: 0903109-004C

Client Sample ID: SVWL No. 96

Collection Date: 03/17/09 10:00

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16791

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
HARDNESS-TOTAL, AS CaCO3							
Hardness-Total, as CaCO3	88	10		10	mg/L	1	03/26/09

SM 18-20 2340 C

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435776

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903109
Matrix: GROUNDWATER
Inst. ID: ICAP 61E **Sample Size:** 50 mL
ColumnID: **%Moisture:**
Revision: 04/06/09 11:41 **TestCode:** 6010W05
Col Type:

Lab ID: 0903109-004C
Client Sample ID: SVWL No. 96
Collection Date: 03/17/09 10:00
Date Received: 03/18/09 10:20
PrepDate: 03/18/09 0:00
BatchNo: 9136/R16868
FileID: 1-SAMP-102834

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Aluminum	ND		0.10	0.060	mg/L	1	04/03/09 12:53
Antimony	ND		0.060	0.0030	mg/L	1	04/03/09 12:53
Arsenic	ND		0.010	0.0040	mg/L	1	04/03/09 12:53
Barium	0.0086 J		0.10	0.0020	mg/L	1	04/03/09 12:53
Beryllium	ND		0.0030	0.00020	mg/L	1	04/03/09 12:53
Cadmium	ND		0.0050	0.0010	mg/L	1	04/03/09 12:53
Calcium	23		1.0	0.040	mg/L	1	04/03/09 12:53
Chromium	ND		0.010	0.0028	mg/L	1	04/03/09 12:53
Cobalt	ND		0.050	0.0060	mg/L	1	04/03/09 12:53
Copper	0.0063 J		0.010	0.0028	mg/L	1	04/03/09 12:53
Iron	0.016 J		0.050	0.010	mg/L	1	04/03/09 12:53
Lead	ND		0.010	0.0040	mg/L	1	04/03/09 12:53
Magnesium	6.3		1.0	0.040	mg/L	1	04/03/09 12:53
Manganese	ND		0.050	0.0015	mg/L	1	04/03/09 12:53
Nickel	ND		0.050	0.0020	mg/L	1	04/03/09 12:53
Potassium	1.3 J		5.0	0.20	mg/L	1	04/03/09 12:53
Selenium	ND		0.010	0.0050	mg/L	1	04/03/09 12:53
Silver	ND		0.010	0.0020	mg/L	1	04/03/09 12:53
Sodium	54		1.0	0.040	mg/L	1	04/03/09 12:53
Thallium	ND		0.020	0.010	mg/L	1	04/03/09 12:53
Vanadium	ND		0.050	0.0020	mg/L	1	04/03/09 12:53
Zinc	0.014 J		0.020	0.0040	mg/L	1	04/03/09 12:53

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

437087

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: MS02_12

Sample Size: 25 mL

ColumnID: Rtx-502.2

%Moisture:

Revision: 03/25/09 15:19

TestCode: 8260W

Col Type:

Lab ID: 0903109-004D

Client Sample ID: *SVWL No. 96*

Collection Date: 03/17/09 10:00

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16773

FileID: 1-SAMP-M5929.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	ND	0.50	0.10	µg/L	1		03/24/09 13:15
Benzene	ND	0.50	0.10	µg/L	1		03/24/09 13:15
Chlorobenzene	ND	0.50	0.10	µg/L	1		03/24/09 13:15
Vinyl chloride	ND	1.00	0.33	µg/L	1		03/24/09 13:15
Surr: 1,2-Dichloroethane-d4	110	75-134	0.16	%REC	1		03/24/09 13:15
Surr: 4-Bromofluorobenzene	102	75-125	0.10	%REC	1		03/24/09 13:15
Surr: Toluene-d8	107	75-125	0.10	%REC	1		03/24/09 13:15

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435562

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: GENESYS 20

ColumnID:

Revision: 03/19/09 11:27

Col Type:

Sample Size: NA

%Moisture:

TestCode: COD410.4

Lab ID: 0903109-005A

Client Sample ID: 2-OS

Collection Date: 03/17/09 10:45

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16725

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
COD					EPA 410.4		
Chemical Oxygen Demand	17	10		3.6	mg/L	1	03/19/09 12:01

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

434762

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: AA3

ColumnID:

Revision: 03/31/09 5:59

Col Type:

Sample Size: 20 mL

%Moisture:

TestCode: TKN351.2

Lab ID: 0903109-005A

Client Sample ID: 2-OS

Collection Date: 03/17/09 10:45

Date Received: 03/18/09 10:20

PrepDate: 03/30/09 0:00

BatchNo: 9187/R16820

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	0.10	J	0.20	0.10	mg/L	1	03/30/09 16:00

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

436412

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: pH meter

ColumnID:

Revision: 03/20/09 14:11

Col Type:

Sample Size: NA

%Moisture:

TestCode: ALKT 2320B

Lab ID: 0903109-005B

Client Sample ID: 2-OS

Collection Date: 03/17/09 10:45

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16741

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
ALKALINITY, AS CaCO ₃							
Alkalinity, as CaCO ₃	280	10		10	mg/L	1	03/20/09

SM 18-20 2320 B

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435012

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: FIMS 100

ColumnID:

Revision: 03/20/09 15:31

Col Type:

Sample Size: 50 mL

%Moisture:

TestCode: HG7470W

Lab ID: 0903109-005C

Client Sample ID: 2-OS

Collection Date: 03/17/09 10:45

Date Received: 03/18/09 10:20

PrepDate: 03/19/09 0:00

BatchNo: 9141/R16742

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7470A		(SW7470A)
Mercury	ND	0.00020		0.000050	mg/L	1	03/20/09 12:33

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435056

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: Buret Type A

ColumnID:

Revision: 04/03/09 14:18

Col Type:

Sample Size: NA

%Moisture:

TestCode: HARD2340C

Lab ID: 0903109-005C

Client Sample ID: 2-OS

Collection Date: 03/17/09 10:45

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16791

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
HARDNESS-TOTAL, AS CaCO3					SM 18-20 2340 C		
Hardness-Total, as CaCO3	280	10		10	mg/L	1	03/26/09

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
	J Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
	P Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435777

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903109
Matrix: GROUNDWATER
Inst. ID: ICAP 61E **Sample Size:** 50 mL
ColumnID: **%Moisture:**
Revision: 04/06/09 11:41 **TestCode:** 6010W05
Col Type:

Lab ID: 0903109-005C
Client Sample ID: 2-OS
Collection Date: 03/17/09 10:45
Date Received: 03/18/09 10:20
PrepDate: 03/18/09 0:00
BatchNo: 9136/R16868
FileID: 1-SAMP-102835

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Aluminum	3.2	0.10		0.060	mg/L	1	04/03/09 12:57
Antimony	ND	0.060		0.0030	mg/L	1	04/03/09 12:57
Arsenic	ND	0.010		0.0040	mg/L	1	04/03/09 12:57
Barium	0.044 J	0.10		0.0020	mg/L	1	04/03/09 12:57
Beryllium	ND	0.0030		0.00020	mg/L	1	04/03/09 12:57
Cadmium	ND	0.0050		0.0010	mg/L	1	04/03/09 12:57
Calcium	99	1.0		0.040	mg/L	1	04/03/09 12:57
Chromium	0.48	0.010		0.0028	mg/L	1	04/03/09 12:57
Cobalt	0.020 J	0.050		0.0060	mg/L	1	04/03/09 12:57
Copper	0.021	0.010		0.0028	mg/L	1	04/03/09 12:57
Iron	12	0.050		0.010	mg/L	1	04/03/09 12:57
Lead	0.0057 J	0.010		0.0040	mg/L	1	04/03/09 12:57
Magnesium	18	1.0		0.040	mg/L	1	04/03/09 12:57
Manganese	2.2	0.050		0.0015	mg/L	1	04/03/09 12:57
Nickel	0.49	0.050		0.0020	mg/L	1	04/03/09 12:57
Potassium	2.1 J	5.0		0.20	mg/L	1	04/03/09 12:57
Selenium	ND	0.010		0.0050	mg/L	1	04/03/09 12:57
Silver	ND	0.010		0.0020	mg/L	1	04/03/09 12:57
Sodium	11	1.0		0.040	mg/L	1	04/03/09 12:57
Thallium	ND	0.020		0.010	mg/L	1	04/03/09 12:57
Vanadium	0.0085 J	0.050		0.0020	mg/L	1	04/03/09 12:57
Zinc	0.016 J	0.020		0.0040	mg/L	1	04/03/09 12:57

Qualifiers:

* Value exceeds Maximum Contaminant Level
 E Value exceeds the instrument calibration range
 J Analyte detected below the PQL
 P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Practical Quantitation Limit (PQL)
 S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

437088

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: MS02_12

Sample Size: 25 mL

ColumnID: Rtx-502.2

%Moisture:

Revision: 03/25/09 15:19

TestCode: 8260W

Lab ID: 0903109-005D

Client Sample ID: 2-OS

Collection Date: 03/17/09 10:45

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16773

FileID: 1-SAMP-M5930.D

Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	ND	0.50	0.10	µg/L	1		03/24/09 13:56
Benzene	ND	0.50	0.10	µg/L	1		03/24/09 13:56
Chlorobenzene	ND	0.50	0.10	µg/L	1		03/24/09 13:56
Vinyl chloride	ND	1.00	0.33	µg/L	1		03/24/09 13:56
Surr: 1,2-Dichloroethane-d4	112	75-134	0.16	%REC	1		03/24/09 13:56
Surr: 4-Bromofluorobenzene	100	75-125	0.10	%REC	1		03/24/09 13:56
Surr: Toluene-d8	107	75-125	0.10	%REC	1		03/24/09 13:56

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435563

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: GENESYS 20

ColumnID:

Revision: 03/19/09 11:27

Col Type:

Sample Size: NA

%Moisture:

TestCode: COD410.4

Lab ID: 0903109-006A

Client Sample ID: I-OS

Collection Date: 03/17/09 11:45

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16725

FileID: I-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
COD					EPA 410.4		
Chemical Oxygen Demand	26	10		3.6	mg/L	1	03/19/09 12:19

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

434765

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: AA3

ColumnID:

Revision: 03/31/09 5:59

Col Type:

Sample Size: 20 mL

%Moisture:

TestCode: TKN351.2

Lab ID: 0903109-006A

Client Sample ID: 1-OS

Collection Date: 03/17/09 11:45

Date Received: 03/18/09 10:20

PrepDate: 03/30/09 0:00

BatchNo: 9187/R16820

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
KJELDAHL NITROGEN - TOTAL (AS N)					EPA 351.2		(E351.2)
Kjeldahl Nitrogen - Total (as N)	0.31	0.20		0.10	mg/L	1	03/30/09 16:00

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

436413

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: pH meter

ColumnID:

Revision: 03/20/09 14:11

Col Type:

Sample Size: NA

%Moisture:

TestCode: ALKT 2320B

Lab ID: 0903109-006B

Client Sample ID: I-OS

Collection Date: 03/17/09 11:45

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16741

FileID: I-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
ALKALINITY, AS CaCO3					SM 18-20 2320 B		
Alkalinity, as CaCO3	140	10		10	mg/L	1	03/20/09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435013

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: FIMS 100

ColumnID:

Revision: 03/20/09 15:31

Col Type:

Sample Size: 50 mL

%Moisture:

TestCode: HG7470W

Lab ID: 0903109-006C

Client Sample ID: 1-OS

Collection Date: 03/17/09 11:45

Date Received: 03/18/09 10:20

PrepDate: 03/19/09 0:00

BatchNo: 9141/R16742

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7470A		(SW7470A)
Mercury	ND	0.00020		0.000050	mg/L	1	03/20/09 12:35

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435057

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: Buret Type A

ColumnID:

Revision: 04/03/09 14:18

Col Type:

Sample Size: NA

%Moisture:

TestCode: HARD2340C

Lab ID: 0903109-006C

Client Sample ID: 1-OS

Collection Date: 03/17/09 11:45

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16791

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
HARDNESS-TOTAL, AS CaCO3					SM 18-20 2340 C		
Hardness-Total, as CaCO3	280	10		10	mg/L	1	03/26/09

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435778

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903109
Matrix: GROUNDWATER
Inst. ID: ICAP 61E
ColumnID:
Revision: 04/06/09 11:41
Col Type:

Lab ID: 0903109-006C
Client Sample ID: 1-OS
Collection Date: 03/17/09 11:45
Date Received: 03/18/09 10:20
PrepDate: 03/18/09 0:00
BatchNo: 9136/R16868
FileID: 1-SAMP-102836

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Aluminum	12		0.10	0.060	mg/L	1	04/03/09 13:01
Antimony	ND		0.060	0.0030	mg/L	1	04/03/09 13:01
Arsenic	0.0071	J	0.010	0.0040	mg/L	1	04/03/09 13:01
Barium	0.15		0.10	0.0020	mg/L	1	04/03/09 13:01
Beryllium	0.00061	J	0.0030	0.00020	mg/L	1	04/03/09 13:01
Cadmium	ND		0.0050	0.0010	mg/L	1	04/03/09 13:01
Calcium	82		1.0	0.040	mg/L	1	04/03/09 13:01
Chromium	0.14		0.010	0.0028	mg/L	1	04/03/09 13:01
Cobalt	0.028	J	0.050	0.0060	mg/L	1	04/03/09 13:01
Copper	0.033		0.010	0.0028	mg/L	1	04/03/09 13:01
Iron	38		0.050	0.010	mg/L	1	04/03/09 13:01
Lead	0.0063	J	0.010	0.0040	mg/L	1	04/03/09 13:01
Magnesium	20		1.0	0.040	mg/L	1	04/03/09 13:01
Manganese	9.0		0.050	0.0015	mg/L	1	04/03/09 13:01
Nickel	0.64		0.050	0.0020	mg/L	1	04/03/09 13:01
Potassium	5.8		5.0	0.20	mg/L	1	04/03/09 13:01
Selenium	ND		0.010	0.0050	mg/L	1	04/03/09 13:01
Silver	ND		0.010	0.0020	mg/L	1	04/03/09 13:01
Sodium	97		1.0	0.040	mg/L	1	04/03/09 13:01
Thallium	ND		0.020	0.010	mg/L	1	04/03/09 13:01
Vanadium	0.034	J	0.050	0.0020	mg/L	1	04/03/09 13:01
Zinc	0.046		0.020	0.0040	mg/L	1	04/03/09 13:01

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
	P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

437089

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: MS02_12

Sample Size: 25 mL

ColumnID: Rtx-502.2

%Moisture:

Revision: 03/25/09 15:19

TestCode: 8260W

Col Type:

Lab ID: 0903109-006D

Client Sample ID: I-OS

Collection Date: 03/17/09 11:45

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16773

FileID: 1-SAMP-M5931.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	ND	0.50	0.10	µg/L	1	03/24/09 14:37	
Benzene	ND	0.50	0.10	µg/L	1	03/24/09 14:37	
Chlorobenzene	ND	0.50	0.10	µg/L	1	03/24/09 14:37	
Vinyl chloride	ND	1.00	0.33	µg/L	1	03/24/09 14:37	
Surr: 1,2-Dichloroethane-d4	114	75-134	0.16	%REC	1	03/24/09 14:37	
Surr: 4-Bromofluorobenzene	102	75-125	0.10	%REC	1	03/24/09 14:37	
Surr: Toluene-d8	107	75-125	0.10	%REC	1	03/24/09 14:37	

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435564

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: FIMS 100

ColumnID:

Revision: 03/20/09 15:31

Col Type:

Sample Size: 50 mL

%Moisture:

TestCode: HG7470W

Lab ID: 0903109-007C

Client Sample ID: 3-OS

Collection Date: 03/17/09 12:25

Date Received: 03/18/09 10:20

PrepDate: 03/19/09 0:00

BatchNo: 9141/R16742

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
MERCURY					SW7470A		(SW7470A)
Mercury	ND		0.00020	0.000050	mg/L	1	03/20/09 12:38

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435058

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: Buret Type A

ColumnID:

Revision: 04/03/09 14:18

Col Type:

Sample Size: NA

%Moisture:

TestCode: HARD2340C

Lab ID: 0903109-007C

Client Sample ID: 3-OS

Collection Date: 03/17/09 12:25

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16791

FileID: 1-SAMP-

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
HARDNESS-TOTAL, AS CaCO3							
Hardness-Total, as CaCO3	280	10		10	mg/L	1	03/26/09

SM 18-20 2340 C

Qualifiers:

* Value exceeds Maximum Contaminant Level

E Value exceeds the instrument calibration range

J Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435779

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.
Project: Ramapo
W Order: 0903109
Matrix: GROUNDWATER
Inst. ID: ICAP 61E
ColumnID:
Revision: 04/06/09 11:41
Col Type:

Lab ID: 0903109-007C
Client Sample ID: 3-OS
Collection Date: 03/17/09 12:25
Date Received: 03/18/09 10:20
PrepDate: 03/18/09 0:00
BatchNo: 9136/R16868
FileID: 1-SAMP-102837

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Aluminum	0.87		0.10	0.060	mg/L	1	04/03/09 13:05
Antimony	ND		0.060	0.0030	mg/L	1	04/03/09 13:05
Arsenic	ND		0.010	0.0040	mg/L	1	04/03/09 13:05
Barium	0.13		0.10	0.0020	mg/L	1	04/03/09 13:05
Beryllium	ND		0.0030	0.00020	mg/L	1	04/03/09 13:05
Cadmium	ND		0.0050	0.0010	mg/L	1	04/03/09 13:05
Calcium	100		1.0	0.040	mg/L	1	04/03/09 13:05
Chromium	3.9		0.010	0.0028	mg/L	1	04/03/09 13:05
Cobalt	0.020 J		0.050	0.0060	mg/L	1	04/03/09 13:05
Copper	0.044		0.010	0.0028	mg/L	1	04/03/09 13:05
Iron	30		0.050	0.010	mg/L	1	04/03/09 13:05
Lead	ND		0.010	0.0040	mg/L	1	04/03/09 13:05
Magnesium	12		1.0	0.040	mg/L	1	04/03/09 13:05
Nickel	0.81		0.050	0.0020	mg/L	1	04/03/09 13:05
Potassium	3.1 J		5.0	0.20	mg/L	1	04/03/09 13:05
Silver	ND		0.010	0.0020	mg/L	1	04/03/09 13:05
Sodium	36		1.0	0.040	mg/L	1	04/03/09 13:05
Vanadium	0.017 J		0.050	0.0020	mg/L	1	04/03/09 13:05
Zinc	0.0066 J		0.020	0.0040	mg/L	1	04/03/09 13:05

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

437090

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: ICAP 61E

ColumnID:

Revision: 04/06/09 11:41

Col Type:

Sample Size: 50 mL

%Moisture:

TestCode: 6010W05

Lab ID: 0903109-007CDL

Client Sample ID: 3-OS

Collection Date: 03/17/09 12:25

Date Received: 03/18/09 10:20

PrepDate: 03/18/09 0:00

BatchNo: 9136/R16868

FileID: 1-DL-102838

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
TOTAL METALS BY ICP					SW6010B		(SW3005A)
Manganese	14	0.10		0.0030	mg/L	2	04/03/09 13:09
Selenium	ND	0.020		0.010	mg/L	2	04/03/09 13:09
Thallium	ND	0.040		0.020	mg/L	2	04/03/09 13:09

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

437091

Project Supervisor: Anthony Crescenzi



Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Analytical Results

StateCertNo: 10155

CLIENT: Sterling Environmental Engineering, P.C.

Project: Ramapo

W Order: 0903109

Matrix: GROUNDWATER

Inst. ID: MS02_12

Sample Size: 25 mL

ColumnID: Rtx-502.2

%Moisture:

Revision: 03/25/09 15:19

TestCode: 8260W

Lab ID: 0903109-007D

Client Sample ID: 3-OS

Collection Date: 03/17/09 12:25

Date Received: 03/18/09 10:20

PrepDate:

BatchNo: R16773

FileID: 1-SAMP-M5932.D

Col Type:

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				SW8260B			
1,1-Dichloroethane	ND	0.50	0.10	µg/L	1		03/24/09 15:18
Benzene	ND	0.50	0.10	µg/L	1		03/24/09 15:18
Chlorobenzene	ND	0.50	0.10	µg/L	1		03/24/09 15:18
Vinyl chloride	ND	1.00	0.33	µg/L	1		03/24/09 15:18
Surr: 1,2-Dichloroethane-d4	111	75-134	0.16	%REC	1		03/24/09 15:18
Surr: 4-Bromofluorobenzene	102	75-125	0.10	%REC	1		03/24/09 15:18
Surr: Toluene-d8	107	75-125	0.10	%REC	1		03/24/09 15:18

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value exceeds the instrument calibration range
J Analyte detected below the PQL
P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Practical Quantitation Limit (PQL)
S Spike Recovery outside accepted recovery limits

Print Date: 04/10/09 13:28

435565

Project Supervisor: Anthony Crescenzi



5000 Brittonfield Parkway, Suite 200
East Syracuse, New York 13057
(315) 437-0200

Chain of Custody

Client: Sterling Environmental Engineering, P.C.

Project: Town of Ramapo Landfill

Sampled by: Jessica Spaditi + Jeremy Cooke

Client Contact: Jessica Szwed Phone # 518-456-4900

Phone # 515-454-4900

Sample Description

[illegible]

Relinquished by: 	Date: 3/16/09	Time: 7:00	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by Lab: 	Date: 3/17/09	Time: 10/6
Shipment Method:	Airbill Number:				

Turnaround Time Required:

Routine

Rush (Specify)

Comments: Custody Search



221

Temperature: 22°C ON 1CE

Original - Laboratory
Copy - Client



5000 Brittonfield Parkway, Suite 200
East Syracuse, New York 13057
(315) 437-0200

Chain of Custody

Turnaround Time Required: _____
 Routine _____
 Rush (Specify) _____
 Temperature: 2.4°C on ice
 222

Comments: Custody seals intact 

Original - Laboratory
 Copy - Client



5000 Brittonfield Parkway, Suite 200
East Syracuse, New York 13057
(315) 437-0200

Chain of Custody

Client: Sterling Environmental Engineering, P.C.																																																																																																											
Project: Town of Ramapo Landfill																																																																																																											
Sampled by: Jessica Sganibetti + Jeremy Coote																																																																																																											
Client Contact: 518-456-4900 Jessica Sganibetti Phone # 518-456-4900																																																																																																											
<table border="1"> <thead> <tr> <th colspan="5">Sample Description</th> <th colspan="5">Analysis/Method</th> </tr> <tr> <th>Sample Location</th> <th>Date Collected</th> <th>Time Collected</th> <th>Sample Matrix</th> <th>Comp. or Grab</th> <th>No. of Containers</th> <th>TKN, COD, Alkalinity, Hardness as CaCO₃, Volatile Chloride, Benzene, and TML Metals</th> <th></th> <th></th> <th></th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>4-05</td> <td>3/17/09</td> <td>9:10</td> <td>GW</td> <td>Grab</td> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td>Antimony Method 200.8 for 0.3 ppb reporting limit</td> </tr> <tr> <td>SWC No. 93</td> <td></td> <td>9:35</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>SWC No. 95</td> <td></td> <td>9:52</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>SWC No. 96</td> <td></td> <td>10:00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2-05</td> <td></td> <td>10:45</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Also 3-05 produced insufficient water, so please analyze what you can with what we provided for 3-05. Reval.</td> </tr> <tr> <td>1-05</td> <td></td> <td>11:45</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3-05</td> <td></td> <td>12:25</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>										Sample Description					Analysis/Method					Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers	TKN, COD, Alkalinity, Hardness as CaCO ₃ , Volatile Chloride, Benzene, and TML Metals				Comments	4-05	3/17/09	9:10	GW	Grab	7					Antimony Method 200.8 for 0.3 ppb reporting limit	SWC No. 93		9:35									SWC No. 95		9:52									SWC No. 96		10:00									2-05		10:45								Also 3-05 produced insufficient water, so please analyze what you can with what we provided for 3-05. Reval.	1-05		11:45									3-05		12:25								
Sample Description					Analysis/Method																																																																																																						
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Relinquished by: 	Date: 3/17/09	Time: 1:30	Received by:	Date:	Time:																																																																																																						
Relinquished by:	Date:	Time:	Received by:	Date:	Time:																																																																																																						
Relinquished by:	Date:	Time:	Received by Lab: 	Date: 3/18/09	Time: 1020																																																																																																						
Shipment Method:	Airbill Number:																																																																																																										

Turnaround Time Required:

Routine _____
Rush (Specify) _____

Temperature: 4.8°C on ice

228

Original - Laboratory
Copy - Client