



## **SITE MANAGEMENT**

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### **ANNUAL REPORT 2013 CALENDAR YEAR**

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#### **WORK ASSIGNMENT D007622-07**

**ROSE VALLEY LANDFILL  
RUSSIA (T)**

**SITE NO. 622017  
HERKIMER (C), NY**

Prepared for:  
NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
625 Broadway, Albany, New York

Joe Martens, Commissioner

DIVISION OF ENVIRONMENTAL REMEDIATION

URS Corporation  
77 Goodell Street  
Buffalo, New York 14203

March 2014

**ROSE VALLEY LANDFILL**

**2013 ANNUAL REPORT**

**SITE MANAGEMENT**

**SITE # 622017**

**TOWN OF RUSSIA, HERKIMER COUNTY, NEW YORK**

**PREPARED FOR:**

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

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**77 GOODELL STREET**

**BUFFALO, NEW YORK 14203**

**MARCH 2014**

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## **1.0 INTRODUCTION**

### **1.1 General**

This Site Management Annual Report for 2013 has been prepared under New York State Department of Environmental Conservation (NYSDEC) URS Work Assignment No. D007622-07 for the Rose Valley Landfill site (Figure 1). The purpose of this Annual Report is to provide a record of the long-term maintenance of the cap, wells and stormwater management features associated with remediation at the Rose Valley Landfill and to monitor the effectiveness of natural attenuation. This report is the fourth annual report as called for by Section 6.3 of the Conceptual Operation, Monitoring and Maintenance Plan (COMMP) (URS, November 2006). The COMMP was modified based upon comments from the NYSDEC. The modified plan, re-titled as the Site Management Plan (SMP) was submitted by URS to the Department, reviewed, and approved in September 2010.

The purpose of the site management as presented in the Record of Decision (ROD) is to provide guidance for the operation and maintenance of the site relative to:

- Maintaining the capped area;
- Long term monitoring of the natural attenuation of the groundwater plume by and within the downslope wetlands; and
- Documenting the effectiveness of natural attenuation.

### **1.2 Project Background**

The NYSDEC proposed a remedy in the ROD dated March 30, 2001. The recommendation involved:

- On-site disposal of contaminated surface soils from the older septic disposal pit into the on-site landfill;
- Installing a new cap on the landfill to reduce infiltration through the wastes;
- Installing a new residential well in a deeper, clean aquifer for the impacted residence; and
- Long-term monitoring of the leachate and contaminated groundwater plume by monitoring natural attenuation.

A description of the project site can be found in Section 2.0.

## **2.0 SITE DESCRIPTION**

The Rose Valley Landfill is a privately owned, unlined dump that was open from 1963 to 1985. The site is located in Russia Township in Herkimer County as part of a 91-acre parcel (since subdivided into two parcels in 1986). The site is bounded to the east by Military Road, to the west by Bromley Road, and to the southwest by Rose Valley Road (Figure 2). A NYSDEC Class C stream locally known as Finch Brook separates the site from Military Road. Finch Brook is a tributary of Hurricane Brook (also a NYSDEC Class C stream).

The landfill is located on the side of a hill that has approximately 120 feet of relief. A steep, 60-foot-high sand embankment extends above the landfill to the west. The site is characterized by high relief, with sharp drops in elevation from southwest to northeast and a moderate, even south to southwest slope. The gradient across the western portion of the property is less severe, sloping in the opposite direction.

The area surrounding the site is sparsely populated, with few known permanent residents. At the time that the ROD was issued, a private well immediately adjacent to the landfill entrance on Rose Valley Road (and downgradient of the landfill) was found to be contaminated with site-related contaminants. A new replacement drinking water well into the deeper aquifer has since been installed at the residence; it is being monitored by the Herkimer County Department of Health.

The remedial design of the landfill closure was completed and the construction of the landfill cap was completed in 2007. A 6-foot high chain-link fence was constructed to limit access to the landfill cap area.

### **3.0 MONITORING ACTIVITIES**

Monitoring activities were performed during October 2013 in accordance with the SMP (URS, September 2010). Site monitoring consisted of the collection of groundwater samples from ten (10) wells and surface water samples from four (4) locations, shown on Figure 2. Seven of the groundwater wells are “Sentry Wells” (i.e., SW-01S, SW-01D, SW-02S, SW-02D, SW-03S, SW-04S and SW-04D) and three are monitoring wells (i.e., MW-03, MW-04 and MW-16). Sentry Wells are constructed the same as monitoring wells, but are called Sentry Wells because they are located between the landfill and nearby residential drinking water wells or a surface water body. The monitoring wells are located within the wetland, east of the landfill. Surface water sample locations are:

- at the toe of the embankment (SWTR-1T); at the entrance of the downgradient stream (SWTR-1E);
- at the North Detention Pond (NDP); and
- at the South Detention Pond (SDP).

A copy of the field notes from the 2013 monitoring activities is provided in Appendix A.

#### **3.1 Groundwater Hydraulic Monitoring**

On October 15 and 16, 2013, groundwater level measurements were obtained from fourteen wells (i.e., seven Sentry Wells and seven monitoring wells). The water level measurements are provided in Table 1. Four of the Sentry Wells (i.e., SW-01S, SW-02S, SW-03S and SW-04S) and the three monitoring wells (MW-03, MW-04, and MW-16) are shallow wells. Three of the Sentry Wells (i.e., SW-01D, SW-02D and SW-04D) and four of the monitoring wells (MW-02, MW-14, MW-15 and MW-17) are deep wells. One of the deep wells east of the landfill is an artesian well (i.e., SW-04D). The water column of SW-04D was measured using a pressure gauge. The reading was 8.4 pounds per square inch (psi), which calculates to a column height of 19.38 feet above the measuring point. In addition to the list of wells in the SMP (URS, September 2010), monitoring wells MW-14, MW-15 and MW-17 were added to the hydraulic monitoring list in 2011 to aid in the development of the deep potentiometric surface map due to the artesian condition found in well SW-04D.

A potentiometric surface map based on the water level measurements from the shallow wells, using a 10-foot contour interval, is provided in Figure 3. A potentiometric surface map

based on the water level measurements from the deep wells, using a 10-foot contour interval, is provided in Figure 4.

The shallow groundwater flow is generally to the east-northeast towards Military Road. Approaching Bromley and Rose Valley Roads, the shallow groundwater flow is to the west-southwest. The deep groundwater flow is in the same general direction, with the west-southwest direction starting closer to the western end of the landfill cap.

### **3.2 Groundwater Sampling**

On October 15 and 16, 2013, URS collected groundwater samples from seven Sentry Wells and three monitoring wells plus quality control (QC) samples using low-flow sampling procedures.

Prior to sample collection, standing water was purged from each well with either a GeoPump2 peristaltic pump or Grundfos Redi-Flow 2 submersible pump using dedicated/disposable high-density polyethylene (HDPE) tubing. Wells were purged at a rate of two-liters per minute or less and the purge rate was adjusted to minimize draw down. During the purging of the well, water quality parameters (i.e., pH, specific conductivity, temperature, dissolved oxygen, turbidity) were measured using a Horiba U-52-2 Multi-parameter instrument with a flow-through cell. The water quality parameters were documented on a purge log. Samples were collected after the water quality parameters stabilized. Well purge logs are provided in Appendix B and a Photographic Log is provided in Appendix C. Purge water was disposed of on the ground up-gradient of the well locations, as per the direction of the Department.

The samples were transported under chain of custody (COC) to the NYSDEC's callout laboratory, Test America Laboratories, Inc. (Test America), a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) accredited laboratory. The samples were analyzed for target compound list (TCL) volatile organic compounds (VOCs) plus tentatively identified compounds (TICs) following United States Environmental Protection Agency (USEPA) SW846 Method 8260B.

#### **3.2.1 Groundwater Results**

NYSDEC Analytical Services Protocol (ASP) Category B data deliverables was received by URS. The data was reviewed in accordance with the requirements outlined in *Guidance for Data Deliverables and the Development of Data Usability Summary Reports (DUSR)*, Appendix

2B, *DER-10/Technical Guidance for Site Investigation and Remediation* (NYSDEC, May 2010). Data summary tables, Form I's and Form Ie's (TICs) are provided in the DUSR and include the reporting limit for each non-detected compound. A copy of the DUSR may be found in Appendix D.

A summary of the detected compounds in the groundwater samples are provided in Table 2. Results exceeding TOGS 1.1.1 Class GA groundwater standards or guidance values are indicated with a circle. The locations of detected compounds that have exceeded their respective criteria are shown on Figure 5. Only two VOCs [i.e., 1,1-dichloroethane (11 µg/L, MW-04) and cis-1,2-dichloroethene (6.6 µg/L, MW-03)] were detected above TOGS 1.1.1 Class GA limits in the groundwater samples. No VOCs exceeded TOGS No. 1.1.1 standards or guidance values in the samples from Sentry Wells (i.e., SW-01D, SW-01S, SW-02D, SW-02S, SW-03S, SW-04D, and SW-04S) or monitoring well MW-16. A historical summary of detected results in groundwater is provided in Table 3 and shown on Figure 5. Results from the 2013 monitoring event are consistent with the 2010, 2011 and 2012 monitoring events.

### **3.3 Surface Water/Detention Pond Sampling**

On October 16, 2013, URS collected surface water samples from locations SWTR-1T and SWTR-1E, the North Detention Pond (NDP) and the South Detention Pond (SDP), plus QC samples. At each location the surface water sample was collected by immersing pre-cleaned, laboratory grade sample bottles as close to the middle of the water body as possible without disturbing the sediment. During the collection of the surface water samples, water quality parameters (i.e., pH, specific conductivity, temperature, dissolved oxygen, turbidity) were measured using a Horiba U-52-2 Multi-parameter instrument. The water quality parameters were documented on a sample log, which may be found in Appendix B. Photographs of surface water sampling are provided in Appendix C.

All surface water samples were transported under COC to Test America. The samples were analyzed for TCL VOCs plus TICs following USEPA SW846 Method 8260B.

#### **3.3.1 Surface Water/Detention Pond Results**

One VOC (i.e., benzene) was detected in the 2013 surface water samples, although benzene did not exceed TOGS No. 1.1.1 Class C standards or guidance values for surface water. A summary of detected results in the 2013 surface water samples is provided in Table 4. A historical summary of detected results in groundwater is provided in Table 5 and shown on

Figure 6. Table 6 lists criteria that required calculation, per TOGS No. 1.1.1 for Class C surface waters. VOCs results from the 2013 monitoring event are consistent with the 2010, 2011 and 2012 monitoring events.

## **4.0 SITE MAINTENANCE**

### **4.1 Monitoring Well Inspections**

During the 2013 groundwater monitoring event, a well inspection was performed. All wells appeared to be in good condition. The monitoring well inspection logs may be found in Appendix E.

### **4.2 Landfill Inspection**

A landfill inspection was performed by URS accompanied by NYSDEC personnel in July 2013 and during the October 2013 groundwater monitoring event. A copy of the completed landfill inspection form from the October 2013 site visit can be found in Appendix F. The July 2013 site inspection is documented in the inspection report which may be found in Appendix G. During the October inspection, the landfill cap components appeared to be in good condition. The landfill fence was also inspected and was found to be in good condition.

In the areas surrounding the landfill cap, the following was observed during the October inspection:

- Multiple erosion ruts, approximately 12 inches deep and up to 12-inches wide were present in the main gravel access road from Rose Valley Road all the way to the landfill (see Photos 1, 26, and 27 in Appendix C);
- Multiple erosion rills, approximately 10 inches deep, were discovered along the access road on top of the landfill, and also along the access road west of the landfill (see Photos 5 and 6 in Appendix C);
- As noted initially during the August 9, 2012 site inspection and observed during the July and October inspections, the diversion channel around the north side of the landfill is head cutting. There is now an approximately 6-foot high vertical discontinuity in the channel bottom at about the mid-point of the landfill. There appears to be no significant change to the extent of the head cutting since the August 9, 2012 site inspection.
- It appears that the head cutting has been stopped by the geotextile that underlay the downstream end of the channel armor, of which a length of about 10 feet has failed. It is unclear if this equilibrium will persist as the geotextile degrades. It is also unclear, even assuming that the head cutting has stopped, if the adjacent

sides of the landfill will hold during run-off events. It was observed that the north bank of the channel appears to be eroding. Thus, the erosion is occurring on the side of the channel away from the landfill. If the head cutting continues, there could be significant erosion of and damage to the landfill cap. The situation can be monitored by noting the tree in the center of Photo 11 of the Periodic Inspection Report (July 10, 2013) in Appendix G and in Photos 9, 10, and 11 in Appendix C.

- One of the jersey barriers blocking access to the landfill along Military Road was moved further down the road, presumably by recreational users, allowing access to the landfill for all terrain vehicles (ATV) riding and continued illegal dumping of municipal solid waste and construction and demolition debris.

Trash and asphalt have been illegally dumped near the jersey barriers along Military Road. Several tires have also been illegally dumped in the ravine north of the landfill along Military Road. In July 2013, it was noticed that trespassers had removed the double swing gate panels from the gate located at the southwest corner of the landfill to gain access for ATV riding. One gate panel was found lying in the grass next to the gate opening. The second gate panel was found lying up against the northern perimeter fence. On July 22, 2013, the gates were replaced and secured by URS subcontractor, Brady Fence Co. Inc., prior to the October 2013 site inspection.

Photographs taken during the October 2013 landfill inspection can be found in Appendix C. The Periodic Inspection Report (July 10, 2013) can be found in Appendix G.

#### **4.3 Maintenance Performed**

The following subsections describe site maintenance activities.

##### **4.3.1 Monitoring Well Maintenance**

Monitoring well locks were sprayed with WD-40 to prevent ceasing. No other routine maintenance was performed at the time this report was prepared.

##### **4.3.2 Routine Maintenance**

The landfill cap was mowed in July 2013 by Marcy Excavation Services, LLC., (MES) a subcontractor to the NYSDEC call-out contractor Environmental Products & Services of



Vermont (EPS). The mowing activities were documented on the construction report which may be found in Appendix G. The NYSDEC also cut brush/small trees near the monitoring wells and removed some growth from the swales. No other routine maintenance was performed at the time this report was prepared.

#### **4.3.3 Intermittent Maintenance**

The double swing gate panels located at the southwestern corner of the landfill were replaced and secured by Brady Fence Co. Inc., prior to the October 2013 site inspection. No other intermittent maintenance was performed at the time this report was prepared.

## **5.0 SUMMARY AND RECOMMENDATIONS**

A summary of the annual monitoring and recommendations are provided below.

### **5.1 Groundwater Hydraulic Monitoring**

Shallow and deep groundwater generally flows in an east-northeast direction towards Military Road. Approaching Bromley and Rose Valley Roads, the shallow and deep groundwater flow is to the west-southwest. In addition to the wells sampled, four additional wells (i.e., MW-02, MW-14, MW-15 and MW-17) were measured in order to provide the deep groundwater contours. It is recommended that these wells continue to be measured during future monitoring events.

### **5.2 Groundwater Quality Monitoring**

Two VOCs (cis-1,2-dichloroethene and 1,1-dichloroethane) exceeded TOGS 1.1.1 Class GA standards and guidance values in the 2013 groundwater samples at two locations, MW-03 and MW-04. There were no VOC exceedances in the Sentry Wells. Historical results of the ten wells are provided in Table 3 and Figure 5. The concentrations of the VOCs in the 2013 monitoring event are consistent when compared with the 2010 - 2012 results from MW-03 and MW-04. Using a Mann-Kendall statistical analysis, no trends have been identified in the groundwater, as shown on Table 7.

### **5.3 Surface Water/Detention Pond Quality Monitoring**

Only one VOC, benzene, was detected in one of the four surface water locations from the 2013 monitoring event. No VOCs exceeded the TOGS 1.1.1 Class C surface water standards and guidance values, consistent with previous monitoring events. Historical data from the surface water sampling locations is provided in Table 5. Using a Mann-Kendall statistical analysis, no trends have been identified in the surface water, as shown on Table 7.

### **5.4 Monitoring Well Maintenance**

No maintenance is necessary for the monitoring wells.

### **5.5 Landfill Maintenance**

All landfill cap components appeared to be sound. The landfill was mowed in July 2013. The Department did not want a second mowing to occur in 2013. The landfill should be scheduled to be mowed in June 2014. Erosion was noted on the west side of the landfill at the toe drain/channel interface and on the north side of the site, north of the stone-lined drainage channel. Ruts have formed in the

gravel on the landfill road. URS recommends that approximately 20 cubic yards of gravel be brought on site and used to fill the ruts in an effort to fix the perimeter access road from Rose Valley Road all the way to the landfill. URS and the Department discussed the recommendation of placing approximately 120 linear feet of concrete jersey barrier at the top of the landfill from the west fence, near the southwestern gate, west to the hill to prevent ATVs from riding through the area and creating tracks which promote erosion and rilling. As an additional deterrent, URS also recommends welding the existing concrete barriers together that are currently located at the back site entrance along Military Road. This would help prevent site access and minimize the disposal of solid waste and construction and demolition debris.

During the October 16, 2013 site inspection, new trash dumping piles were observed at the back entrance from Military Road. The trash piles included an old toilet, paint cans, and municipal solid waste along with construction and demolition debris. In the area where the Department had previously removed over 500 discarded tires, more tires have been discarded, along with wildlife carcasses and other municipal trash. The NYSDEC will monitor erosion and dumping during the next monitoring event. Corrective action may be necessary to mitigate the erosion and to remove the trash based on future observations.

## **TABLES**

**TABLE 1**  
**GROUNDWATER ELEVATION MEASUREMENTS**  
**ROSE VALLEY LANDFILL**

Location ID / Type	Northing	Easting	Ground Elevation (ft)	Casing Elevation (ft)	Meas.point (Riser)Elev.(ft)	Geol. Zone	Specific Gravity	Date / Time	Depth to Water (ft)	Water Elev. (ft)	Product Thick. (ft)	Corrected Water Elev. (ft)	Remark
<b>MW-02</b>	1601925.82	356255.39			1305.15	B							
WL								8/17/2004 1415	58.38	1246.77	0.00		
WL								7/12/2011 1313	57.55	1247.60	0.00		
WL								10/17/2012 1028	60.59	1244.56	0.00		
WL								10/16/2013 0814	58.89	1246.26	0.00		
<b>MW-03</b>	1602437.498	357450.2192			1175.58	A							
WL								8/19/2004 1210	3.31	1172.27	0.00		
WL								4/21/2010 0000	3.03	1172.55	0.00		
WL								7/12/2011 1335	3.01	1172.57	0.00		
WL								10/17/2012 1223	2.85	1172.73	0.00		
WL								10/16/2013 1412	2.84	1172.74	0.00		
<b>MW-04</b>	1602588.989	357572.8098			1172.46	A							
WL								8/19/2004 1310	2.56	1169.90	0.00		
WL								4/21/2010 0000	2.63	1169.83	0.00		
WL								7/12/2011 1345	2.54	1169.92	0.00		
WL								10/17/2012 1234	2.40	1170.06	0.00		
WL								10/16/2013 1318	2.50	1169.96	0.00		
<b>MW-14</b>	1602932.523	356221.9497			1317.83	B							
WL								8/19/2004 1610	96.74	1221.09	0.00		
WL								7/12/2011 1520	98.55	1219.28	0.00		
WL								10/17/2012 1129	98.42	1219.41	0.00		
WL								10/16/2013 0827	95.34	1222.49	0.00		
<b>MW-16</b>	1602287.308	357950.8887			1152.58	A							
WL								8/18/2004 1320	4.00	1148.58	0.00		
WL								4/21/2010 0000	3.00	1149.58	0.00		
WL								7/12/2011 1400	3.56	1149.02	0.00		

NM - No Measurement

The value noted in the column labeled Specific Gravity is an assumed value for free product, if found.

**Geologic Zone:**

- A Shallow Unconfined Aquifer
- B Deep Unconfined Aquifer

**TABLE 1**  
**GROUNDWATER ELEVATION MEASUREMENTS**  
**ROSE VALLEY LANDFILL**

Location ID / Type	Northing	Easting	Ground Elevation (ft)	Casing Elevation (ft)	Meas.point (Riser)Elev.(ft)	Geol. Zone	Specific Gravity	Date / Time	Depth to Water (ft)	Water Elev. (ft)	Product Thick. (ft)	Corrected Water Elev. (ft)	Remark
WL								10/17/2012 1208	3.30	1149.28	0.00		
WL								10/16/2013 1143	3.01	1149.57	0.00		
<b>MW-17</b>	1602592.476	356386.6381			1311.72	B							
WL								8/17/2004 1715	87.30	1224.42	0.00		
WL								7/12/2011 1505	86.69	1225.03	0.00		
WL								10/17/2012 1121	87.06	1224.66	0.00		
WL								10/16/2013 0820	87.15	1224.57	0.00		
<b>SW-01D</b>	1601823.93	355356.06	1262.0		1264.70	B							
WL								8/17/2004 1025	68.64	1196.06	0.00		
WL								4/21/2010 0000	67.13	1197.57	0.00		
WL								7/12/2011 1437	67.37	1197.33	0.00		
WL								10/17/2012 1048	68.71	1195.99	0.00		
WL								10/15/2013 1500	67.89	1196.81	0.00		
<b>SW-01S</b>	1601817.02	355346.13	1260.5		1263.17	A							
WL								8/17/2004 1020	19.32	1243.85	0.00		
WL								4/21/2010 0000	19.05	1244.12	0.00		
WL								7/12/2011 1435	18.56	1244.61	0.00		
WL								10/17/2012 1045	20.82	1242.35	0.00		
WL								10/15/2013 1610	19.55	1243.62	0.00		
<b>SW-02D</b>	1601370.34	355721.25			1257.00	B							
WL								8/16/2004 1600	70.49	1186.51	0.00		
WL								4/21/2010 0000	70.10	1186.90	0.00		
WL								7/12/2011 1450	70.73	1186.27	0.00		
WL								10/17/2012 1106	70.97	1186.03	0.00		
WL								10/15/2013 1357	70.42	1186.58	0.00		

NM - No Measurement

The value noted in the column labeled Specific Gravity is an assumed value for free product, if found.

**Geologic Zone:**

- A Shallow Unconfined Aquifer
- B Deep Unconfined Aquifer

**TABLE 1**  
**GROUNDWATER ELEVATION MEASUREMENTS**  
**ROSE VALLEY LANDFILL**

Location ID / Type	Northing	Easting	Ground Elevation (ft)	Casing Elevation (ft)	Meas.point (Riser)Elev.(ft)	Geol. Zone	Specific Gravity	Date / Time	Depth to Water (ft)	Water Elev. (ft)	Product Thick. (ft)	Corrected Water Elev. (ft)	Remark
<b>SW-02S</b>	1601367.21	355730.86			1257.20	A							
WL								8/16/2004 1700	12.05	1245.15	0.00		
WL								4/21/2010 0000	12.36	1244.84	0.00		
WL								7/12/2011 1448	11.30	1245.90	0.00		
WL								10/17/2012 1108	13.95	1243.25	0.00		
WL								10/15/2013 1239	12.40	1244.80	0.00		
<b>SW-03S</b>	1601483.4	355518.17			1257.67	A							
WL								8/17/2004 0925	12.73	1244.94	0.00		
WL								4/21/2010 0000	12.81	1244.86	0.00		
WL								7/12/2011 1440	11.85	1245.82	0.00		
WL								10/17/2012 1058	14.52	1243.15	0.00		
WL								10/15/2013 1137	19.96	1237.71	0.00		
<b>SW-04D</b>	1602328.65	358265.16	1149.0		1148.65	B							
WL								8/18/2004 1205	NM	-	NM	-	Artesian well
WL								4/21/2010 0000	NM	-	NM	-	Artesian well
WL								7/12/2011 1415	NM	-	NM	-	Artesian well
WL								10/17/2012 1152	NM	-	NM	-	Artesian well
WL								10/16/2013 0910	-19.38	1168.03	NM		8.4 psi at wellhead
<b>SW-04S</b>	1602315.5	358278.21	1148.3		1148.00	A							
WL								8/18/2004 1225	3.76	1144.24	0.00		
WL								4/21/2010 0000	2.83	1145.17	0.00		
WL								7/12/2011 1420	3.40	1144.60	0.00		
WL								10/17/2012 1153	3.20	1144.80	0.00		
WL								10/16/2013 1018	3.35	1144.65	0.00		

NM - No Measurement

The value noted in the column labeled Specific Gravity is an assumed value for free product, if found.

**Geologic Zone:**

- A Shallow Unconfined Aquifer
- B Deep Unconfined Aquifer

**TABLE 2**  
**SUMMARY OF DETECTED COMPOUNDS IN 2013 GROUNDWATER SAMPLES**  
**ROSE VALLEY LANDFILL**

Location ID			MW-03	MW-04	MW-16	SW-01D	SW-01S
Sample ID			MW-03	MW-04	MW-16	SW-01D	SW-01S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/16/13	10/16/13	10/16/13	10/15/13	10/15/13
Parameter	Units	*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5	1.9	11			
1,2-Dichloroethene (cis)	UG/L	5	6.6				

\*- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds

- = No standard or guidance value.

Blank cell or ND - Not detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.



**TABLE 2**  
**SUMMARY OF DETECTED COMPOUNDS IN 2013 GROUNDWATER SAMPLES**  
**ROSE VALLEY LANDFILL**

Location ID			SW-02D	SW-02D	SW-02S	SW-03S	SW-04D
Sample ID			FD-101513	SW-02D	SW-02S	SW-03S	SW-04D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/15/13	10/15/13	10/15/13	10/15/13	10/16/13
Parameter	Units	*	Field Duplicate (1-1)				
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5			1.0		
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethene (cis)	UG/L	5					

\*- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds

- = No standard or guidance value.

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Only Detected Results Reported.

**TABLE 2**  
**SUMMARY OF DETECTED COMPOUNDS IN 2013 GROUNDWATER SAMPLES**  
**ROSE VALLEY LANDFILL**

<b>Location ID</b>			<b>SW-04S</b>
<b>Sample ID</b>			<b>SW-04S</b>
<b>Matrix</b>			<b>Groundwater</b>
<b>Depth Interval (ft)</b>			<b>-</b>
<b>Date Sampled</b>			<b>10/16/13</b>
<b>Parameter</b>	<b>Units</b>	<b>*</b>	
<b>Volatile Organic Compounds</b>			
1,1,1-Trichloroethane	UG/L	5	
1,1-Dichloroethane	UG/L	5	
1,2-Dichloroethene (cis)	UG/L	5	

\*- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds

- = No standard or guidance value.

Blank cell or ND - Not detected. J - The reported concentration is an estimated value.


Only Detected Results Reported.

**TABLE 3**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER SAMPLES**  
**ROSE VALLEY LANDFILL**

Location ID			MW-03	MW-03	MW-03	MW-03	MW-04
Sample ID			MW-03	MW-03	MW-03	MW-03	MW-04
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			04/21/10	07/13/11	10/18/12	10/16/13	04/21/10
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5	2.3	2.2	3 J	1.9	9.3
1,2-Dichloroethene (cis)	UG/L	5	7.1	8.0	11	6.6	2.3
Chloroethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5	0.75 J				0.86 J
<b>Metals</b>							
Aluminum	UG/L	-		NA	NA	NA	
Barium	UG/L	1000	47.6	NA	NA	NA	16.0
Cadmium	UG/L	5		NA	NA	NA	
Calcium	UG/L	-	225,000	NA	NA	NA	171,000
Chromium	UG/L	50		NA	NA	NA	
Iron	UG/L	300	252	NA	NA	NA	1,050
Magnesium	UG/L	35000	18,600	NA	NA	NA	31,700
Manganese	UG/L	300	2,450	NA	NA	NA	525
Potassium	UG/L	-	3,320	NA	NA	NA	1,130
Sodium	UG/L	20000	3,800	NA	NA	NA	14,100
Vanadium	UG/L	-		NA	NA	NA	

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value.

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J - The reported concentration is an estimated value.


Only Detected Results Reported.

**TABLE 3**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER SAMPLES**  
**ROSE VALLEY LANDFILL**

Location ID			MW-04	MW-04	MW-04	MW-16	MW-16
Sample ID			MW-04	MW-04	MW-04	MW-16	MW-16
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/13/11	10/18/12	10/16/13	04/21/10	07/13/11
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5	10	15	11		
1,2-Dichloroethene (cis)	UG/L	5	2.4	3 J			
Chloroethane	UG/L	5	0.35 J				
Dichlorodifluoromethane	UG/L	5		1 J			
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA		NA
Barium	UG/L	1000	NA	NA	NA	31.0	NA
Cadmium	UG/L	5	NA	NA	NA		NA
Calcium	UG/L	-	NA	NA	NA	77,900	NA
Chromium	UG/L	50	NA	NA	NA		NA
Iron	UG/L	300	NA	NA	NA	16,600	NA
Magnesium	UG/L	35000	NA	NA	NA	8,150	NA
Manganese	UG/L	300	NA	NA	NA	1,090	NA
Potassium	UG/L	-	NA	NA	NA		NA
Sodium	UG/L	20000	NA	NA	NA	5,800	NA
Vanadium	UG/L	-	NA	NA	NA		NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value.

Blank cell or ND - Not detected.

J - The reported concentration is an estimated value.

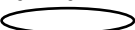
Only Detected Results Reported.

**TABLE 3**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER SAMPLES**  
**ROSE VALLEY LANDFILL**

Location ID			MW-16	MW-16	SW-01D	SW-01D	SW-01D
Sample ID			MW-16	MW-16	DUP-2	SW-01D	SW-01D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/18/12	10/16/13	04/21/10	04/21/10	07/12/11
Parameter	Units	Criteria*			Field Duplicate (1-1)		
<b>Volatile Organic Compounds</b>							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethene (cis)	UG/L	5					
Chloroethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA			NA
Barium	UG/L	1000	NA	NA	71.2	70.2	NA
Cadmium	UG/L	5	NA	NA			NA
Calcium	UG/L	-	NA	NA	28,600	27,600	NA
Chromium	UG/L	50	NA	NA			NA
Iron	UG/L	300	NA	NA	292 J	631 J	NA
Magnesium	UG/L	35000	NA	NA	14,000	13,500	NA
Manganese	UG/L	300	NA	NA	8.8	11.8	NA
Potassium	UG/L	-	NA	NA	1,940	1,890	NA
Sodium	UG/L	20000	NA	NA	10,200	9,900	NA
Vanadium	UG/L	-	NA	NA			NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

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Blank cell or ND - Not detected.

J - The reported concentration is an estimated value.

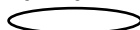
Only Detected Results Reported.

**TABLE 3**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER SAMPLES**  
**ROSE VALLEY LANDFILL**

Location ID			SW-01D	SW-01D	SW-01S	SW-01S	SW-01S
Sample ID			SW-01D	SW-01D	SW-01S	FD-071211	SW-01S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/17/12	10/15/13	04/21/10	07/12/11	07/12/11
Parameter	Units	Criteria*				Field Duplicate (1-1)	
<b>Volatile Organic Compounds</b>							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethene (cis)	UG/L	5					
Chloroethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	5,830	NA	NA
Barium	UG/L	1000	NA	NA	33.4	NA	NA
Cadmium	UG/L	5	NA	NA		NA	NA
Calcium	UG/L	-	NA	NA	109,000	NA	NA
Chromium	UG/L	50	NA	NA	6.9	NA	NA
Iron	UG/L	300	NA	NA	3,700	NA	NA
Magnesium	UG/L	35000	NA	NA	4,000	NA	NA
Manganese	UG/L	300	NA	NA	50.5	NA	NA
Potassium	UG/L	-	NA	NA	2,080	NA	NA
Sodium	UG/L	20000	NA	NA	2,100	NA	NA
Vanadium	UG/L	-	NA	NA	6.6	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

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Only Detected Results Reported.

**TABLE 3**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER SAMPLES**  
**ROSE VALLEY LANDFILL**

Location ID			SW-01S	SW-01S	SW-02D	SW-02D	SW-02D
Sample ID			SW-01S	SW-01S	SW-02D	SW-02D	FD-101712
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/17/12	10/15/13	04/22/10	07/12/11	10/17/12
Parameter	Units	Criteria*					Field Duplicate (1-1)
<b>Volatile Organic Compounds</b>							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethene (cis)	UG/L	5					
Chloroethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	443	NA	NA
Barium	UG/L	1000	NA	NA	65.7	NA	NA
Cadmium	UG/L	5	NA	NA		NA	NA
Calcium	UG/L	-	NA	NA	62,800	NA	NA
Chromium	UG/L	50	NA	NA	4.1	NA	NA
Iron	UG/L	300	NA	NA	433	NA	NA
Magnesium	UG/L	35000	NA	NA	22,300	NA	NA
Manganese	UG/L	300	NA	NA	10.2	NA	NA
Potassium	UG/L	-	NA	NA	1,870	NA	NA
Sodium	UG/L	20000	NA	NA	7,500	NA	NA
Vanadium	UG/L	-	NA	NA		NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

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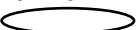
Only Detected Results Reported.

**TABLE 3**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER SAMPLES**  
**ROSE VALLEY LANDFILL**

Location ID			SW-02D	SW-02D	SW-02D	SW-02S	SW-02S
Sample ID			SW-02D	FD-101513	SW-02D	SW-02S	SW-02S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/17/12	10/15/13	10/15/13	04/22/10	07/12/11
Parameter	Units	Criteria*		Field Duplicate (1-1)			
<b>Volatile Organic Compounds</b>							
1,1,1-Trichloroethane	UG/L	5				1.9	
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethene (cis)	UG/L	5					
Chloroethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA	NA		NA
Barium	UG/L	1000	NA	NA	NA	2.9	NA
Cadmium	UG/L	5	NA	NA	NA		NA
Calcium	UG/L	-	NA	NA	NA	57,400	NA
Chromium	UG/L	50	NA	NA	NA		NA
Iron	UG/L	300	NA	NA	NA		NA
Magnesium	UG/L	35000	NA	NA	NA	2,240	NA
Manganese	UG/L	300	NA	NA	NA		NA
Potassium	UG/L	-	NA	NA	NA		NA
Sodium	UG/L	20000	NA	NA	NA	1,000	NA
Vanadium	UG/L	-	NA	NA	NA		NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

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Only Detected Results Reported.




**TABLE 3**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER SAMPLES**  
**ROSE VALLEY LANDFILL**

Location ID			SW-02S	SW-02S	SW-03S	SW-03S	SW-03S
Sample ID			SW-02S	SW-02S	SW-03S	SW-03S	SW-03S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/17/12	10/15/13	04/22/10	07/12/11	10/17/12
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1-Trichloroethane	UG/L	5	1 J	1.0			
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethene (cis)	UG/L	5					
Chloroethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
<b>Metals</b>							
Aluminum	UG/L	-	NA	NA		NA	NA
Barium	UG/L	1000	NA	NA	8.8	NA	NA
Cadmium	UG/L	5	NA	NA		NA	NA
Calcium	UG/L	-	NA	NA	74,400	NA	NA
Chromium	UG/L	50	NA	NA		NA	NA
Iron	UG/L	300	NA	NA		NA	NA
Magnesium	UG/L	35000	NA	NA	3,040	NA	NA
Manganese	UG/L	300	NA	NA		NA	NA
Potassium	UG/L	-	NA	NA	1,910	NA	NA
Sodium	UG/L	20000	NA	NA	22,600	NA	NA
Vanadium	UG/L	-	NA	NA		NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

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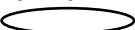
Only Detected Results Reported.

**TABLE 3**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER SAMPLES**  
**ROSE VALLEY LANDFILL**

Location ID			SW-03S	SW-04D	SW-04D	SW-04D	SW-04D
Sample ID			SW-03S	SW-04D	SW-04D	SW-04D	SW-04D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/15/13	04/21/10	07/13/11	10/17/12	10/16/13
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethene (cis)	UG/L	5					
Chloroethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
<b>Metals</b>							
Aluminum	UG/L	-	NA	1,800	NA	NA	NA
Barium	UG/L	1000	NA	14.7	NA	NA	NA
Cadmium	UG/L	5	NA	2.4	NA	NA	NA
Calcium	UG/L	-	NA	12,200	NA	NA	NA
Chromium	UG/L	50	NA		NA	NA	NA
Iron	UG/L	300	NA	1,630	NA	NA	NA
Magnesium	UG/L	35000	NA	1,960	NA	NA	NA
Manganese	UG/L	300	NA	38.7	NA	NA	NA
Potassium	UG/L	-	NA	1,170	NA	NA	NA
Sodium	UG/L	20000	NA	32,000	NA	NA	NA
Vanadium	UG/L	-	NA		NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value.

Blank cell or ND - Not detected.

J - The reported concentration is an estimated value.

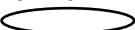
Only Detected Results Reported.

**TABLE 3**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER SAMPLES**  
**ROSE VALLEY LANDFILL**

Location ID			SW-04S	SW-04S	SW-04S	SW-04S
Sample ID			SW-04S	SW-04S	SW-04S	SW-04S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-
Date Sampled			04/21/10	07/13/11	10/17/12	10/16/13
Parameter	Units	Criteria*				
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/L	5				
1,1-Dichloroethane	UG/L	5				
1,2-Dichloroethene (cis)	UG/L	5				
Chloroethane	UG/L	5		0.48 J		
Dichlorodifluoromethane	UG/L	5				
<b>Metals</b>						
Aluminum	UG/L	-	336	NA	NA	NA
Barium	UG/L	1000	26.1	NA	NA	NA
Cadmium	UG/L	5		NA	NA	NA
Calcium	UG/L	-	92,700	NA	NA	NA
Chromium	UG/L	50		NA	NA	NA
Iron	UG/L	300	8,870	NA	NA	NA
Magnesium	UG/L	35000	6,900	NA	NA	NA
Manganese	UG/L	300	2,080	NA	NA	NA
Potassium	UG/L	-	1,940	NA	NA	NA
Sodium	UG/L	20000	4,300	NA	NA	NA
Vanadium	UG/L	-		NA	NA	NA

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value.

Blank cell or ND - Not detected.

J - The reported concentration is an estimated value.

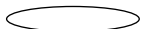
Only Detected Results Reported.

**TABLE 4**  
**SUMMARY OF DETECTED COMPOUNDS IN 2013 SURFACE/DETENTION POND WATER SAMPLES**  
**ROSE VALLEY LANDFILL**

Location ID			NDP	NDP	SDP	SWTR-1E	SWTR-1T
Sample ID			FD-101613	NDP	SDP	SWTR-1E	SWTR-1T
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/16/13	10/16/13	10/16/13	10/16/13	10/16/13
Parameter	Units	*	Field Duplicate (1-1)				
Volatile Organic Compounds							
Benzene	UG/L	10					2.1 J

\*- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class C.

Flags assigned during chemistry validation are shown.



Concentration Exceeds

Blank cell or ND - Not detected.

Only Detected Results Reported.

**TABLE 5**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN SURFACE/DETENTION POND WATER**  
**SAMPLES**  
**ROSE VALLEY LANDFILL**

Location ID			NDP	NDP	NDP	NDP	NDP
Sample ID			NDP	FD-071311	NDP-WS	NDP-WS	FD-101613
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			04/20/10	07/13/11	07/13/11	10/18/12	10/16/13
Parameter	Units	*		Field Duplicate (1-1)			Field Duplicate (1-1)
<b>Volatile Organic Compounds</b>							
Acetone	UG/L	-					
Benzene	UG/L	10					
Chlorobenzene	UG/L	5					
<b>Metals</b>							
Aluminum	UG/L	100 ionic		NA	NA	NA	NA
Barium	UG/L	-	32.5	NA	NA	NA	NA
Calcium	UG/L	-	123,000	NA	NA	NA	NA
Cobalt	UG/L	5		NA	NA	NA	NA
Iron	UG/L	300	1,650	NA	NA	NA	NA
Magnesium	UG/L	-	15,900	NA	NA	NA	NA
Manganese	UG/L	-	720	NA	NA	NA	NA
Nickel	UG/L	calc, diss		NA	NA	NA	NA
Potassium	UG/L	-	3,700	NA	NA	NA	NA
Sodium	UG/L	-	4,000	NA	NA	NA	NA
<b>Miscellaneous Parameters</b>							
Hardness (calculated)	MG/L	-	373	NA	NA	NA	NA

\*- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class C.

Flags assigned during chemistry validation are shown.



Concentration Exceeds

- = No standard or guidance value. Blank cell or ND - Not detected. J - The reported concentration is an estimated value.

NA - Not analyzed.

Only Detected Results Reported.

**TABLE 5**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN SURFACE/DETENTION POND WATER**  
**SAMPLES**  
**ROSE VALLEY LANDFILL**

Location ID			NDP	SDP	SDP	SDP	SDP
Sample ID			NDP	DUP-1	SDP	SDP-WS	FD-101812
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/16/13	04/20/10	04/20/10	07/13/11	10/18/12
Parameter	Units	*		Field Duplicate (1-1)			Field Duplicate (1-1)
<b>Volatile Organic Compounds</b>							
Acetone	UG/L	-					
Benzene	UG/L	10					
Chlorobenzene	UG/L	5					
<b>Metals</b>							
Aluminum	UG/L	100 ionic	NA	1,570	1,460	NA	NA
Barium	UG/L	-	NA	51.8	49.7	NA	NA
Calcium	UG/L	-	NA	77,200	74,600	NA	NA
Cobalt	UG/L	5	NA			NA	NA
Iron	UG/L	300	NA	2,790	2,360	NA	NA
Magnesium	UG/L	-	NA	16,200	15,800	NA	NA
Manganese	UG/L	-	NA	101 J	71.3 J	NA	NA
Nickel	UG/L	calc, diss	NA			NA	NA
Potassium	UG/L	-	NA	7,760	7,650	NA	NA
Sodium	UG/L	-	NA	6,200	6,100	NA	NA
<b>Miscellaneous Parameters</b>							
Hardness (calculated)	MG/L	-	NA	259	251	NA	NA

\*- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class C.

Flags assigned during chemistry validation are shown.



Concentration Exceeds

- = No standard or guidance value. Blank cell or ND - Not detected. J - The reported concentration is an estimated value.

NA - Not analyzed.

Only Detected Results Reported.

**TABLE 5**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN SURFACE/DETENTION POND WATER**  
**SAMPLES**  
**ROSE VALLEY LANDFILL**

Location ID			SDP	SDP	SWTR-1E	SWTR-1E	SWTR-1E
Sample ID			SDP-WS	SDP	SWTR-1E	SWTR-1E	SWTR-1E
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/18/12	10/16/13	04/20/10	07/13/11	10/18/12
Parameter	Units	*					
<b>Volatile Organic Compounds</b>							
Acetone	UG/L	-					
Benzene	UG/L	10					
Chlorobenzene	UG/L	5					
<b>Metals</b>							
Aluminum	UG/L	100 ionic	NA	NA		NA	NA
Barium	UG/L	-	NA	NA	22.3	NA	NA
Calcium	UG/L	-	NA	NA	88,400	NA	NA
Cobalt	UG/L	5	NA	NA		NA	NA
Iron	UG/L	300	NA	NA	230	NA	NA
Magnesium	UG/L	-	NA	NA	12,800	NA	NA
Manganese	UG/L	-	NA	NA	25.4	NA	NA
Nickel	UG/L	calc, diss	NA	NA		NA	NA
Potassium	UG/L	-	NA	NA	5,570	NA	NA
Sodium	UG/L	-	NA	NA	6,600	NA	NA
<b>Miscellaneous Parameters</b>							
Hardness (calculated)	MG/L	-	NA	NA	273	NA	NA

\*- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class C.

Flags assigned during chemistry validation are shown.



Concentration Exceeds

- = No standard or guidance value. Blank cell or ND - Not detected. J - The reported concentration is an estimated value.

NA - Not analyzed.

Only Detected Results Reported.

**TABLE 5**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN SURFACE/DETENTION POND WATER**  
**SAMPLES**  
**ROSE VALLEY LANDFILL**

Location ID			SWTR-1E	SWTR-1T	SWTR-1T	SWTR-1T	SWTR-1T
Sample ID			SWTR-1E	SWTR-1T	SWTR-1T	SWTR-1T	SWTR-1T
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/16/13	04/21/10	07/13/11	10/18/12	10/16/13
Parameter	Units	*					
<b>Volatile Organic Compounds</b>							
Acetone	UG/L	-		9.4	20 J		
Benzene	UG/L	10			1.8 J		2.1 J
Chlorobenzene	UG/L	5		0.75 J	3.3 J		
<b>Metals</b>							
Aluminum	UG/L	100 ionic	NA		NA	NA	NA
Barium	UG/L	-	NA	117	NA	NA	NA
Calcium	UG/L	-	NA	122,000	NA	NA	NA
Cobalt	UG/L	5	NA	7.1	NA	NA	NA
Iron	UG/L	300	NA	10,500	NA	NA	NA
Magnesium	UG/L	-	NA	26,100	NA	NA	NA
Manganese	UG/L	-	NA	385	NA	NA	NA
Nickel	UG/L	calc, diss	NA	12.0	NA	NA	NA
Potassium	UG/L	-	NA	70,800	NA	NA	NA
Sodium	UG/L	-	NA	65,400	NA	NA	NA
<b>Miscellaneous Parameters</b>							
Hardness (calculated)	MG/L	-	NA	412	NA	NA	NA

\*- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class C.

Flags assigned during chemistry validation are shown.



Concentration Exceeds

- = No standard or guidance value. Blank cell or ND - Not detected. J - The reported concentration is an estimated value.

NA - Not analyzed.

Only Detected Results Reported.



**TABLE 6**  
**SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN SURFACE WATER**  
**CRITERIA FOR CLASS C SURFACE WATERS REQUIRING CALCULATION**  
**ROSE VALLEY LANDFILL**

Sample ID			NDP		DUP-1 (SDP)		SDP		SWTR-1E		SWTR-1T	
Sample Date			04/20/10		04/20/10		04/20/10		04/20/10		04/21/10	
	Units	Criteria Applies To	Criteria	Result	Criteria	Result	Criteria	Result	Criteria	Result	Criteria	Result
<b>Metals</b>												
Hardness (calculated)	MG/L	Not applicable	--	373	--	259	--	251	--	273	--	412
Nickel	UG/L	Dissolved form	158		117		113		122		172	12.0

**Criteria:**

NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class C.

-- - No criteria

Blank cell - not detected

Only detected results shown.

**TABLE 7**  
**MANN-KENDALL STATISTICAL ANALYSIS**  
**OF GROUNDWATER AND SURFACE WATER ANALYTICAL RESULTS**  
**ROSE VALLEY LANDFILL**

**LOCID: MW-03**

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
1,1-Dichloroethane	WG	VOA	4	4	1	0.625	No Trend
1,2-Dichloroethene (cis)	WG	VOA	4	4	1	0.625	No Trend
Dichlorodifluoromethane	WG	VOA	4	1	-3	0.375	No Trend
Total Volatile Organic Compounds	WG	VOA	4	4	-1	0.625	No Trend

**LOCID: MW-04**

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
1,1-Dichloroethane	WG	VOA	4	4	4	0.167	No Trend
1,2-Dichloroethene (cis)	WG	VOA	4	3	-1	0.625	No Trend
Dichlorodifluoromethane	WG	VOA	4	2	-2	0.375	No Trend
Total Volatile Organic Compounds	WG	VOA	4	4	-1	0.625	No Trend

**LOCID: SW-02S**

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
1,1,1-Trichloroethane	WG	VOA	4	3	-1	0.625	No Trend
Total Volatile Organic Compounds	WG	VOA	4	3	-1	0.625	No Trend

**LOCID: SWTR-1T**

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
Acetone	WS	VOA	4	2	-3	0.375	No Trend
Benzene	WS	VOA	4	2	2	0.375	No Trend
Chlorobenzene	WS	VOA	4	2	-3	0.375	No Trend
Total Volatile Organic Compounds	WS	VOA	4	3	-2	0.375	No Trend

For multiple observations per time period, the Mann-Kendall test to the median was used.

Data reported as less than the detection limit were used by assigning a common value to the data that was smaller than the smallest measurement in the data set.

(1) - Probabilities for Mann-Kendall Nonparametric Test for Trend (Gilbert R.O. 1987, Table A18).

(2) - Assuming a probability of error of 10% in the analysis method and/or data, then the probability of no trend as calculated by the Mann-Kendall statistic is less than 10%, then it is assumed that there is a trend.

\* - Number of observations too small to calculate probabilities.

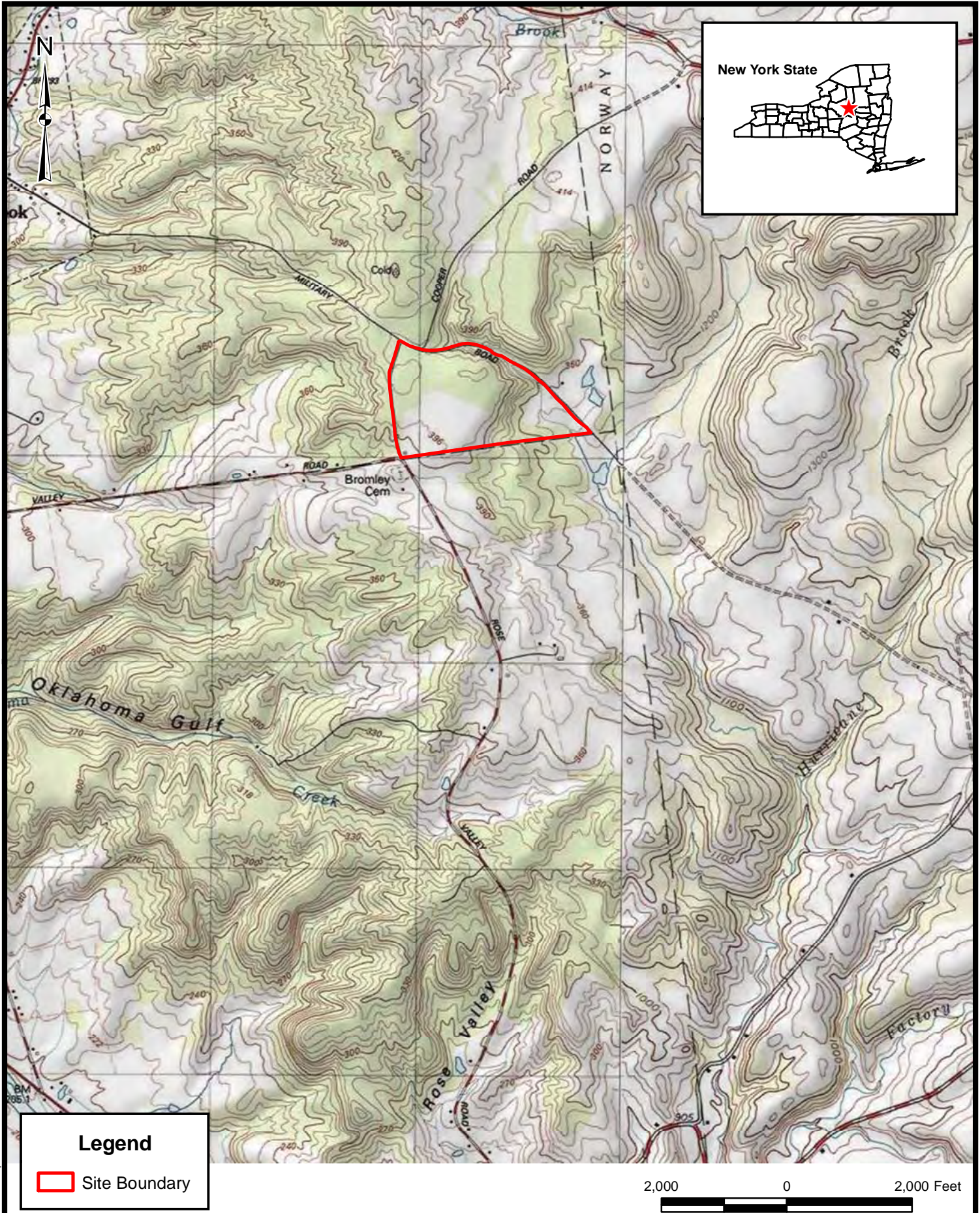
\*\* - Probability Undefined for S=0 and N=6, 7, 10, 11, 14, 15, 18, 19, 22, 23, 26, 27, 30, 31, 34, or 35.

MATRIX: WG - Groundwater. WS - Surface Water.

Only Detected Results Reported.

## **FIGURES**












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**Legend**

 Groundwater Monitoring Well

 Surface Water Sampling Location

 Residential Buildings

ROSE VALLEY LANDFILL  
SITE PLAN

 **URS**

FIGURE 2



I:\1176167\GIS\2013 Annual Report\03 GW CONTOURS SHALLOW 131015.mxd 12/9/2013



**Legend**

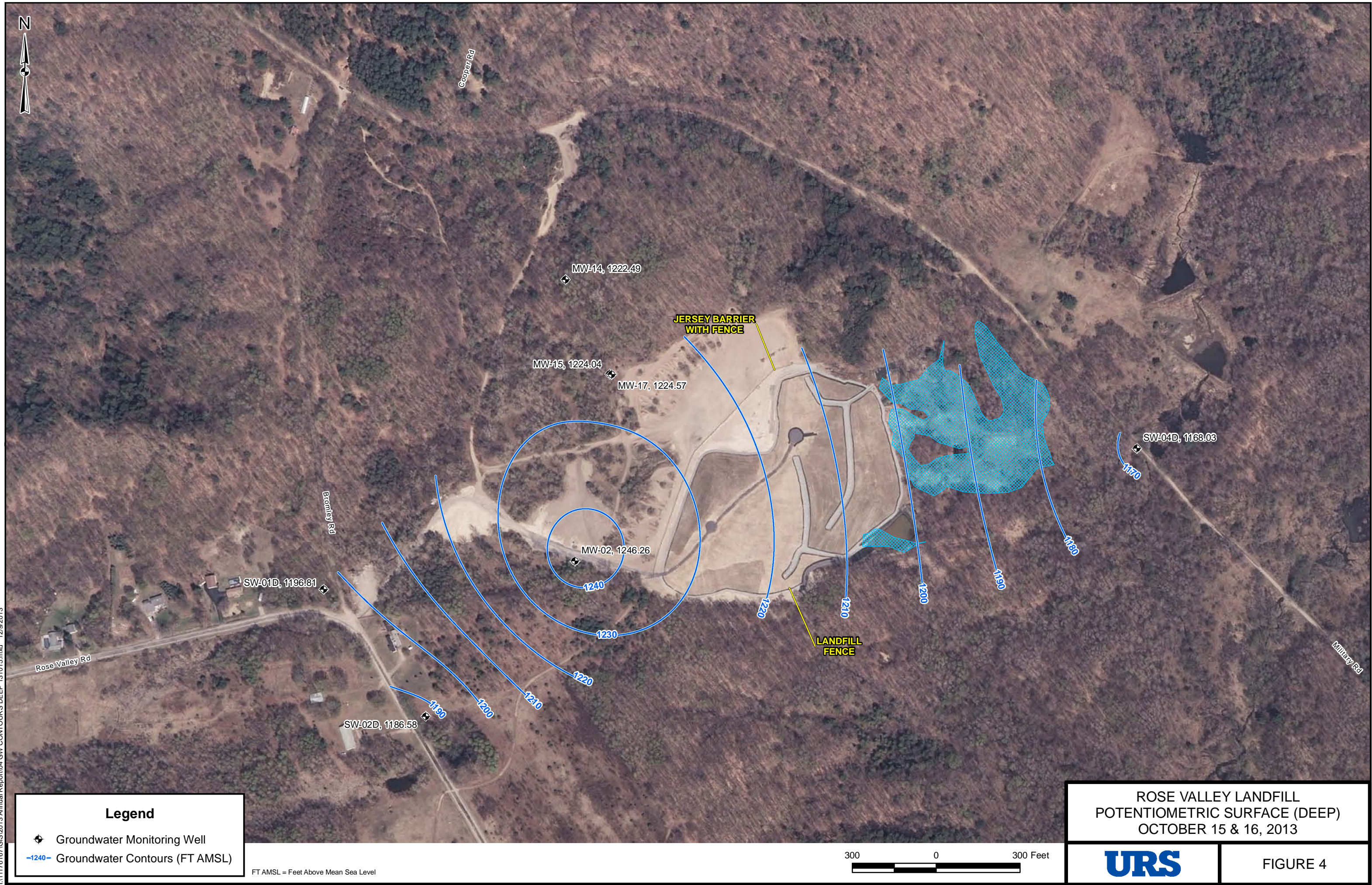
- Groundwater Monitoring Well
- Groundwater Contours (FT AMSL)

FT AMSL = Feet Above Mean Sea Level

ROSE VALLEY LANDFILL POTENTIOMETRIC SURFACE (SHALLOW) OCTOBER 15 & 16, 2013	
	FIGURE 3



I:\1176167\GIS\2013 Annual Report\04 GW CONTOURS DEEP 131015.mxd 12/9/2013







MW-04	TOGS	4/10	7/11	10/12	10/13
VOCs:					
1,1-Dichloroethane	5	9.3	10	15	11
Metals:					
Iron	300	1050	NS	NS	NS
Manganese	300	525	NS	NS	NS

MW-03	TOGS	4/10	7/11	10/12	10/13
VOCs:					
1,2-Dichloroethene (cis)	5	7.1	8	11	6.6
Metals:					
Antimony	3	ND	NS	NS	NS
Iron	300	252	NS	NS	NS
Manganese	300	2450	NS	NS	NS

SW-04D	TOGS	4/10	7/11	10/12	10/13
Metals:					
Iron	300	1630	NS	NS	NS
Sodium	20000	32000	NS	NS	NS

SW-04S	TOGS	4/10	7/11	10/12	10/13
Metals:					
Chromium	50	ND	NS	NS	NS
Iron	300	8870	NS	NS	NS
Manganese	300	2080	NS	NS	NS

MW-16	TOGS	4/10	7/11	10/12	10/13
Metals:					
Iron	300	16600	NS	NS	NS
Manganese	300	1090	NS	NS	NS

SW-01S	TOGS	4/10	7/11	10/12	10/13
Metals:					
Iron	300	3700	NS	NS	NS

SW-01D	TOGS	4/10	7/11	10/12	10/13
Metals:					
Iron	300	631	NS	NS	NS

SW-03S	TOGS	4/10	7/11	10/12	10/13
Metals:					
Sodium	20000	22600	NS	NS	NS

SW-02D	TOGS	4/10	7/11	10/12	10/13
Metals:					
Iron	300	433	NS	NS	NS

SW-02S

### Legend

- One or More Compounds Exceed Criteria
- No Compounds Exceed Criteria

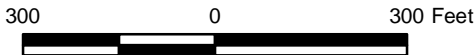
Location ID		Sample Date	
MW-04	TOGS	10/12	
VOCs:			
1,1-Dichloroethane	5	15	
Compound		Criteria Value (µg/L)	Concentration (µg/L)

Notes: ND - Not Detected; NS - Not Sampled for this parameter; NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA criteria used to determine exceedances.

## ROSE VALLEY LANDFILL GROUNDWATER EXCEEDANCES

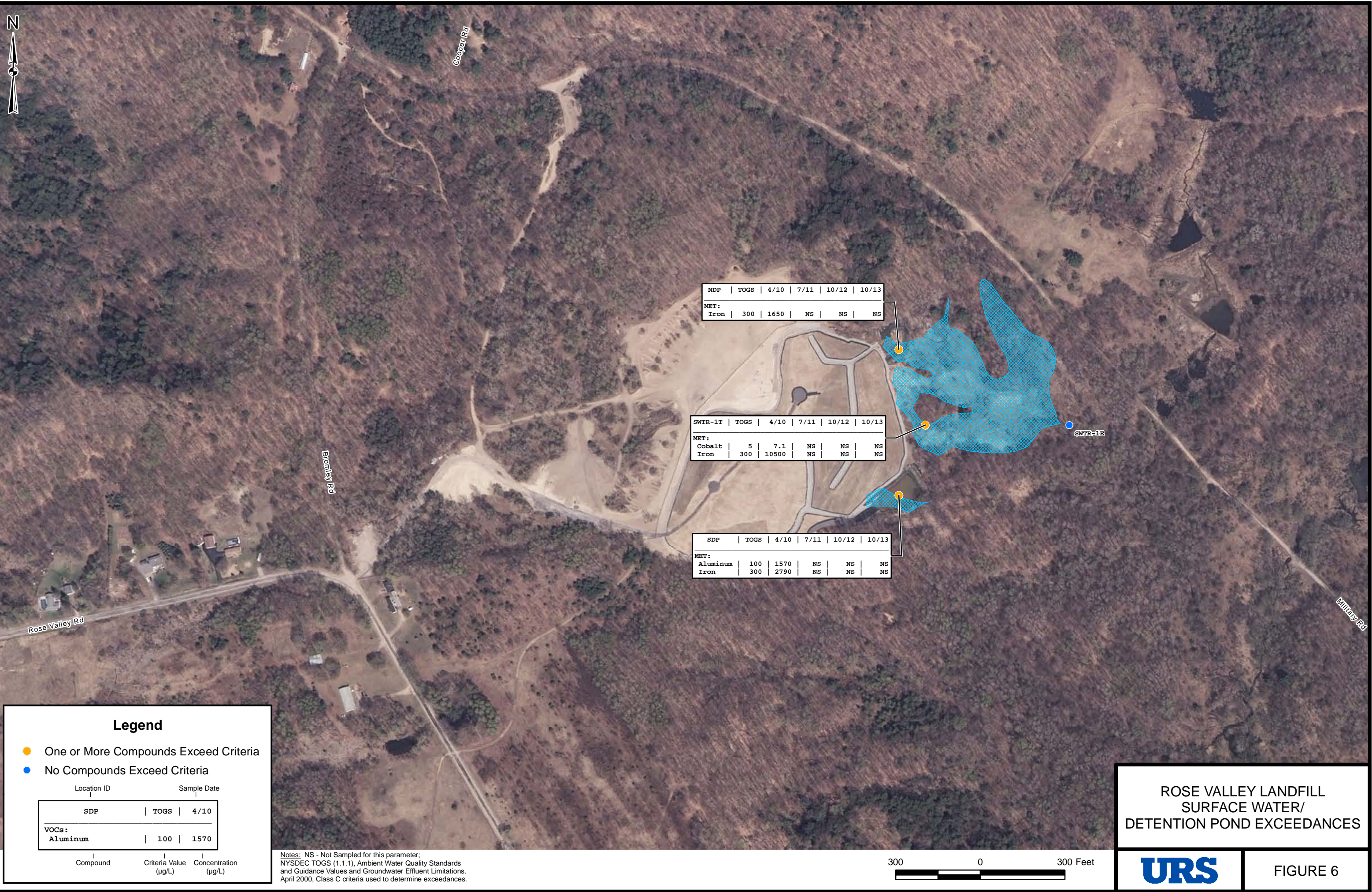
URS

FIGURE 5





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# **APPENDIX A**

## **FIELD NOTES**

Location Poland, NY Date 10/15/13 <sup>47</sup>  
Project / Client Rose Valley Landfill / NYSDEC

1100 - arrive onsite

URS - Tim Izkovich

weather - partly cloudy ~60°

Calibrate U-52 w/ Flow cell

	Actual	Reading
pH	3.9	4.0
Cond	4.49	4.48
Turb	0.0	0.4

- Will sample 10 monitoring wells  
+ 4 surface water locations for  
TEL VOCs + TICs analysis

1137 - Begin to purge SW-035.

NYSDEC onsite - Mike Mason &  
Chris Keenan

1200 - NYSDEC offsite for lunch

1207 - Sample ~~SW~~ SW-035

1239 - Begin to purge SW-025 ~~at 12:45~~

1300 - NYSDEC return to the site

1314 - Sample SW-025 w/ NYSDEC

1357 - Begin to purge SW-02D

1427 - Sample SW-02D w/ Field Rep.

1500 - Begin to purge SW-01D

1525 - Chuck Dux (URS) arrives  
onsite

Location

Date

10/15/13

Project / Client

Rose Valley Landfill

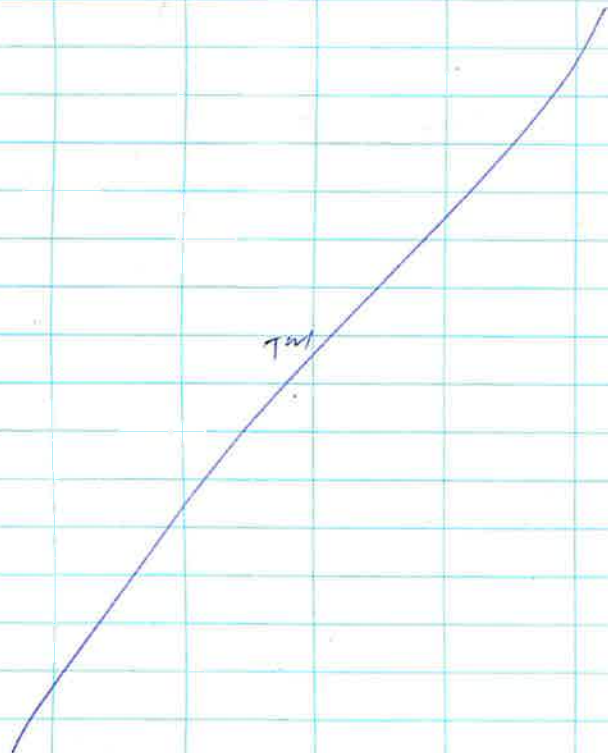
1546- Collect sample from SW-010

1610- Begin to purge SW-015

NYSDEC offsite

1700- Finished sampling SW-015

- TI &amp; CD offsite



Location

Poland, NY

Date

10/16/13

Project / Client

Rose Valley Landfill / NYSDEC

Weather- Cloudy, ~60°

0800- onsite- Tim Ifkovich, Chuck Dusek

ID	DTB	DTW	Time	
MW-02	76.60	58.89	0814	soft
MW-14	109.24	99.34	0927	
MW-15	90.59	88.32	0822	
MW-17	98.81	87.15	0820	

0830- collected water level measurements from the above wells, these wells do not require sampling

0900- used a water pressure gauge (0-30 psi range) connected to 1" PVC & a 1" Packer to collect a pressure reading from Artesian Well SW-04D  
pressure reading = 8.4 PSI

0910- Begin to purge SW-04D

- CD begins to perform Landfill inspection

1010- Sample SW-04D

1018- Begin to purge SW-045

1048- Sample SW-045

1143- Begin to purge MW-16

1233- Sample MW-16

10/16/13

Rose Valley Landfill

1240 - Collect sample @ SWTR-1 E plus M5/150

1318 - Begin to purge MW-04

1348 - Sample MW-04

CD completed Landfill inspection.

Note: - Erosion rilling has continued on the access roads @ the top of the landfill

- One concrete barrier along Military Rd was removed & found further down the road, may need to connect & weld the barriers together to prevent tampering

- more garbage was also found near the barriers @ military rd

1412 - Begin to purge MW-03

1442 - Sample MW-03

1455 - Collect sample @ NDP, also Field Dup

1515 - Collect sample @ SWTR-1 T

1530 - Collect sample @ SDP

1630 - Measured distance @ top of landfill from west fence, west to hill (~120') may place concrete barriers to prevent 4x4's from creating tracks which creates rilling & erosion

- URS offsite

**APPENDIX B**

**MONITORING WELL PURGE LOGS/  
SURFACE WATER SAMPLE LOG**



# LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11176716.00004 Site: Rose Valley Landfill Well #: MW-03

Sampling Personnel: C. Dusel, T. Ifkovich Date: 10/16/13 Company: URS Corporation

Purging/  
Sampling  
Device: Geopump Tubing Type: LDPE Tubing Inlet: Screen Midpoint

Measuring  
Point: TOC Initial Depth  
to Water: 2.84 Depth to  
Well Bottom: 17.26 Well  
Diameter: 2" Screen  
Length: 10'

Casing  
Type: PVC Volume in 1  
Well Casing  
(liters): 8.9 Estimated  
Purge  
Volume  
(liters): 8.4

Sample ID: MW-03 Sample Time: 1442 QA/QC: None

Sample Parameters: TCL VOC + TICs

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1412	7.24	15.05	1.08	0.00	5.9	19	280	2.84
1417	6.71	13.36	1.13	0.00	2.8	26	280	3.55
1422	6.43	13.01	1.13	0.00	1.4	28	280	3.60
1427	6.40	12.89	1.12	0.00	1.3	25	280	3.62
1432	6.45	12.83	1.11	0.00	1.2	20	280	3.62
1437	6.51	12.80	1.11	0.00	1.0	17	280	3.62
1442	6.49	12.81	1.11	0.00	1.1	17	280	3.62
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft (vol<sub>cyl</sub> =  $\pi r^2 h$ )

Comments:

# LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11176716.00004 Site: Rose Valley Landfill Well #: MW-04

Sampling Personnel: C. Dusel, T. Ifkovich Date: 10/16/13 Company: URS Corporation

Purging/  
Sampling  
Device: Geopump Tubing Type: LDPE Tubing Inlet: Screen Midpoint

Measuring  
Point: TOC Initial Depth  
to Water: 2.50 Depth to  
Well Bottom: 17.54 Well  
Diameter: 2" Screen  
Length: 10'

Casing  
Type: PVC Volume in 1  
Well Casing  
(liters): 9.3 Estimated  
Purge  
Volume  
(liters): 7.5

Sample ID: MW-04 Sample Time: 1348 QA/QC: None

Sample Parameters: TCL VOC + TICs

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1318	7.53	16.37	0.955	0.28	20.9	0	250	2.50
1323	7.08	15.58	0.966	0.00	62.3	-7	250	2.93
1328	6.87	15.15	0.967	0.00	33.9	-4	250	2.93
1333	6.78	14.76	0.974	0.00	23.8	-3	250	2.94
1338	6.75	14.61	0.977	0.00	19.6	-3	250	2.94
1343	6.72	14.55	0.977	0.00	11.8	-2	250	2.94
1348	6.72	14.52	0.978	0.00	9.9	-3	250	2.94
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft (vol<sub>cyl</sub> =  $\pi r^2 h$ )

**Comments:** \_\_\_\_\_



# LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11176716.00004 Site: Rose Valley Landfill Well #: MW-16

Sampling Personnel: C. Dusel, T. Ifkovich Date: 10/16/13 Company: URS Corporation

Purging/  
Sampling  
Device: Geopump Tubing Type: LDPE Tubing Inlet: Screen Midpoint

Measuring  
Point: TOC Initial Depth  
to Water: 3.01 Depth to  
Well Bottom: 11.62 Well  
Diameter: 2" Screen  
Length: 8'

Casing  
Type: PVC Volume in 1  
Well Casing  
(liters): 5.3 Estimated  
Purge  
Volume  
(liters): 5.1

Sample ID: MW-16 Sample Time: 1233 QA/QC: None

Sample Parameters: TCL VOC + TICs

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1143	7.33	13.48	0.491	0.57	96.7	-64	125	3.01
1148	6.81	12.82	0.492	0.00	31.8	-61	100	4.22
1153	6.86	12.78	0.487	0.00	18.7	-74	100	4.62
1158	6.82	12.75	0.487	0.00	21.2	-75	100	4.85
1203	6.78	12.71	0.485	0.00	24.3	-76	100	5.09
1208	6.75	12.68	0.484	0.00	28.7	-77	100	5.26
1213	6.76	12.75	0.485	0.00	24.3	-79	100	5.37
1218	6.77	12.82	0.485	0.00	22.0	-80	100	5.48
1223	6.85	12.80	0.487	0.00	18.3	-84	100	5.59
1228	6.90	12.79	0.488	0.00	15.7	-87	100	5.67
1233	6.89	12.79	0.490	0.00	15.4	-87	100	5.76
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft (vol<sub>cyl</sub> =  $\pi r^2 h$ )

Comments:

# LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11176716.00004 Site: Rose Valley Landfill Well #: SW-01S

Sampling Personnel: C. Dusel, T. Ifkovich Date: 10/15/13 Company: URS Corporation

Purging/  
Sampling  
Device: Geopump Tubing Type: LDPE Tubing Inlet: Screen Midpoint

Measuring  
Point: TOC Initial Depth  
to Water: 19.55 Depth to  
Well Bottom: 28.39 Well  
Diameter: 2" Screen  
Length: 10'

Casing  
Type: PVC Volume in 1  
Well Casing  
(liters): 5.5 Estimated  
Purge  
Volume  
(liters): 9.4

Sample ID: SW-01S Sample Time: 1648 QA/QC: None

Sample Parameters: TCL VOC + TICs

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1608	7.56	13.26	0.569	8.91	216	139	250	19.55
1613	6.99	10.98	0.572	7.94	18.5	173	250	20.12
1618	6.53	10.92	0.556	7.77	6.3	178	250	20.80
1623	6.92	11.00	0.563	7.65	5.3	177	225	20.82
1628	6.76	10.97	0.568	7.54	5.4	185	225	20.84
1633	6.55	10.95	0.574	7.42	5.6	199	225	20.85
1638	6.43	10.89	0.584	7.34	5.9	206	225	20.86
1643	6.44	10.89	0.588	7.30	4.8	208	225	20.87
1648	6.53	10.82	0.590	7.28	4.9	204	225	20.87
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft (vol<sub>cyl</sub> =  $\pi r^2 h$ )

Comments:

# LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11176716.00004 Site: Rose Valley Landfill Well #: SW-01D

Sampling Personnel: C. Dusel, T. Ifkovich Date: 10/15/13 Company: URS Corporation

Purging/  
Sampling  
Device: Grundfos Tubing Type: LDPE Tubing Inlet: Screen Midpoint

Measuring  
Point: TOC Initial Depth  
to Water: 67.89 Depth to  
Well Bottom: 83.87 Well  
Diameter: 2" Screen  
Length: 10'

Casing  
Type: PVC Volume in 1  
Well Casing  
(liters): 9.9 Estimated  
Purge  
Volume  
(liters): 10.4

Sample ID: SW-01D Sample Time: 1546 QA/QC: None

Sample Parameters: TCL VOC + TICs

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1500	7.82	11.78	0.280	0.00	28.3	99	225	67.89
1505	7.59	11.48	0.257	0.00	16.2	68	225	68.60
1510	7.36	13.15	0.256	0.00	12.3	63	225	68.70
1515	7.26	14.37	0.254	0.00	8.6	50	225	68.85
1520	7.31	14.92	0.252	0.00	5.3	24	225	68.98
1525	7.37	14.90	0.250	0.00	3.1	0	225	69.14
1530	7.43	14.93	0.250	0.00	2.3	-9	225	69.25
1535	7.77	14.94	0.248	0.00	2.4	-33	225	69.41
1540	7.67	15.15	0.246	0.00	2.2	-37	225	69.55
1543	7.64	14.98	0.245	0.00	2.0	-38	225	69.58
1546	7.60	14.90	0.245	0.00	2.0	-40	225	69.61
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft (vol<sub>cyl</sub> =  $\pi r^2 h$ )

Comments:

# LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11176716.00004 Site: Rose Valley Landfill Well #: SW-02S

Sampling Personnel: C. Dusel, T. Ifkovich Date: 10/15/13 Company: URS Corporation

Purging/  
Sampling  
Device: Geopump Tubing Type: LDPE Tubing Inlet: Screen Midpoint

Measuring  
Point: TOC Initial Depth  
to Water: 12.40 Depth to  
Well Bottom: 20.04 Well  
Diameter: 2" Screen  
Length: 10'

Casing  
Type: PVC Volume in 1  
Well Casing  
(liters): 4.7 Estimated  
Purge  
Volume  
(liters): 13.1

Sample ID: SW-02S Sample Time: 1314 QA/QC: MS/MSD

Sample Parameters: TCL VOC + TICs

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1239	8.12	16.63	0.254	9.77	96.8	148	375	12.40
1244	7.79	14.25	0.244	9.51	59.1	169	375	12.40
1249	7.60	14.30	0.237	9.16	41.3	180	375	12.40
1254	7.37	14.05	0.235	9.01	17.9	190	375	12.40
1259	7.27	13.93	0.233	8.96	13.7	195	375	12.40
1304	7.24	13.91	0.232	8.90	8.2	199	375	12.40
1309	7.20	13.91	0.230	8.76	7.7	201	375	12.40
1314	7.22	13.92	0.229	8.74	5.9	197	375	12.40
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft (vol<sub>cyl</sub> =  $\pi r^2 h$ )

Comments:

# LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11176716.00004 Site: Rose Valley Landfill Well #: SW-02D

Sampling Personnel: C. Dusel, T. Ifkovich Date: 10/15/13 Company: URS Corporation

Purging/  
Sampling  
Device: Grundfos Tubing Type: LDPE Tubing Inlet: Screen Midpoint

Measuring  
Point: TOC Initial Depth  
to Water: 70.42 Depth to  
Well Bottom: 79.19 Well  
Diameter: 2" Screen  
Length: 10'

Casing  
Type: PVC Volume in 1  
Well Casing  
(liters): 5.4 Estimated  
Purge  
Volume  
(liters): 42.0

Sample ID: SW-02D Sample Time: 1427 QA/QC: FD-101513

Sample Parameters: TCL VOC + TICs

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1357	7.69	10.33	0.470	0.39	3.0	138	1400	70.42
1402	7.48	13.31	0.450	0.00	0.0	129	1400	70.43
1407	7.24	13.67	0.443	0.00	0.0	121	1400	70.43
1412	7.17	13.64	0.441	0.00	0.0	109	1400	70.43
1417	7.28	13.63	0.439	0.00	0.0	102	1400	70.43
1422	7.33	13.59	0.439	0.00	0.0	101	1400	70.43
1427	7.37	13.54	0.437	0.00	0.0	102	1400	70.43
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft (vol<sub>cyl</sub> =  $\pi r^2 h$ )

Comments: Grundfos - 200 HZ

# LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11176716.00004 Site: Rose Valley Landfill Well #: SW-03S

Sampling Personnel: C. Dusel, T. Ifkovich Date: 10/15/13 Company: URS Corporation

Purging/  
Sampling  
Device: Geopump Tubing Type: LDPE Tubing Inlet: Screen Midpoint

Measuring  
Point: TOC Initial Depth  
to Water: 12.96 Depth to  
Well Bottom: 18.81 Well  
Diameter: 2" Screen  
Length: 10'

Casing  
Type: PVC Volume in 1  
Well Casing  
(liters): 3.6 Estimated  
Purge  
Volume  
(liters): 9.8

Sample ID: SW-03S Sample Time: 1207 QA/QC: None

Sample Parameters: TCL VOC + TICs

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1137	7.90	14.42	0.898	11.33	703	124	275	12.96
1142	7.29	13.18	0.801	10.57	232	154	275	13.00
1147	7.06	13.14	0.745	10.30	114	168	350	13.02
1152	6.87	13.10	0.745	10.10	67.0	178	350	13.02
1157	6.86	13.14	0.743	9.92	41.5	181	350	13.02
1202	6.82	13.11	0.742	9.86	36.5	183	350	13.02
1207	6.82	13.15	0.745	9.68	28.6	183	350	13.02
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft (vol<sub>cyl</sub> =  $\pi r^2 h$ )

Comments:

# LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11176716.00004 Site: Rose Valley Landfill Well #: SW-04S

Sampling Personnel: C. Dusel, T. Ifkovich Date: 10/16/13 Company: URS Corporation

Purging/  
Sampling  
Device: Geopump Tubing Type: LDPE Tubing Inlet: Screen Midpoint

Measuring  
Point: TOC Initial Depth  
to Water: 3.35 Depth to  
Well Bottom: 8.20 Well  
Diameter: 2" Screen  
Length: 8'

Casing  
Type: PVC Volume in 1  
Well Casing  
(liters): 3.0 Estimated  
Purge  
Volume  
(liters): 6.0

Sample ID: SW-04S Sample Time: 1048 QA/QC: None

Sample Parameters: TCL VOC + TICs

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1018	8.45	12.93	0.601	0.00	52.9	-59	200	3.35
1023	7.52	13.50	0.609	0.00	43.6	-75	200	3.72
1028	7.20	13.62	0.622	0.00	13.1	-77	200	3.86
1033	7.02	13.65	0.634	0.00	11.1	-77	200	3.99
1038	6.91	13.67	0.643	0.00	10.8	-78	200	4.23
1043	6.85	13.68	0.645	0.00	10.0	-79	200	4.45
1048	6.83	13.70	0.645	0.00	12.3	-79	200	4.65
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft (vol<sub>cyl</sub> =  $\pi r^2 h$ )

Comments:

# LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11176716.00004 Site: Rose Valley Landfill Well #: SW-04D

Sampling Personnel: C. Dusel, T. Ifkovich Date: 10/16/13 Company: URS Corporation

Purging/  
Sampling  
Device: Geopump Tubing Type: LDPE Tubing Inlet: Screen Midpoint

Measuring  
Point: TOC Initial Depth  
to Water: -19.38 Depth to  
Well Bottom: 84.42 Well  
Diameter: 2" Screen  
Length: 8'

Casing  
Type: PVC Volume in 1  
Well Casing  
(liters): 52.1 Estimated  
Purge  
Volume  
(liters): 54.0

Sample ID: SW-04D Sample Time: 1010 QA/QC: None

Sample Parameters: TCL VOC + TICs

## PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O <sub>2</sub> (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
0910	7.35	10.00	0.170	0.12	441	198	900	--
0915	7.82	9.82	0.170	0.00	191	151	900	--
0920	7.94	9.80	0.170	0.00	307	123	900	--
0925	8.07	9.78	0.169	0.00	577	88	900	--
0930	8.53	9.78	0.169	0.00	>800	37	900	--
0935	8.76	9.77	0.170	0.00	>800	-2	900	--
0940	8.57	9.77	0.170	0.00	>800	-18	900	--
0945	8.34	9.77	0.170	0.00	>800	-35	900	--
0950	8.37	9.76	0.170	0.00	691	-49	900	--
0955	8.39	9.76	0.170	0.00	563	-62	900	--
1000	8.85	9.77	0.170	0.00	442	-88	900	--
1005	8.91	9.77	0.170	0.00	363	-93	900	--
1010	9.12	9.75	0.170	0.00	365	-98	900	--
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

**Information:** WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;  
4 inch diameter well = 2470 ml/ft (vol<sub>cyt</sub> =  $\pi r^2 h$ )

**Comments:** Artesian well. Pressure reading at well head = 8.4 psi. 1 Pound Per Square Inch = 2.3067 Feet Of Water



## SURFACE WATER SAMPLING - SAMPLE COLLECTION DATA SHEET

Project Name: Rose Valley Landfill

Project Number: 11176716

Sampling Crew Members: C. Dusel, T. Ifkovich

Supervisor: C. Dusel

Date of Sample Collection: 10/16/2013

<i>Sample I.D. Number</i>	<i>Sample Location</i>	<i>Est. Stream Width</i>	<i>Est. Stream Depth</i>	<i>Est. Stream Velocity</i>	<i>pH</i>	<i>Temp. °C</i>	<i>Diss. O<sub>2</sub> (mg/L)</i>	<i>Turb. (NTU)</i>	<i>Cond. (mS/cm)</i>	<i>ORP (mV)</i>	<i>Time</i>	<i>Sample Analysis</i>	<i>Sample Description</i>
NDP	NDP	Not measured	Not measured	Not measured	7.36	14.65	6.11	51.5	0.706	-7	1455	VOCs	Surface water & FD-101613
SDP	SDP	Not measured	Not measured	Not measured	7.45	15.10	9.13	163	0.651	-49	1530	VOCs	Surface water
SWTR-1E	SWTR-1E	Not measured	Not measured	Not measured	7.06	12.84	6.73	5.5	0.529	-96	1240	VOCs	Surface water & MS/MSD
SWTR-1T	SWTR-1T	Not measured	Not measured	Not measured	6.46	14.10	0.29	>800	1.70	-43	1515	VOCs	Surface water

Additional Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**APPENDIX C**

**PHOTOGRAPHIC LOG**

**ROSE VALLEY LANDFILL  
2013 SITE MANAGEMENT  
PHOTOGRAPHIC LOG**



**Photo 1:** 10/16/13 Looking east towards the landfill. The erosion/rilling in this area is starting to re-occur.



**Photo 2:** 10/16/13 Looking east at the western entrance to the landfill.

**ROSE VALLEY LANDFILL  
2013 SITE MANAGEMENT  
PHOTOGRAPHIC LOG**



**Photo 3:** 10/16/13 Close-up of gas vent.



**Photo 4:** 10/16/13 Looking north at main all-terrain vehicle recreation area/hill in background.



**ROSE VALLEY LANDFILL  
2013 SITE MANAGEMENT  
PHOTOGRAPHIC LOG**



**Photo 5:** 10/16/13 Erosion/rilling in access road on top of landfill. In some areas the erosion is approximately 12 inches deep.



**Photo 6:** 10/16/13 Close-up of erosion/rilling occurring in access road on top of landfill. Note fabric has been exposed.

**ROSE VALLEY LANDFILL  
2013 SITE MANAGEMENT  
PHOTOGRAPHIC LOG**



**Photo 7:** 10/16/13 Standing at the top of the landfill, looking east.



**Photo 8:** 10/16/13 Standing at the center of the landfill, looking south at gas vents and rip-rap lined drain chutes.



**ROSE VALLEY LANDFILL  
2013 SITE MANAGEMENT  
PHOTOGRAPHIC LOG**



**Photo 9:** 10/16/13 Location of erosion occurring north of the landfill.



**Photo 10:** 10/16/13 Location of erosion occurring north of the landfill.

**ROSE VALLEY LANDFILL  
2013 SITE MANAGEMENT  
PHOTOGRAPHIC LOG**



**Photo 11:** 10/16/13 Erosion occurring north of landfill, exposing fabric.



**Photo 12:** 10/16/13 North side of landfill, looking towards the North Detention Pond.



**ROSE VALLEY LANDFILL  
2013 SITE MANAGEMENT  
PHOTOGRAPHIC LOG**



**Photo 13:** 10/16/13 Looking at northeast drainage channel just west of North Detention Pond.



**Photo 14:** 10/16/13 Standing along the north side of the landfill. Looking east towards the North Detention Pond.

**ROSE VALLEY LANDFILL  
2013 SITE MANAGEMENT  
PHOTOGRAPHIC LOG**



**Photo 15:** 10/16/13 Close-up of main all-terrain vehicle recreation area/hill and perimeter swale.



**Photo 16:** 10/16/13 Trash in ravine along south side of Military Road.



**ROSE VALLEY LANDFILL  
2013 SITE MANAGEMENT  
PHOTOGRAPHIC LOG**



**Photo 17:** 10/16/13 Discarded tires and carcass in ravine along Military Road.



**Photo 18:** 10/16/13 Trash and damaged jersey barrier along Military Road.



**ROSE VALLEY LANDFILL  
2013 SITE MANAGEMENT  
PHOTOGRAPHIC LOG**



**Photo 19:** 10/16/13 Jersey barrier that was moved from the north landfill access road further down Military Road to allow access to the landfill for ATV riding.



**Photo 20:** 10/16/13 Construction and demolition debris along Military Road.

**ROSE VALLEY LANDFILL  
2013 SITE MANAGEMENT  
PHOTOGRAPHIC LOG**



**Photo 21:** 10/16/13 Remaining section of jersey barriers along Military Road restricting access to the landfill.



**Photo 22:** 10/16/13 Trash and jersey barriers along Military Road.



**ROSE VALLEY LANDFILL  
2013 SITE MANAGEMENT  
PHOTOGRAPHIC LOG**



**Photo 23:** 10/16/13 Looking southeast at landfill from top of sand dune.



**Photo 24:** 10/16/13 Erosion/rilling in gravel access road west of landfill.

**ROSE VALLEY LANDFILL  
2013 SITE MANAGEMENT  
PHOTOGRAPHIC LOG**



**Photo 25:** 10/16/13 Erosion/rilling in access road west of landfill. Note camera case and pen for scale.



**Photo 26:** 10/16/13 Typical low-flow groundwater sampling set-up. Photo taken at location MW-03.



**ROSE VALLEY LANDFILL  
2013 SITE MANAGEMENT  
PHOTOGRAPHIC LOG**



**Photo 27:** 10/16/13 Looking northwest towards the North Detention Pond.



**Photo 28:** 10/16/13 Surface water sampling location at North Detention Pond.



**ROSE VALLEY LANDFILL  
2013 SITE MANAGEMENT  
PHOTOGRAPHIC LOG**



**Photo 29:** 10/16/13 Looking east towards surface water sampling location at SWTR-1T. Note arrow for approximate sampling location.



**Photo 30:** 10/16/13 Close up of surface water sampling location at SWTR-1T.

**ROSE VALLEY LANDFILL  
2013 SITE MANAGEMENT  
PHOTOGRAPHIC LOG**



**Photo 31:** 10/16/13 Sampling surface water at South Detention Pond.

**APPENDIX D**

**DATA USABILITY SUMMARY REPORT**

**DATA USABILITY SUMMARY REPORT**

**ROSE VALLEY LANDFILL SITE MANAGEMENT  
2013 GROUNDWATER/SURFACE WATER SAMPLING EVENT  
NYSDEC WORK ASSIGNMENT #D007622-07**

**ROSE VALLEY LANDFILL  
HERKIMER COUNTY, NEW YORK  
SITE NO. 622017**

**Analyses Performed by:**

**TESTAMERICA LABORATORIES, INC.  
10 HAZELWOOD DRIVE  
AMHERST, NY 14228**

**Prepared for:**

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF ENVIRONMENTAL REMEDIATION**

**Prepared by:**

**URS CORPORATION  
77 GOODELL STREET  
BUFFALO, NY 14203**

**NOVEMBER 2013**

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## TABLES (Following Text)

Table 1	Summary of Data Qualifications
Table 2	Validated Groundwater Sample Results
Table 3	Validated Surface Water Sample Results
Table 4	Validated Field QC Sample Results

## ATTACHMENTS

Attachment A	Validated Form 1's
Attachment B	Support Documentation

## 1.0 INTRODUCTION

This Data Usability Summary Report (DUSR) has been prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *DER-10 Technical Guidance for Site Investigation and Remediation, Appendix 2B-Guidance for Data Deliverables and the Development of Data Usability and Summary Reports*, May 2010. Discussed in this DUSR are analytical data for ten (10) groundwater samples, one (1) field duplicate, and one (1) matrix spike/matrix spike duplicate (MS/MSD) pair; and four (4) surface water samples, one (1) field duplicate, and one (1) MS/MSD pair collected by URS personnel on October 15-16, 2013 from the Rose Valley Landfill site (Site No. 622017). A trip blank accompanied the sample shipment to the lab. The samples were collected in support of NYSDEC Work Assignment # D007622-07.

## 2.0 ANALYTICAL METHODOLOGIES/DATA VALIDATION PROCEDURES

All samples were sent to the NYSDEC callout laboratory TestAmerica Laboratories, Inc. (Amherst, NY) and analyzed for volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method SW8260B, plus tentatively identified compounds (TICs).

A limited data validation was performed following the guidelines in the following USEPA Region II document:

- *Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B, SOP HW-24, Rev. 2, August 2008.*

The limited validation included: a review of completeness of all required deliverables; holding times; a review of quality control (QC) results [blanks, instrument tunings, calibration standards, duplicate analyses, and MS/MSD/laboratory control sample (LCS) recoveries] to determine if the data are within the protocol-required limits and specifications; a determination that all samples were analyzed using established and agreed upon analytical protocols; an evaluation of the raw data to confirm the results provided in the data summary sheets; and a review of laboratory data qualifiers.

Data qualifiers applied to the results during the validation included 'UJ' (estimated quantitation limit), and 'R' (rejected). Definitions of USEPA Region II data qualifiers are presented at the end of this

text. A summary of data qualifications is provided on Table 1. The validated analytical results are presented on Tables 2 (groundwater), 3 (surface water), and 4 (field QC). Copies of the validated laboratory results (i.e., Form 1's) are presented in Attachment A. Documentation supporting the qualification of data is presented in Attachment B. Only analytical deviations affecting data usability are discussed in this report.

### **3.0 DATA DELIVERABLE COMPLETENESS**

Full deliverable data packages (i.e., NYSDEC ASP Category B, or equivalent) were provided by the laboratory, which included all reporting forms and raw data necessary to fully evaluate and verify the reported analytical results.

### **4.0 PRESERVATION/SAMPLE RECEIPT/HOLDING TIMES**

All samples were received by the laboratory intact, properly preserved, and under proper chain-of-custody (COC).

All samples were analyzed within the required holding times.

### **5.0 NON-CONFORMANCES**

#### **Instrument Calibration**

The percent difference (%D) between the initial calibration (ICAL) average relative response factor (RRF) and the RRF in the continuing calibration standard (CCAL) associated with the samples was greater than 20% for dichlorodifluoromethane. The results for this compound in the associated samples listed in Table 1 were qualified 'UJ'.

#### **Instrument Contamination**

Column-bleed compounds (i.e., silanols) were reported as TICs by the laboratory. The TIC results for the associated samples listed on Table 1 were qualified 'R' (rejected).

#### **Field Duplicate Samples**

The field duplicates were collected at groundwater location SW-02D and surface water location

NDP, which exhibited good analytical precision. Note, USEPA Region II validation guidelines do not require qualification of VOC analytical results based upon field duplicate precision.

## 6.0 SAMPLE RESULTS AND REPORTING

All quantitation/detection limits were reported in accordance with method requirements and were adjusted for sample volume and dilution factors.

Note, the undiluted analysis of surface water SWTR-1T exhibited “foaming”, thus requiring a secondary dilution (5x). The quantitation limits reported for the non-detects are the lowest achievable at the diluted level.

## 7.0 SUMMARY

All sample analyses were found to be compliant with the method criteria, except where previously noted. Those results qualified ‘UJ’ (estimated quantitation limit) are considered conditionally usable. Those TIC results qualified ‘R’ are rejected and considered unusable. URS does not recommend the recollection of any samples at this time.

**Prepared By:** Peter R. Fairbanks, Senior Chemist

PF

**Date:** 11/20/13

**Reviewed By:** George E. Kisluk, Senior Chemist

GK

**Date:** 11/20/13



**TABLE 1**  
**SUMMARY OF DATA QUALIFICATIONS**  
**ROSE VALLEY LANDFILL SITE**


<b>SAMPLE ID</b>	<b>FRACTION</b>	<b>ANALYTICAL DEVIATION</b>	<b>QUALIFICATION</b>
All groundwater, surface water, and field QC samples.	VOA	%D between the ICAL average RRF and the CCAL RRF >20% for dichlorodifluoromethane.	Qualify non-detect results 'UJ'.
MW-04, SW-01D, SW-03S, SW-04D, SWTR-1E, SWTR-1T, FD-101613 (field duplicate of NDP), FD-101613 (field duplicate of SW-02D), TB-101713	VOA	Column-bleed compounds (i.e., silanols) reported as TICs.	Qualify TIC results 'R'.

**TABLE 2**  
**VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**ROSE VALLEY LANDFILL**

Location ID			MW-03	MW-04	MW-16	SW-01D	SW-01S
Sample ID			MW-03	MW-04	MW-16	SW-01D	SW-01S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/16/13	10/16/13	10/16/13	10/15/13	10/15/13
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
1,1,1-Trichloroethane	UG/L	5	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	UG/L	5	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	UG/L	1	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	UG/L	5	1.9	11	1 U	1 U	1 U
1,1-Dichloroethene	UG/L	5	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	UG/L	5	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	UG/L	0.04	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	6.00E-04	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	UG/L	3	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	UG/L	0.6	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene (cis)	UG/L	5	6.6	1 U	1 U	1 U	1 U
1,2-Dichloroethene (trans)	UG/L	5	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	UG/L	1	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	UG/L	3	1 U	1 U	1 U	1 U	1 U
1,3-Dichloropropene (cis)	UG/L	0.4	1 U	1 U	1 U	1 U	1 U
1,3-Dichloropropene (trans)	UG/L	0.4	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	UG/L	3	1 U	1 U	1 U	1 U	1 U
2-Hexanone	UG/L	50	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	UG/L	-	5 U	5 U	5 U	5 U	5 U
Acetone	UG/L	50	10 U	10 U	10 U	10 U	10 U
Benzene	UG/L	1	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	UG/L	50	1 U	1 U	1 U	1 U	1 U
Bromoform	UG/L	50	1 U	1 U	1 U	1 U	1 U
Bromomethane	UG/L	5	1 U	1 U	1 U	1 U	1 U

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit. ; NA - Not Analyzed

J - The reported concentration is an estimated value.

UJ - Not detected. The reported quantitation limit is an estimated value.

Made By: PRF 10/30/2013 Checked By: AMK 10/31/2013

Detection Limits shown are PQL

**TABLE 2**  
**VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**ROSE VALLEY LANDFILL**

Location ID			MW-03	MW-04	MW-16	SW-01D	SW-01S
Sample ID			MW-03	MW-04	MW-16	SW-01D	SW-01S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/16/13	10/16/13	10/16/13	10/15/13	10/15/13
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Carbon disulfide	UG/L	60	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	UG/L	5	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	UG/L	5	1 U	1 U	1 U	1 U	1 U
Chloroethane	UG/L	5	1 U	1 U	1 U	1 U	1 U
Chloroform	UG/L	7	1 U	1 U	1 U	1 U	1 U
Chloromethane	UG/L	5	1 U	1 U	1 U	1 U	1 U
Cyclohexane	UG/L	-	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	UG/L	50	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	UG/L	5	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Ethylbenzene	UG/L	5	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	UG/L	5	1 U	1 U	1 U	1 U	1 U
Methyl acetate	UG/L	-	1 U	1 U	1 U	1 U	1 U
Methyl ethyl ketone (2-Butanone)	UG/L	50	10 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	UG/L	10	1 U	1 U	1 U	1 U	1 U
Methylcyclohexane	UG/L	-	1 U	1 U	1 U	1 U	1 U
Methylene chloride	UG/L	5	1 U	1 U	1 U	1 U	1 U
Styrene	UG/L	5	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	UG/L	5	1 U	1 U	1 U	1 U	1 U
Toluene	UG/L	5	1 U	1 U	1 U	1 U	1 U
Trichloroethene	UG/L	5	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	UG/L	5	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	UG/L	2	1 U	1 U	1 U	1 U	1 U
Xylene (total)	UG/L	5	2 U	2 U	2 U	2 U	2 U

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit. ; NA - Not Analyzed

J - The reported concentration is an estimated value.

UJ - Not detected. The reported quantitation limit is an estimated value.

Made By: PRF 10/30/2013 Checked By: AMK 10/31/2013

**Detection Limits shown are PQL**

**TABLE 2**  
**VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**ROSE VALLEY LANDFILL**

Location ID			SW-02D	SW-02D	SW-02S	SW-03S	SW-04D
Sample ID			FD-101513	SW-02D	SW-02S	SW-03S	SW-04D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/15/13	10/15/13	10/15/13	10/15/13	10/16/13
Parameter	Units	Criteria*	Field Duplicate (1-1)				
<b>Volatile Organic Compounds</b>							
1,1,1-Trichloroethane	UG/L	5	1 U	1 U	1	1 U	1 U
1,1,2,2-Tetrachloroethane	UG/L	5	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	UG/L	1	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	UG/L	5	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	UG/L	5	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	UG/L	5	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	UG/L	0.04	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	6.00E-04	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	UG/L	3	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	UG/L	0.6	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene (cis)	UG/L	5	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene (trans)	UG/L	5	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	UG/L	1	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	UG/L	3	1 U	1 U	1 U	1 U	1 U
1,3-Dichloropropene (cis)	UG/L	0.4	1 U	1 U	1 U	1 U	1 U
1,3-Dichloropropene (trans)	UG/L	0.4	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	UG/L	3	1 U	1 U	1 U	1 U	1 U
2-Hexanone	UG/L	50	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	UG/L	-	5 U	5 U	5 U	5 U	5 U
Acetone	UG/L	50	10 U	10 U	10 U	10 U	10 U
Benzene	UG/L	1	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	UG/L	50	1 U	1 U	1 U	1 U	1 U
Bromoform	UG/L	50	1 U	1 U	1 U	1 U	1 U
Bromomethane	UG/L	5	1 U	1 U	1 U	1 U	1 U

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.



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Made By: PRF 10/30/2013 Checked By: AMK 10/31/2013

Detection Limits shown are PQL

**TABLE 2**  
**VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**ROSE VALLEY LANDFILL**

Location ID			SW-02D	SW-02D	SW-02S	SW-03S	SW-04D
Sample ID			FD-101513	SW-02D	SW-02S	SW-03S	SW-04D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/15/13	10/15/13	10/15/13	10/15/13	10/16/13
Parameter	Units	Criteria*	Field Duplicate (1-1)				
<b>Volatile Organic Compounds</b>							
Carbon disulfide	UG/L	60	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	UG/L	5	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	UG/L	5	1 U	1 U	1 U	1 U	1 U
Chloroethane	UG/L	5	1 U	1 U	1 U	1 U	1 U
Chloroform	UG/L	7	1 U	1 U	1 U	1 U	1 U
Chloromethane	UG/L	5	1 U	1 U	1 U	1 U	1 U
Cyclohexane	UG/L	-	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	UG/L	50	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	UG/L	5	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Ethylbenzene	UG/L	5	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	UG/L	5	1 U	1 U	1 U	1 U	1 U
Methyl acetate	UG/L	-	1 U	1 U	1 U	1 U	1 U
Methyl ethyl ketone (2-Butanone)	UG/L	50	10 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	UG/L	10	1 U	1 U	1 U	1 U	1 U
Methylcyclohexane	UG/L	-	1 U	1 U	1 U	1 U	1 U
Methylene chloride	UG/L	5	1 U	1 U	1 U	1 U	1 U
Styrene	UG/L	5	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	UG/L	5	1 U	1 U	1 U	1 U	1 U
Toluene	UG/L	5	1 U	1 U	1 U	1 U	1 U
Trichloroethene	UG/L	5	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	UG/L	5	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	UG/L	2	1 U	1 U	1 U	1 U	1 U
Xylene (total)	UG/L	5	2 U	2 U	2 U	2 U	2 U

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.



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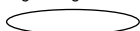
**Detection Limits shown are PQL**

**TABLE 2**  
**VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**ROSE VALLEY LANDFILL**

<b>Location ID</b>			<b>SW-04S</b>
<b>Sample ID</b>			<b>SW-04S</b>
<b>Matrix</b>			<b>Groundwater</b>
<b>Depth Interval (ft)</b>			<b>-</b>
<b>Date Sampled</b>			<b>10/16/13</b>
<b>Parameter</b>	<b>Units</b>	<b>Criteria*</b>	
<b>Volatile Organic Compounds</b>			
1,1,1-Trichloroethane	UG/L	5	1 U
1,1,2,2-Tetrachloroethane	UG/L	5	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5	1 U
1,1,2-Trichloroethane	UG/L	1	1 U
1,1-Dichloroethane	UG/L	5	1 U
1,1-Dichloroethene	UG/L	5	1 U
1,2,4-Trichlorobenzene	UG/L	5	1 U
1,2-Dibromo-3-chloropropane	UG/L	0.04	1 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	6.00E-04	1 U
1,2-Dichlorobenzene	UG/L	3	1 U
1,2-Dichloroethane	UG/L	0.6	1 U
1,2-Dichloroethene (cis)	UG/L	5	1 U
1,2-Dichloroethene (trans)	UG/L	5	1 U
1,2-Dichloropropane	UG/L	1	1 U
1,3-Dichlorobenzene	UG/L	3	1 U
1,3-Dichloropropene (cis)	UG/L	0.4	1 U
1,3-Dichloropropene (trans)	UG/L	0.4	1 U
1,4-Dichlorobenzene	UG/L	3	1 U
2-Hexanone	UG/L	50	5 U
4-Methyl-2-pentanone	UG/L	-	5 U
Acetone	UG/L	50	10 U
Benzene	UG/L	1	1 U
Bromodichloromethane	UG/L	50	1 U
Bromoform	UG/L	50	1 U
Bromomethane	UG/L	5	1 U

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.



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Made By: PRF 10/30/2013 Checked By: AMK 10/31/2013


**Detection Limits shown are PQL**

**TABLE 2**  
**VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**ROSE VALLEY LANDFILL**

<b>Location ID</b>			<b>SW-04S</b>
<b>Sample ID</b>			<b>SW-04S</b>
<b>Matrix</b>			<b>Groundwater</b>
<b>Depth Interval (ft)</b>			<b>-</b>
<b>Date Sampled</b>			<b>10/16/13</b>
<b>Parameter</b>	<b>Units</b>	<b>Criteria*</b>	
<b>Volatile Organic Compounds</b>			
Carbon disulfide	UG/L	60	1 U
Carbon tetrachloride	UG/L	5	1 U
Chlorobenzene	UG/L	5	1 U
Chloroethane	UG/L	5	1 U
Chloroform	UG/L	7	1 U
Chloromethane	UG/L	5	1 U
Cyclohexane	UG/L	-	1 U
Dibromochloromethane	UG/L	50	1 U
Dichlorodifluoromethane	UG/L	5	1 UJ
Ethylbenzene	UG/L	5	1 U
Isopropylbenzene (Cumene)	UG/L	5	1 U
Methyl acetate	UG/L	-	1 U
Methyl ethyl ketone (2-Butanone)	UG/L	50	10 U
Methyl tert-butyl ether	UG/L	10	1 U
Methylcyclohexane	UG/L	-	1 U
Methylene chloride	UG/L	5	1 U
Styrene	UG/L	5	1 U
Tetrachloroethene	UG/L	5	1 U
Toluene	UG/L	5	1 U
Trichloroethene	UG/L	5	1 U
Trichlorofluoromethane	UG/L	5	1 U
Vinyl chloride	UG/L	2	1 U
Xylene (total)	UG/L	5	2 U

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit. ; NA - Not Analyzed

J - The reported concentration is an estimated value.

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Made By: PRF 10/30/2013      Checked By: AMK 10/31/2013

**Detection Limits shown are PQL**

**TABLE 3**  
**VALIDATED SURFACE WATER SAMPLE ANALYTICAL RESULTS**  
**ROSE VALLEY LANDFILL**

Location ID			NDP	NDP	SDP	SWTR-1E	SWTR-1T
Sample ID			FD-101613	NDP	SDP	SWTR-1E	SWTR-1T
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/16/13	10/16/13	10/16/13	10/16/13	10/16/13
Parameter	Units	Criteria*	Field Duplicate (1-1)				
<b>Volatile Organic Compounds</b>							
1,1,1-Trichloroethane	UG/L	-	1 U	1 U	1 U	1 U	5 U
1,1,2,2-Tetrachloroethane	UG/L	-	1 U	1 U	1 U	1 U	5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	-	1 U	1 U	1 U	1 U	5 U
1,1,2-Trichloroethane	UG/L	-	1 U	1 U	1 U	1 U	5 U
1,1-Dichloroethane	UG/L	-	1 U	1 U	1 U	1 U	5 U
1,1-Dichloroethene	UG/L	-	1 U	1 U	1 U	1 U	5 U
1,2,4-Trichlorobenzene	UG/L	5	1 U	1 U	1 U	1 U	5 U
1,2-Dibromo-3-chloropropane	UG/L	-	1 U	1 U	1 U	1 U	5 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	-	1 U	1 U	1 U	1 U	5 U
1,2-Dichlorobenzene	UG/L	5	1 U	1 U	1 U	1 U	5 U
1,2-Dichloroethane	UG/L	-	1 U	1 U	1 U	1 U	5 U
1,2-Dichloroethene (cis)	UG/L	-	1 U	1 U	1 U	1 U	5 U
1,2-Dichloroethene (trans)	UG/L	-	1 U	1 U	1 U	1 U	5 U
1,2-Dichloropropane	UG/L	-	1 U	1 U	1 U	1 U	5 U
1,3-Dichlorobenzene	UG/L	5	1 U	1 U	1 U	1 U	5 U
1,3-Dichloropropene (cis)	UG/L	-	1 U	1 U	1 U	1 U	5 U
1,3-Dichloropropene (trans)	UG/L	-	1 U	1 U	1 U	1 U	5 U
1,4-Dichlorobenzene	UG/L	5	1 U	1 U	1 U	1 U	5 U
2-Hexanone	UG/L	-	5 U	5 U	5 U	5 U	25 U
4-Methyl-2-pentanone	UG/L	-	5 U	5 U	5 U	5 U	25 U
Acetone	UG/L	-	10 U	10 U	10 U	10 U	50 U
Benzene	UG/L	10	1 U	1 U	1 U	1 U	2.1 J
Bromodichloromethane	UG/L	-	1 U	1 U	1 U	1 U	5 U
Bromoform	UG/L	-	1 U	1 U	1 U	1 U	5 U
Bromomethane	UG/L	-	1 U	1 U	1 U	1 U	5 U

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class C.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit. ; NA - Not Analyzed

J - The reported concentration is an estimated value.

UJ - Not detected. The reported quantitation limit is an estimated value.

Made By: PRF 10/30/2013 Checked By: AMK 10/31/2013

Detection Limits shown are PQL



**TABLE 3**  
**VALIDATED SURFACE WATER SAMPLE ANALYTICAL RESULTS**  
**ROSE VALLEY LANDFILL**

Location ID			NDP	NDP	SDP	SWTR-1E	SWTR-1T
Sample ID			FD-101613	NDP	SDP	SWTR-1E	SWTR-1T
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/16/13	10/16/13	10/16/13	10/16/13	10/16/13
Parameter	Units	Criteria*	Field Duplicate (1-1)				
<b>Volatile Organic Compounds</b>							
Carbon disulfide	UG/L	-	1 U	1 U	1 U	1 U	5 U
Carbon tetrachloride	UG/L	-	1 U	1 U	1 U	1 U	5 U
Chlorobenzene	UG/L	5	1 U	1 U	1 U	1 U	5 U
Chloroethane	UG/L	-	1 U	1 U	1 U	1 U	5 U
Chloroform	UG/L	-	1 U	1 U	1 U	1 U	5 U
Chloromethane	UG/L	-	1 U	1 U	1 U	1 U	5 U
Cyclohexane	UG/L	-	1 U	1 U	1 U	1 U	5 U
Dibromochloromethane	UG/L	-	1 U	1 U	1 U	1 U	5 U
Dichlorodifluoromethane	UG/L	-	1 UJ	1 UJ	1 UJ	1 UJ	5 UJ
Ethylbenzene	UG/L	17	1 U	1 U	1 U	1 U	5 U
Isopropylbenzene (Cumene)	UG/L	2.6	1 U	1 U	1 U	1 U	5 U
Methyl acetate	UG/L	-	1 U	1 U	1 U	1 U	5 U
Methyl ethyl ketone (2-Butanone)	UG/L	-	10 U	10 U	10 U	10 U	50 U
Methyl tert-butyl ether	UG/L	-	1 U	1 U	1 U	1 U	5 U
Methylcyclohexane	UG/L	-	1 U	1 U	1 U	1 U	5 U
Methylene chloride	UG/L	200	1 U	1 U	1 U	1 U	5 U
Styrene	UG/L	-	1 U	1 U	1 U	1 U	5 U
Tetrachloroethene	UG/L	1	1 U	1 U	1 U	1 U	5 U
Toluene	UG/L	100	1 U	1 U	1 U	1 U	5 U
Trichloroethene	UG/L	40	1 U	1 U	1 U	1 U	5 U
Trichlorofluoromethane	UG/L	-	1 U	1 U	1 U	1 U	5 U
Vinyl chloride	UG/L	-	1 U	1 U	1 U	1 U	5 U
Xylene (total)	UG/L	65	2 U	2 U	2 U	2 U	10 U

\*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class C.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit. ; NA - Not Analyzed

J - The reported concentration is an estimated value.

UJ - Not detected. The reported quantitation limit is an estimated value.

Made By: PRF 10/30/2013 Checked By: AMK 10/31/2013

**Detection Limits shown are PQL**

**TABLE 4**  
**VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS**  
**ROSE VALLEY LANDFILL**

Location ID		FIELDQC
Sample ID		TB-101713
Matrix		Water Quality
Depth Interval (ft)		-
Date Sampled		10/16/13
Parameter	Units	Trip Blank (1-1)
<b>Volatile Organic Compounds</b>		
1,1,1-Trichloroethane	UG/L	1 U
1,1,2,2-Tetrachloroethane	UG/L	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	1 U
1,1,2-Trichloroethane	UG/L	1 U
1,1-Dichloroethane	UG/L	1 U
1,1-Dichloroethene	UG/L	1 U
1,2,4-Trichlorobenzene	UG/L	1 U
1,2-Dibromo-3-chloropropane	UG/L	1 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	1 U
1,2-Dichlorobenzene	UG/L	1 U
1,2-Dichloroethane	UG/L	1 U
1,2-Dichloroethene (cis)	UG/L	1 U
1,2-Dichloroethene (trans)	UG/L	1 U
1,2-Dichloropropane	UG/L	1 U
1,3-Dichlorobenzene	UG/L	1 U
1,3-Dichloropropene (cis)	UG/L	1 U
1,3-Dichloropropene (trans)	UG/L	1 U
1,4-Dichlorobenzene	UG/L	1 U
2-Hexanone	UG/L	5 U
4-Methyl-2-pentanone	UG/L	5 U
Acetone	UG/L	10 U
Benzene	UG/L	1 U
Bromodichloromethane	UG/L	1 U
Bromoform	UG/L	1 U
Bromomethane	UG/L	1 U
Carbon disulfide	UG/L	1 U

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit. ; NA - Not Analyzed

UU - Not detected. The reported quantitation limit is an estimated value.

Made By: PRF 10/30/2013      Checked By: AMK 10/31/2013

**Detection Limits shown are PQL**

**TABLE 4**  
**VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS**  
**ROSE VALLEY LANDFILL**

Location ID		FIELDQC
Sample ID		TB-101713
Matrix		Water Quality
Depth Interval (ft)		-
Date Sampled		10/16/13
Parameter	Units	Trip Blank (1-1)
<b>Volatile Organic Compounds</b>		
Carbon tetrachloride	UG/L	1 U
Chlorobenzene	UG/L	1 U
Chloroethane	UG/L	1 U
Chloroform	UG/L	1 U
Chloromethane	UG/L	1 U
Cyclohexane	UG/L	1 U
Dibromochloromethane	UG/L	1 U
Dichlorodifluoromethane	UG/L	1 UJ
Ethylbenzene	UG/L	1 U
Isopropylbenzene (Cumene)	UG/L	1 U
Methyl acetate	UG/L	1 U
Methyl ethyl ketone (2-Butanone)	UG/L	10 U
Methyl tert-butyl ether	UG/L	1 U
Methylcyclohexane	UG/L	1 U
Methylene chloride	UG/L	1 U
Styrene	UG/L	1 U
Tetrachloroethene	UG/L	1 U
Toluene	UG/L	1 U
Trichloroethene	UG/L	1 U
Trichlorofluoromethane	UG/L	1 U
Vinyl chloride	UG/L	1 U
Xylene (total)	UG/L	2 U

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit. ; NA - Not Analyzed

UJ - Not detected. The reported quantitation limit is an estimated value.

Made By: PRF 10/30/2013      Checked By: AMK 10/31/2013

**Detection Limits shown are PQL**

**ATTACHMENT A**

**VALIDATED FORM 1's**

## **DEFINITIONS OF USEPA REGION II DATA QUALIFIERS**

- U – The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J – The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ – The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R – The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- D – The positive value is the result of an analysis at a secondary dilution factor

# Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-03S

Lab Sample ID: 480-48159-1

Client Matrix: Water

Date Sampled: 10/15/2013 1207

Date Received: 10/17/2013 1115

## 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6793.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/22/2013 2350			Final Weight/Volume:	5 mL
Prep Date:	10/22/2013 2350				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Butanone (MEK)	ND		1.3	10
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
1,2-Dibromoethane	ND		0.73	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

**Analytical Data**

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-03S

Lab Sample ID: 480-48159-1

Client Matrix: Water

Date Sampled: 10/15/2013 1207

Date Received: 10/17/2013 1115

**8260C Volatile Organic Compounds by GC/MS**

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6793.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/22/2013 2350			Final Weight/Volume:	5 mL
Prep Date:	10/22/2013 2350				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	98		71 - 126
1,2-Dichloroethane-d4 (Surr)	100		66 - 137
4-Bromofluorobenzene (Surr)	96		73 - 120



# Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-03S

Lab Sample ID: 480-48159-1

Client Matrix: Water

Date Sampled: 10/15/2013 1207

Date Received: 10/17/2013 1115

## 8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-146726

Instrument ID: HP5975D

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: D6793.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 10/22/2013 2350

Final Weight/Volume: 5 mL

Prep Date: 10/22/2013 2350

## Tentatively Identified Compounds

Number TIC's Found: 1

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
<del>18173-64-3</del>	<del>tert-Butyldimethylsilanol</del>	<del>4.04</del>	<del>3.5</del>	<del>T J N</del>

10/30/13

# Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-02S

Lab Sample ID: 480-48159-2

Client Matrix: Water

Date Sampled: 10/15/2013 1314

Date Received: 10/17/2013 1115

## 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6794.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0011			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0011				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	1.0		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Butanone (MEK)	ND		1.3	10
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND <i>u5</i>		0.68	1.0
Ethylbenzene	ND		0.74	1.0
1,2-Dibromoethane	ND		0.73	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-02S

Lab Sample ID: 480-48159-2

Client Matrix: Water

Date Sampled: 10/15/2013 1314

Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6794.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0011			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0011				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	99		71 - 126
1,2-Dichloroethane-d4 (Surr)	98		66 - 137
4-Bromofluorobenzene (Surr)	97		73 - 120

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-02S

Lab Sample ID: 480-48159-2

Client Matrix: Water

Date Sampled: 10/15/2013 1314

Date Received: 10/17/2013 1115

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### 8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-146726

Instrument ID: HP5975D

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: D6794.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 10/23/2013 0011

Final Weight/Volume: 5 mL

Prep Date: 10/23/2013 0011

### Tentatively Identified Compounds

Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

**Analytical Data**

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-02D

Lab Sample ID: 480-48159-3

Date Sampled: 10/15/2013 1427

Client Matrix: Water

Date Received: 10/17/2013 1115

**8260C Volatile Organic Compounds by GC/MS**

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6797.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0115			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0115				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Butanone (MEK)	ND		1.3	10
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
1,2-Dibromoethane	ND		0.73	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-02D  
Lab Sample ID: 480-48159-3  
Client Matrix: Water

Date Sampled: 10/15/2013 1427  
Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C  
Prep Method: 5030C  
Dilution: 1.0  
Analysis Date: 10/23/2013 0115  
Prep Date: 10/23/2013 0115

Analysis Batch: 480-146726  
Prep Batch: N/A

Instrument ID: HP5975D  
Lab File ID: D6797.D  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	99		71 - 126
1,2-Dichloroethane-d4 (Surr)	99		66 - 137
4-Bromofluorobenzene (Surr)	97		73 - 120

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-02D

Lab Sample ID: 480-48159-3

Client Matrix: Water

Date Sampled: 10/15/2013 1427

Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-146726

Instrument ID: HP5975D

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: D6797.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 10/23/2013 0115

Final Weight/Volume: 5 mL

Prep Date: 10/23/2013 0115

### Tentatively Identified Compounds

Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	



# Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-01D

Lab Sample ID: 480-48159-4

Client Matrix: Water

Date Sampled: 10/15/2013 1546

Date Received: 10/17/2013 1115

## 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6798.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0136			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0136				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Butanone (MEK)	ND		1.3	10
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
1,2-Dibromoethane	ND		0.73	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-01D

Lab Sample ID: 480-48159-4

Client Matrix: Water

Date Sampled: 10/15/2013 1546

Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6798.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0136			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0136				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	100		71 - 126
1,2-Dichloroethane-d4 (Surr)	101		66 - 137
4-Bromofluorobenzene (Surr)	99		73 - 120

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-01D

Lab Sample ID: 480-48159-4

Client Matrix: Water

Date Sampled: 10/15/2013 1546

Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-146726

Instrument ID: HP5975D

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: D6798.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 10/23/2013 0136

Final Weight/Volume: 5 mL

Prep Date: 10/23/2013 0136

### Tentatively Identified Compounds

Number TIC's Found: 1

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
<del>18173-64-3</del>	<del>tert-Butyldimethylsilanol</del>	<del>4.04</del>	<del>4.2</del>	<del>T J N</del>

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# Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-01S

Lab Sample ID: 480-48159-5

Client Matrix: Water

Date Sampled: 10/15/2013 1648

Date Received: 10/17/2013 1115

## 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6799.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0157			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0157				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Butanone (MEK)	ND		1.3	10
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
1,2-Dibromoethane	ND		0.73	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-01S

Lab Sample ID: 480-48159-5

Client Matrix: Water

Date Sampled: 10/15/2013 1648

Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6799.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0157			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0157				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	100		71 - 126
1,2-Dichloroethane-d4 (Surr)	101		66 - 137
4-Bromofluorobenzene (Surr)	98		73 - 120

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-01S

Lab Sample ID: 480-48159-5

Client Matrix: Water

Date Sampled: 10/15/2013 1648

Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-146726

Instrument ID: HP5975D

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: D6799.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 10/23/2013 0157

Final Weight/Volume: 5 mL

Prep Date: 10/23/2013 0157

### Tentatively Identified Compounds

Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

# Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-04D

Lab Sample ID: 480-48159-6

Client Matrix: Water

Date Sampled: 10/16/2013 1010

Date Received: 10/17/2013 1115

## 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6800.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0219			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0219				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,1,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Butanone (MEK)	ND		1.3	10
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
1,2-Dibromoethane	ND		0.73	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

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## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-04D

Lab Sample ID: 480-48159-6

Client Matrix: Water

Date Sampled: 10/16/2013 1010

Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6800.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0219			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0219				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	99		71 - 126
1,2-Dichloroethane-d4 (Surr)	100		66 - 137
4-Bromofluorobenzene (Surr)	98		73 - 120

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-04D

Lab Sample ID: 480-48159-6

Client Matrix: Water

Date Sampled: 10/16/2013 1010

Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-146726

Instrument ID: HP5975D

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: D6800.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 10/23/2013 0219

Final Weight/Volume: 5 mL

Prep Date: 10/23/2013 0219

### Tentatively Identified Compounds

Number TIC's Found: 1

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
<del>1066-40-6</del>	<del>Silanol, trimethyl-</del>	<del>4.04</del>	<del>2.4</del>	<del>T J N</del>

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# Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-04S

Lab Sample ID: 480-48159-7

Client Matrix: Water

Date Sampled: 10/16/2013 1048

Date Received: 10/17/2013 1115

## 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6801.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0240			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0240				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Butanone (MEK)	ND		1.3	10
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
1,2-Dibromoethane	ND		0.73	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-04S

Lab Sample ID: 480-48159-7

Client Matrix: Water

Date Sampled: 10/16/2013 1048

Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6801.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0240			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0240				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	97		71 - 126
1,2-Dichloroethane-d4 (Surr)	101		66 - 137
4-Bromofluorobenzene (Surr)	98		73 - 120

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SW-04S

Lab Sample ID: 480-48159-7

Client Matrix: Water

Date Sampled: 10/16/2013 1048

Date Received: 10/17/2013 1115

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### 8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-146726

Instrument ID: HP5975D

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: D6801.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 10/23/2013 0240

Final Weight/Volume: 5 mL

Prep Date: 10/23/2013 0240

### Tentatively Identified Compounds

Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	



# Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: MW-16

Lab Sample ID: 480-48159-8

Client Matrix: Water

Date Sampled: 10/16/2013 1253

Date Received: 10/17/2013 1115

## 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6802.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0301			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0301				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Butanone (MEK)	ND		1.3	10
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND	45	0.68	1.0
Ethylbenzene	ND		0.74	1.0
1,2-Dibromoethane	ND	10/30/13	0.73	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: MW-16

Lab Sample ID: 480-48159-8

Client Matrix: Water

Date Sampled: 10/16/2013 1253

Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-146726

Instrument ID: HP5975D

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: D6802.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 10/23/2013 0301

Final Weight/Volume: 5 mL

Prep Date: 10/23/2013 0301

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	101		71 - 126
1,2-Dichloroethane-d4 (Surr)	101		66 - 137
4-Bromofluorobenzene (Surr)	100		73 - 120

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: MW-16

Lab Sample ID: 480-48159-8

Client Matrix: Water

Date Sampled: 10/16/2013 1253

Date Received: 10/17/2013 1115

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### 8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-146726

Instrument ID: HP5975D

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: D6802.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 10/23/2013 0301

Final Weight/Volume: 5 mL

Prep Date: 10/23/2013 0301

### Tentatively Identified Compounds

Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

# Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SWTR-1E

Lab Sample ID: 480-48159-9

Date Sampled: 10/16/2013 1240

Client Matrix: Water

Date Received: 10/17/2013 1115

## 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6803.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0322			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0322				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,1,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Butanone (MEK)	ND		1.3	10
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
1,2-Dibromoethane	ND		0.73	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

**Analytical Data**

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SWTR-1E

Lab Sample ID: 480-48159-9

Client Matrix: Water

Date Sampled: 10/16/2013 1240

Date Received: 10/17/2013 1115

**8260C Volatile Organic Compounds by GC/MS**

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6803.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0322			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0322				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	100		71 - 126
1,2-Dichloroethane-d4 (Surr)	100		66 - 137
4-Bromofluorobenzene (Surr)	99		73 - 120



## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SWTR-1E

Lab Sample ID: 480-48159-9

Client Matrix: Water

Date Sampled: 10/16/2013 1240

Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-146726

Instrument ID: HP5975D

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: D6803.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 10/23/2013 0322

Final Weight/Volume: 5 mL

Prep Date: 10/23/2013 0322

### Tentatively Identified Compounds

Number TIC's Found: 1

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
<del>1066-40-6</del>	<del>Silanol, trimethyl-</del>	<del>4.04</del>	<del>2.4</del>	<del>T J N</del>

10/30/13

# Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: MW-04

Lab Sample ID: 480-48159-10

Date Sampled: 10/16/2013 1348

Client Matrix: Water

Date Received: 10/17/2013 1115

## 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6806.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0425			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0425				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	11		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Butanone (MEK)	ND		1.3	10
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
1,2-Dibromoethane	ND		0.73	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

u5  
10/20/13

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: MW-04

Lab Sample ID: 480-48159-10

Client Matrix: Water

Date Sampled: 10/16/2013 1348

Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6806.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0425			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0425				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	101		71 - 126
1,2-Dichloroethane-d4 (Surr)	105		66 - 137
4-Bromofluorobenzene (Surr)	99		73 - 120

# Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: MW-04

Lab Sample ID: 480-48159-10

Client Matrix: Water

Date Sampled: 10/16/2013 1348

Date Received: 10/17/2013 1115

## 8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-146726

Instrument ID: HP5975D

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: D6806.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 10/23/2013 0425

Final Weight/Volume: 5 mL

Prep Date: 10/23/2013 0425

### Tentatively Identified Compounds

Number TIC's Found: 3

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
75-43-4	Dichlorofluoromethane	2.14	0.58	J
60-29-7	Ethyl ether	2.38	4.6	
<del>55644-10-5</del>	<del>Silanol, dimethyl(1,1,2-trimethylpropyl)</del>	<del>4.04</del>	<del>18</del>	<del>T J N</del>

10/30/13  
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# Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: MW-03

Lab Sample ID: 480-48159-11

Date Sampled: 10/16/2013 1442

Client Matrix: Water

Date Received: 10/17/2013 1115

## 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6807.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0446			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0446				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	1.9		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Butanone (MEK)	ND		1.3	10
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	6.6		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
1,2-Dibromoethane	ND		0.73	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0



## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: MW-03

Lab Sample ID: 480-48159-11

Client Matrix: Water

Date Sampled: 10/16/2013 1442

Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6807.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0446			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0446				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	99		71 - 126
1,2-Dichloroethane-d4 (Surr)	100		66 - 137
4-Bromofluorobenzene (Surr)	98		73 - 120

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: MW-03

Lab Sample ID: 480-48159-11

Client Matrix: Water

Date Sampled: 10/16/2013 1442

Date Received: 10/17/2013 1115

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### 8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-146726

Instrument ID: HP5975D

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: D6807.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 10/23/2013 0446

Final Weight/Volume: 5 mL

Prep Date: 10/23/2013 0446

#### Tentatively Identified Compounds

Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

# Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: NDP

Lab Sample ID: 480-48159-12

Date Sampled: 10/16/2013 1455

Client Matrix: Water

Date Received: 10/17/2013 1115

## 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6808.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0508			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0508				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Butanone (MEK)	ND		1.3	10
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND	uJ	0.68	1.0
Ethylbenzene	ND		0.74	1.0
1,2-Dibromoethane	ND	10/30/13	0.73	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: NDP

Lab Sample ID: 480-48159-12

Date Sampled: 10/16/2013 1455

Client Matrix: Water

Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6808.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0508			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0508				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	97		71 - 126
1,2-Dichloroethane-d4 (Surr)	99		66 - 137
4-Bromofluorobenzene (Surr)	96		73 - 120

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: NDP

Lab Sample ID: 480-48159-12

Client Matrix: Water

Date Sampled: 10/16/2013 1455

Date Received: 10/17/2013 1115

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### 8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-146726

Instrument ID: HP5975D

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: D6808.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 10/23/2013 0508

Final Weight/Volume: 5 mL

Prep Date: 10/23/2013 0508

### Tentatively Identified Compounds

Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

# Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SWTR-1T

Lab Sample ID: 480-48159-13

Date Sampled: 10/16/2013 1515

Client Matrix: Water

Date Received: 10/17/2013 1115

## 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6809.D
Dilution:	5.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0529			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0529				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		4.1	5.0
1,1,2,2-Tetrachloroethane	ND		1.1	5.0
1,1,2-Trichloroethane	ND		1.2	5.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.6	5.0
1,1-Dichloroethane	ND		1.9	5.0
1,1-Dichloroethene	ND		1.5	5.0
1,2,4-Trichlorobenzene	ND		2.1	5.0
1,2-Dibromo-3-Chloropropane	ND		2.0	5.0
1,2-Dichlorobenzene	ND		4.0	5.0
1,2-Dichloroethane	ND		1.1	5.0
1,2-Dichloropropane	ND		3.6	5.0
1,3-Dichlorobenzene	ND		3.9	5.0
1,4-Dichlorobenzene	ND		4.2	5.0
2-Butanone (MEK)	ND		6.6	50
2-Hexanone	ND		6.2	25
4-Methyl-2-pentanone (MIBK)	ND		11	25
Acetone	ND		15	50
Benzene	2.1	J	2.1	5.0
Bromodichloromethane	ND		2.0	5.0
Bromoform	ND		1.3	5.0
Bromomethane	ND		3.5	5.0
Carbon disulfide	ND		0.95	5.0
Carbon tetrachloride	ND		1.4	5.0
Chlorobenzene	ND		3.8	5.0
Dibromochloromethane	ND		1.6	5.0
Chloroethane	ND		1.6	5.0
Chloroform	ND		1.7	5.0
Chloromethane	ND		1.8	5.0
cis-1,2-Dichloroethene	ND		4.1	5.0
cis-1,3-Dichloropropene	ND		1.8	5.0
Cyclohexane	ND		0.90	5.0
Dichlorodifluoromethane	ND 2.5		3.4	5.0
Ethylbenzene	ND		3.7	5.0
1,2-Dibromoethane	ND		3.7	5.0
Isopropylbenzene	ND		4.0	5.0
Methyl acetate	ND		2.5	5.0
Methyl tert-butyl ether	ND		0.80	5.0
Methylcyclohexane	ND		0.80	5.0
Methylene Chloride	ND		2.2	5.0
Styrene	ND		3.7	5.0
Tetrachloroethene	ND		1.8	5.0
Toluene	ND		2.6	5.0
trans-1,2-Dichloroethene	ND		4.5	5.0
trans-1,3-Dichloropropene	ND		1.9	5.0
Trichloroethene	ND		2.3	5.0
Trichlorofluoromethane	ND		4.4	5.0



## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SWTR-1T

Lab Sample ID: 480-48159-13

Client Matrix: Water

Date Sampled: 10/16/2013 1515

Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6809.D
Dilution:	5.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0529			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0529				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		4.5	5.0
Xylenes, Total	ND		3.3	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	100		71 - 126
1,2-Dichloroethane-d4 (Surr)	103		66 - 137
4-Bromofluorobenzene (Surr)	100		73 - 120

**Analytical Data**

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SWTR-1T

Lab Sample ID: 480-48159-13

Date Sampled: 10/16/2013 1515

Client Matrix: Water

Date Received: 10/17/2013 1115

**8260C Volatile Organic Compounds by GC/MS**

Analysis Method: 8260C

Analysis Batch: 480-146726

Instrument ID: HP5975D

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: D6809.D

Dilution: 5.0

Initial Weight/Volume: 5 mL

Analysis Date: 10/23/2013 0529

Final Weight/Volume: 5 mL

Prep Date: 10/23/2013 0529

**Tentatively Identified Compounds**

Number TIC's Found: 3

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
60-29-7	Ethyl ether	2.38	8.9	
<del>1066-40-6</del>	<del>Silanol, trimethyl-</del>	<del>4.04</del>	<del>14</del>	<del>T J N</del>
109-99-9	Tetrahydrofuran	4.28	25	

10/30/13  
R

# Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SDP

Lab Sample ID: 480-48159-14

Date Sampled: 10/16/2013 1530

Client Matrix: Water

Date Received: 10/17/2013 1115

## 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6810.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0550			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0550				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Butanone (MEK)	ND		1.3	10
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND	UJ	0.68	1.0
Ethylbenzene	ND	10/30/13	0.74	1.0
1,2-Dibromoethane	ND		0.73	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SDP

Lab Sample ID: 480-48159-14

Client Matrix: Water

Date Sampled: 10/16/2013 1530

Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6810.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0550			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0550				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	101		71 - 126
1,2-Dichloroethane-d4 (Surr)	104		66 - 137
4-Bromofluorobenzene (Surr)	100		73 - 120

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: SDP

Lab Sample ID: 480-48159-14

Client Matrix: Water

Date Sampled: 10/16/2013 1530

Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-146726

Instrument ID: HP5975D

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: D6810.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 10/23/2013 0550

Final Weight/Volume: 5 mL

Prep Date: 10/23/2013 0550

### Tentatively Identified Compounds

Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

# Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: FD-101613

*Field Duplicate of NDP*

Lab Sample ID: 480-48159-15

Date Sampled: 10/16/2013 0000

Client Matrix: Water

Date Received: 10/17/2013 1115

## 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6811.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0610			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0610				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Butanone (MEK)	ND		1.3	10
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
1,2-Dibromoethane	ND		0.73	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

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*10/30/13*

*2*



**Analytical Data**

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: FD-101613

*Field Duplicate of NDP*

Lab Sample ID: 480-48159-15

Date Sampled: 10/16/2013 0000

Client Matrix: Water

Date Received: 10/17/2013 1115

**8260C Volatile Organic Compounds by GC/MS**

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6811.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0610			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0610				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	101		71 - 126
1,2-Dichloroethane-d4 (Surr)	100		66 - 137
4-Bromofluorobenzene (Surr)	100		73 - 120

**Analytical Data**

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: FD-101613

*Field Duplicate of NDP*

Lab Sample ID: 480-48159-15

Date Sampled: 10/16/2013 0000

Client Matrix: Water

Date Received: 10/17/2013 1115

**8260C Volatile Organic Compounds by GC/MS**

Analysis Method: 8260C  
Prep Method: 5030C  
Dilution: 1.0  
Analysis Date: 10/23/2013 0610  
Prep Date: 10/23/2013 0610

Analysis Batch: 480-146726  
Prep Batch: N/A

Instrument ID: HP5975D  
Lab File ID: D6811.D  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

**Tentatively Identified Compounds****Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
<del>1066-40-6</del>	<del>Silanol, trimethyl-</del>	<del>4.04</del>	<del>8.2</del>	<del>T J N</del>

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R2*

# Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: FD-101513

*Field Duplicate of SW-02D*

Lab Sample ID: 480-48159-16

Date Sampled: 10/15/2013 0000

Client Matrix: Water

Date Received: 10/17/2013 1115

## 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6812.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0631			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0631				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Butanone (MEK)	ND		1.3	10
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
1,2-Dibromoethane	ND		0.73	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

**Analytical Data**

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: FD-101513

*Field Duplicate of SW-02D*

Lab Sample ID: 480-48159-16

Date Sampled: 10/15/2013 0000

Client Matrix: Water

Date Received: 10/17/2013 1115

**8260C Volatile Organic Compounds by GC/MS**

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6812.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0631			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0631				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	99		71 - 126
1,2-Dichloroethane-d4 (Surr)	102		66 - 137
4-Bromofluorobenzene (Surr)	98		73 - 120

**Analytical Data**

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: FD-101513

*Field Duplicate of SW-02.D*

Lab Sample ID: 480-48159-16

Date Sampled: 10/15/2013 0000

Client Matrix: Water

Date Received: 10/17/2013 1115

**8260C Volatile Organic Compounds by GC/MS**

Analysis Method: 8260C

Analysis Batch: 480-146726

Instrument ID: HP5975D

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: D6812.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 10/23/2013 0631

Final Weight/Volume: 5 mL

Prep Date: 10/23/2013 0631

**Tentatively Identified Compounds**

Number TIC's Found: 1

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
<del>18173-64-3</del>	<del>tert-Butyldimethylsilanol</del>	<del>4.04</del>	<del>7.0</del>	<del>TJN</del> <i>R 10/31/13</i>

# Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: TB-101713

Lab Sample ID: 480-48159-17

Date Sampled: 10/16/2013 0000

Client Matrix: Water

Date Received: 10/17/2013 1115

## 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6813.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0652			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0652				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Butanone (MEK)	ND		1.3	10
2-Hexanone	ND		1.2	5.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
1,2-Dibromoethane	ND		0.73	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0



**Analytical Data**

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: TB-101713

Lab Sample ID: 480-48159-17

Client Matrix: Water

Date Sampled: 10/16/2013 0000

Date Received: 10/17/2013 1115

**8260C Volatile Organic Compounds by GC/MS**

Analysis Method:	8260C	Analysis Batch:	480-146726	Instrument ID:	HP5975D
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	D6813.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/23/2013 0652			Final Weight/Volume:	5 mL
Prep Date:	10/23/2013 0652				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	101		71 - 126
1,2-Dichloroethane-d4 (Surr)	104		66 - 137
4-Bromofluorobenzene (Surr)	99		73 - 120

## Analytical Data

Client: New York State D.E.C.

Job Number: 480-48159-1

Client Sample ID: TB-101713

Lab Sample ID: 480-48159-17

Client Matrix: Water

Date Sampled: 10/16/2013 0000

Date Received: 10/17/2013 1115

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analysis Batch: 480-146726

Instrument ID: HP5975D

Prep Method: 5030C

Prep Batch: N/A

Lab File ID: D6813.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Analysis Date: 10/23/2013 0652

Final Weight/Volume: 5 mL

Prep Date: 10/23/2013 0652

### Tentatively Identified Compounds

Number TIC's Found: 1

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
<del>18173-64-3</del>	<del>tert-Butyldimethylsilanol</del>	<del>4.04</del>	<del>3.2</del>	<del>T J N</del>

10/30/13  
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**ATTACHMENT B**

**SUPPORT DOCUMENTATION**

# Chain of Custody Record

<b>Client Information</b> Client Contact: Mr. George Kisluk Company: URS Corporation Address: 77 Goodell St. City: Buffalo State, Zip: NY, 14203 Phone: 716-856-5836 (Tel) 716-856-2545 (Fax) Email: george.kisluk@urs.com Project Name: Rose Valley #622017 Site:		Sampler: <i>Tim Ifkuech</i> Lab PM: Hoffman, Sally J Phone: 856-5636 E-Mail: sally.hoffman@testamericainc.com		Carrier Tracking No(s): COC No: 480-40168-10641.1 Page: Page 1 of 2 Job #:	
<b>Analysis Requested</b> Due Date Requested: TAT Requested (days): <i>Standard TAT</i> PO #: <i>Call Out 122089</i> WO #: <i>48008612</i> Project #: <i>48008612</i> SSOW#:		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2CO3 Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Decalhydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)			
<b>Sample Identification</b> Sample Date Sample Time Sample Type (C=comp, G=grab) Matrix (W=water, S=solid, O=organic, BT=biological, A=air)		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8260C - (MOD) TCL list OLM04.2 Preservation Code: Special Instructions/Note:			
<i>SW-035</i> <i>SW-025</i> <i>SW-02D</i> <i>SW-01D</i> <i>SW-01S</i> <i>SW-04D</i> <i>SW-04S</i> <i>MW-1C</i> <i>SWTR-1E</i> <i>MW-04</i> <i>MW-03</i>		Date: 10/13/13 Time: 1207 G Water Date: 10/13/13 Time: 1314 G Water Date: 10/15/13 Time: 1427 G Water Date: 10/15/13 Time: 1546 G Water Date: 10/15/13 Time: 1648 G Water Date: 10/16/13 Time: 1010 G Water Date: 10/16/13 Time: 1048 G Water Date: 10/16/13 Time: 1233 G Water Date: 10/16/13 Time: 1240 G Water Date: 10/16/13 Time: 1348 G Water Date: 10/16/13 Time: 1442 G Water			
<b>Possible Hazard Identification</b> <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b> <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab Archive For: Months			
<b>Empty Kit Relinquished by:</b> <i>Tim Ifkuech</i> Date/Time: 10/17/13 1115 Company: URS		<b>Method of Shipment:</b> Date/Time: 10/17/13 1115 Company: # BUFFALO			
<b>Relinquished by:</b> Date/Time: 10/17/13 1115 Company: URS		Date/Time: 10/17/13 1115 Company:			
<b>Relinquished by:</b> Date/Time: 10/17/13 1115 Company:		Date/Time: 10/17/13 1115 Company:			
<b>Relinquished by:</b> Date/Time: 10/17/13 1115 Company:		Date/Time: 10/17/13 1115 Company:			
Custody Seal No.: Delta Yes Delta No		Cooler Temperature(s) °C and Other Remarks: #2 3.4			

# Chain of Custody Record

<b>Client Information</b> Client Contact: Mr. George Kisliuk Company: URS Corporation Address: 77 Goodell St. City: Buffalo State, Zip: NY, 14203 Phone: 716-856-5636 (Tel) 716-856-2545 (Fax) Email: george.kisliuk@urs.com Project Name: Rose Valley #622017 Site:		Sampler: Tim Izkovich Lab PM: Hoffman, Sally J E-Mail: sally.hoffman@testamerica.com Phone: 856-5636		CMC No: 480-40168-10641.2 Page: Page 2 of 2 Job #:	
<b>Analysis Requested</b> Due Date Requested: TAT Requested (days): Standard TAT PO #: CallOut 122069 WO #:		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)			
<b>Sample Identification</b> Sample Type (C=Comp, G=Grab) Sample Time Sample Date Matrix (W=Water, S=Solid, O=Other) Preservation Code:		Total Number of Containers Special Instructions/Note:			
NDP SWTR-IT SDP Field Dup SW Field Dup GW MS SW-025-MS MSD SW-025-MSD MS SWTR-IE-MS MSD SWTR-IE-MSD Extra Set for Breakage TB-101713		6250C - (MOD) TCL liq OLMO4.2 Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 2 Tie Blank			
<b>Possible Hazard Identification</b> <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab Archive For _____ Months			
<b>Deliverable Requested</b> I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:			
<b>Empty Kit Relinquished by:</b> Relinquished by: Tim Izkovich Relinquished by: Relinquished by:		Method of Shipment: Date/Time: 10/17/13 1115 Date/Time: Date/Time:			
Custody Seal Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: # 2 3.4			

**Job Narrative**  
**480-48159-1**

**Receipt**

The samples were received on 10/17/2013 11:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

**GC/MS VOA**

Method(s) 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: SWTR-1T (480-48159-13). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The large number of analytes included in the continuing calibration verification (CCV) in batch 146726 gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria.

Method(s) 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 147050 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8260C: The large number of analytes included in the continuing calibration verification (CCV) in batch 147050 gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes are outside the method-defined %D criteria.

Method(s) 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 146726 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.



FORM V  
GC/MS VOA INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Buffalo

Job No.: 480-48159-1

SDG No.: \_\_\_\_\_

Lab File ID: D6786.D

BFB Injection Date: 10/22/2013

Instrument ID: HP5975D

BFB Injection Time: 19:22

Analysis Batch No.: 146726

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	18.3
75	30.0 - 60.0 % of mass 95	48.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.8
173	Less than 2.0 % of mass 174	0.4 (0.5)1
174	50.0 - 120.00 % of mass 95	78.9
175	5.0 - 9.0 % of mass 174	6.1 (7.7)1
176	95.0 - 101.0 % of mass 174	77.0 (97.5)1
177	5.0 - 9.0 % of mass 176	5.2 (6.8)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-146726/2	D6787.D	10/22/2013	21:26
	LCS 480-146726/4	D6789.D	10/22/2013	22:09
	MB 480-146726/5	D6790.D	10/22/2013	22:30
SW-03S	480-48159-1	D6793.D	10/22/2013	23:50
SW-02S	480-48159-2	D6794.D	10/23/2013	00:11
SW-02D	480-48159-3	D6797.D	10/23/2013	01:15
SW-01D	480-48159-4	D6798.D	10/23/2013	01:36
SW-01S	480-48159-5	D6799.D	10/23/2013	01:57
SW-04D	480-48159-6	D6800.D	10/23/2013	02:19
SW-04S	480-48159-7	D6801.D	10/23/2013	02:40
MW-16	480-48159-8	D6802.D	10/23/2013	03:01
SWTR-1E	480-48159-9	D6803.D	10/23/2013	03:22
SWTR-1E MS	480-48159-9 MS	D6804.D	10/23/2013	03:43
SWTR-1E MSD	480-48159-9 MSD	D6805.D	10/23/2013	04:04
MW-04	480-48159-10	D6806.D	10/23/2013	04:25
MW-03	480-48159-11	D6807.D	10/23/2013	04:46
NDP	480-48159-12	D6808.D	10/23/2013	05:08
SWTR-1T	480-48159-13	D6809.D	10/23/2013	05:29
SDP	480-48159-14	D6810.D	10/23/2013	05:50
FD-101613	480-48159-15	D6811.D	10/23/2013	06:10
FD-101513	480-48159-16	D6812.D	10/23/2013	06:31
TB-101713	480-48159-17	D6813.D	10/23/2013	06:52

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo

Job No.: 480-48159-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 480-146726/2

Calibration Date: 10/22/2013 21:26

Instrument ID: HP5975D

Calib Start Date: 10/17/2013 10:59

GC Column: RTX-CLPII ID: 0.53 (mm)

Calib End Date: 10/17/2013 12:45

Lab File ID: D6787.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2333	0.1768	0.1000	18.9	25.0	-24.2*	20.0
Chloromethane	Ave	0.2667	0.2818	0.1000	26.4	25.0	5.7	20.0
Vinyl chloride	Ave	0.3217	0.2879	0.1000	22.4	25.0	-10.5	20.0
Bromomethane	Ave	0.1632	0.1323	0.1000	20.3	25.0	-18.9	20.0
Chloroethane	Ave	0.1690	0.1717	0.1000	25.4	25.0	1.6	20.0
Trichlorofluoromethane	Ave	0.3256	0.3060	0.1000	23.5	25.0	-6.0	20.0
Acrolein	Ave	0.0512	0.0590		576	500	15.2	20.0
1,1-Dichloroethene	Ave	0.3059	0.2740	0.1000	22.4	25.0	-10.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2808	0.2570	0.1000	22.9	25.0	-8.5	20.0
Acetone	Ave	0.1178	0.1367	0.1000	145	125	16.0	20.0
Iodomethane	Ave	0.4481	0.4189		23.4	25.0	-6.5	20.0
Carbon disulfide	Ave	0.9242	0.8690	0.1000	23.5	25.0	-6.0	20.0
Acetonitrile	Ave	0.0234	0.0278		1190	1000	19.0	20.0
Methyl acetate	Ave	0.4039	0.4330	0.1000	26.8	25.0	7.2	20.0
Methylene Chloride	Ave	0.3630	0.3281	0.1000	22.6	25.0	-9.6	20.0
Methyl tert-butyl ether	Ave	1.076	1.096	0.1000	25.5	25.0	1.9	20.0
trans-1,2-Dichloroethene	Ave	0.3467	0.3163	0.1000	22.8	25.0	-8.8	20.0
Acrylonitrile	Ave	0.1359	0.1536		141	125	13.0	20.0
1,1-Dichloroethane	Ave	0.5984	0.5583	0.2000	23.3	25.0	-6.7	20.0
Vinyl acetate	Ave	0.6841	0.7303		133	125	6.8	20.0
2,2-Dichloropropane	Ave	0.3780	0.3157		20.9	25.0	-16.5	20.0
cis-1,2-Dichloroethene	Ave	0.3962	0.3571	0.1000	22.5	25.0	-9.9	20.0
2-Butanone (MEK)	Ave	0.1755	0.2046	0.1000	146	125	16.6	20.0
Chlorobromomethane	Ave	0.2073	0.1889		22.8	25.0	-8.9	20.0
Tetrahydrofuran	Ave	0.1215	0.1371		141	125	12.8	20.0
Chloroform	Ave	0.6213	0.5721	0.2000	23.0	25.0	-7.9	20.0
1,1,1-Trichloroethane	Ave	0.5024	0.4553	0.1000	22.7	25.0	-9.4	20.0
Cyclohexane	Ave	0.5271	0.4936	0.1000	23.4	25.0	-6.4	20.0
Carbon tetrachloride	Ave	0.4491	0.4198	0.1000	23.4	25.0	-6.5	20.0
1,1-Dichloropropene	Ave	0.4623	0.4213		22.8	25.0	-8.9	20.0
Benzene	Ave	1.323	1.242	0.5000	23.5	25.0	-6.1	20.0
1,2-Dichloroethane	Ave	0.4859	0.4670	0.1000	24.0	25.0	-3.9	20.0
Trichloroethene	Ave	0.3478	0.3180	0.2000	22.9	25.0	-8.6	20.0
Methylcyclohexane	Ave	0.5658	0.5127	0.1000	22.7	25.0	-9.4	20.0
1,2-Dichloropropane	Ave	0.3234	0.3148	0.1000	24.3	25.0	-2.7	20.0
Dibromomethane	Ave	0.2396	0.2263	0.1000	23.6	25.0	-5.6	20.0
Bromodichloromethane	Ave	0.4604	0.4531	0.2000	24.6	25.0	-1.6	20.0
2-Chloroethyl vinyl ether	Ave	0.2052	0.2351		143	125	14.6	20.0
cis-1,3-Dichloropropene	Ave	0.4909	0.5331	0.2000	27.1	25.0	8.6	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7650	0.8217	0.1000	134	125	7.4	20.0

**APPENDIX E**

**WELL INSPECTION FORMS**

# MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 11176716

DATE: 10/16/2013

TIME: 14:12

WELL ID: MW-03

## EXTERIOR INSPECTION

PROTECTIVE CASING: OK, stick-up

LOCK/HASP: OK

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: None

OTHER: Thick vegetation surrounding well.

## INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 2.84

DEPTH TO BOTTOM: 17.26 HARD/SOFT BOTTOM Soft

OTHER: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

SIGNATURE INSPECTOR: Tim J. Kozel SIGNATURE APPROVAL: C. J. Smith

LOCK KEY # 2246



# MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 11176716

DATE: 10/16/2013

TIME: 13:18

WELL ID: MW-4

## EXTERIOR INSPECTION

PROTECTIVE CASING: OK, stick-up

LOCK/HASP: OK

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: None

OTHER: \_\_\_\_\_

## INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 2.50

DEPTH TO BOTTOM: 17.54 HARD/SOFT BOTTOM Soft

OTHER: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

SIGNATURE INSPECTOR: Tom H. H. H. SIGNATURE APPROVAL: \_\_\_\_\_

LOCK KEY # 2246

# MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 11176716

DATE: 10/16/2013

TIME: 11:43

WELL ID: MW-16

## EXTERIOR INSPECTION

PROTECTIVE CASING: OK, stick-up

LOCK/HASP: OK

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: None

OTHER: \_\_\_\_\_

## INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 3.01

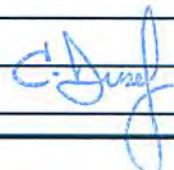
DEPTH TO BOTTOM: 11.62 HARD/SOFT BOTTOM Soft

OTHER: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

SIGNATURE INSPECTOR: Tom J. Kavel SIGNATURE APPROVAL: \_\_\_\_\_

LOCK KEY # 2246





# MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 11176716

DATE: 10/15/2013

TIME: 16:10

WELL ID: SW-01S

## EXTERIOR INSPECTION

PROTECTIVE CASING: OK, stick-up

LOCK/HASP: OK

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: None

OTHER: \_\_\_\_\_

## INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 19.55

DEPTH TO BOTTOM: 28.39 HARD/SOFT BOTTOM Hard

OTHER: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

SIGNATURE INSPECTOR: Tom Alkharil SIGNATURE APPROVAL: C. D. Smith

LOCK KEY # 2246

# MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 11176716

DATE: 10/15/2013

TIME: 15:00

WELL ID: SW-01D

## EXTERIOR INSPECTION

PROTECTIVE CASING: OK, stick-up

LOCK/HASP: OK

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: None

OTHER: \_\_\_\_\_

## INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 67.89

DEPTH TO BOTTOM: 83.87 HARD/SOFT BOTTOM Soft

OTHER: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

SIGNATURE INSPECTOR: Tim Offenberg SIGNATURE APPROVAL: C. Dusef

LOCK KEY # 2246



# MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 11176716

DATE: 10/15/2013

TIME: 12:39

WELL ID: SW-02S

## EXTERIOR INSPECTION

PROTECTIVE CASING: OK, stick-up

LOCK/HASP: OK

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: None

OTHER: \_\_\_\_\_

## INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 12.40

DEPTH TO BOTTOM: 20.04 HARD/SOFT BOTTOM Soft

OTHER: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

SIGNATURE INSPECTOR: Tom Ighaviet SIGNATURE APPROVAL: C. Duff

LOCK KEY # 2246

# MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 11176716

DATE: 10/15/2013

TIME: 13:57

WELL ID: SW-02D

## EXTERIOR INSPECTION

PROTECTIVE CASING: OK, stick-up

LOCK/HASP: OK

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: None

OTHER: \_\_\_\_\_

## INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 70.42

DEPTH TO BOTTOM: 79.19 HARD/SOFT BOTTOM Soft

OTHER: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

SIGNATURE INSPECTOR: Tom Sphar SIGNATURE APPROVAL: C. Duff

LOCK KEY # 2246



# MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 11176716

DATE: 10/15/2013

TIME: 11:37

WELL ID: SW-03S

## EXTERIOR INSPECTION

PROTECTIVE CASING: OK, flush mount

LOCK/HASP: OK

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: None

OTHER: \_\_\_\_\_

## INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 12.96

DEPTH TO BOTTOM: 18.81 HARD/SOFT BOTTOM Soft

OTHER: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

SIGNATURE INSPECTOR: Tim J. H. [Signature] SIGNATURE APPROVAL: \_\_\_\_\_

LOCK KEY # 2246

# MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 11176716

DATE: 10/16/2013

TIME: 10:18

WELL ID: SW-04S

## EXTERIOR INSPECTION

PROTECTIVE CASING: OK, flush mount

LOCK/HASP: OK

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: None

OTHER: \_\_\_\_\_

## INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 3.35

DEPTH TO BOTTOM: 8.20 HARD/SOFT BOTTOM Hard

OTHER: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

SIGNATURE INSPECTOR: Tim Koxil SIGNATURE APPROVAL: C. D. J.

LOCK KEY # 2246



# MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 11176716

DATE: 10/16/2013

TIME: 9:10

WELL ID: SW-04D

## EXTERIOR INSPECTION

PROTECTIVE CASING: OK, flush mount

LOCK/HASP: OK

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: None

OTHER: \_\_\_\_\_

## INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 8.4 psi = 19.38 ft above measuring point

DEPTH TO BOTTOM: 84.42 HARD/SOFT BOTTOM Soft

OTHER: \_\_\_\_\_

COMMENTS: Artesian well.

SIGNATURE INSPECTOR: Tim d'Amico SIGNATURE APPROVAL: C. D'Amico

LOCK KEY # 2246

**APPENDIX F**

**LANDFILL INSPECTION FORM**

# ROSE VALLEY LANDFILL SITE – POST CLOSURE

NYSDEC SITE NO. 6-22-017

## INSPECTION LOG SHEET

Date: October 16, 2013

Inspector: Chuck Duse

Weather: Sunny

Signature: C. Duse

Temperature: ~60° F

Company: URS Corp

Type: Winter Spring Summer Fall  
(Circle One)

Item Inspected	Maintenance Needed (Y/N)	Comments	Inspector's Initials
Drainage Channel	<u>N</u>	<u>good shape</u>	<u>CD</u>
Groundwater Monitoring Wells	<u>N</u>	<u>sprayed WD-40 into all M. well locks.</u>	<u>CD</u>
Perimeter Access Road	<u>Y</u>	<u>significant erosion is occurring in gravel access road which leads to landfill</u>	<u>CA</u>
Vegetative Cover	<u>Y</u>	<u>Mowing should be scheduled for June 2014</u>	<u>CA</u>
Repaired Vegetation	<u>N</u>	<u>N/A</u>	<u>CD</u>
Final Cover Layers (Cap Settlement, etc.)	<u>N</u>	<u>good condition</u>	<u>CD</u>
Gas Vents	<u>N</u>	<u>good condition</u>	
Fence and Gates	<u>N</u>	<u>Gates were repaired summer 2013</u>	<u>CD</u>
Other Items: (Specify) <u>access road on top of landfill</u>	<u>Y</u>	<u>erosion is occurring and fabric has been exposed</u>	<u>CD</u>
Other Items: (Specify) <u>site Joney Barriers entrance</u>	<u>Y</u>	<u>J. Barriers need to be repositioned and welded/fastened together</u>	<u>CD</u>

Install New barriers  
± 120 LF to restrict  
ATV access

Y

prevent erosion from  
ATV traffic

CD



**TABLE 2**  
**LANDFILL CAP AND SITE STORMWATER MANAGEMENT SYSTEM**  
**MINIMUM CHECKLIST FOR ROUTINE INSPECTIONS**

Component	Item	Number/Location/ Area Checked	Condition
Cap Grading	Obvious subsidences, depressions, or cracks <i>None</i> Evidence of ponded water <i>None</i> Stressed vegetation <i>None</i> Signs of erosion occurring at a localized change in grade Evidence of Breaching of toe <i>None</i> Animal burrows <i>None</i> Other:	<i>entire cap was inspected</i>	<i>only erosion of concern is located north of cap between the North Detention Pond and the ATV hill. Took photos. In 2013 and July + Oct. 2013. This needs to be monitored - could be difficult to repair</i>
Cap Vegetation and Repaired Vegetation	Areas of sparse, dead, or missing vegetation <i>None</i> Small rill erosion <i>No</i> Animal burrows <i>No</i> Other:	<i>entire cap</i>	<i>Cap was mowed in July 2013. Very good stand of green vegetation. Will need mowing in June 2014</i>
Drainage Channel	Missing or displaced stones <i>None</i> Woody vegetation growing in the stones or grass cover <i>minor</i>	<i>all channels were inspected</i>	<i>Minor wood &amp; brush growing through stones in drainage channel</i>
GW Monitoring Wells	Condition of lock and cover Signs of damage to casing or collar Condition of weep hole from casing Evidence of tampering Other:	<i>All monitoring wells were inspected - see M-well inspection forms</i>	<i>WD-40 All locks - 10 M-wells were sampled - and water level measurements were made</i>

Fences, Gates and Perimeter Access Road	Cutting or bending of fence fabric <i>No</i> Missing locks, hinges, etc. from gates <i>Gates repaired</i> Motorbike or snowmobile tracks <i>yes</i> Shotgun shell casings <i>no</i> Beer cans or other trash Other signs of access or vandalism Condition of access road surface Other:	Fence gates were damaged by vandals and repaired 7/2/13 by URS subcontractor Brady Fence Co.	Some tire tracks from A+V riding observed on landfill access road - recent C+D and trash disposal - see photos
Gas Vent	Integrity of pipes and joints <i>good</i> Plumbness and differential settlement <i>OK</i> Obstruction of vents by bird, insect or animal nests <i>No</i> Corrosion or deterioration of pipes or supports <i>No</i> Localized browning of vegetation <i>None</i> Other:	Spot checked several gas vents	good condition

**APPENDIX G**

**2013 INTERMITTENT MAINTENANCE**

**CONSTRUCTION REPORTS**  
**AND**  
**PHOTO LOGS**





ROSE VALLEY LANDFILL  
NYSDEC SITE No. 6-22-017

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TEMPERATURE: 80's  
WIND: Still

SKIES: Overcast  
PRECIPITATION: Light Rain

Periodic site visit to observe and document the following:

1. General cap conditions and mowing which is occurring today.

URS arrives on-site at 10:15 A.M. Meet with Michael Mason of the NYSDEC.

The NYSDEC and I conducted an inspection of the landfill during mowing by Marcy Excavation Services (MES). During the inspection of the landfill, the NYSDEC and URS observed the following:

- Multiple erosion rills, approximately 12 inches deep and up to 12-inches wide were observed along the main access road entering the site from Rose Valley Road.
- Trash and asphalt have been illegally dumped near the jersey barriers along Military Road (Photos 1 and 2). Several tires have also been illegally dumped in the ravine north of the landfill along Military Road (Photo 3). Trespassers have removed the double swing gate panels from the gate located at the southwest corner of the landfill to gain access for all terrain vehicles (ATV) riding. One gate panel was found lying in the grass next to the gate opening (Photo 4). The second gate panel was found lying up against the northern perimeter fence (Photo 7).
- Multiple erosion rills, approximately 10 inches deep, were discovered along the access road on top of the landfill (Photos 5 and 6), and also along the access road west of the landfill (Figure 13).
- With the exception noted below, the cap and storm water management system appear to be in excellent condition. The stone lining of the swales and down-chutes is exceptionally clean, with no evidence of high flows at all. No leaf litter or other debris is present in the channel lining.
- As noted initially during the August 9, 2012 site inspection and observed during this current inspection, the diversion channel around the north side of the landfill is head cutting, so that there is now an approximately 6-foot high vertical discontinuity in the channel bottom at about the mid-point of the landfill. There appears to be no significant change to the extent of the head cutting since the August 9, 2012 site inspection.
- It appears that the head cutting has been stopped by the geotextile that underlay the downstream end of the channel armor, of which a length of about 10 feet has failed. It is unclear if this equilibrium will persist as the geotextile degrades. It is also unclear, even assuming that the head cutting has stopped, if the adjacent sides of the landfill will hold during run-off events. It was observed that the north bank of the channel appears to be eroding. Thus, the erosion is occurring on the side of the channel away from the landfill. If the head cutting continues, there could be significant erosion of and damage to the landfill cap. The situation can be monitored by noting the tree in the center of Photo 11.

URS is off-site at 2:00 P.M.

Based upon the observations during this inspection, URS recommend the following corrective actions be taken:

- The addition and grading of crushed stone to the main access road from Rose Valley Road to maintain access to the site.
- The addition and grading of crushed stone to the access road on top of the landfill.
- The replacement and securing of the double swing gate panels from the gate located at the southwest corner of the landfill.
- The placement of jersey barriers across the access road at the western access gate to the landfill to inhibit ATV traffic. The ATV traffic has caused erosion rills to form on the access road.
- The grading of the access road west of the landfill.
- The repair of the diversion channel around the north side of the landfill.

**PHOTO LOG – SEE ATTACHED 17 IMAGES.**

PREPARED BY:

Chuck Dusel

TITLE:

Project Manager



**Photo 1:** 07-10-13 Trash dumped on the northern side of the Jersey barrier between the barrier and Military Road.



**Photo 2:** 07-10-13 Trash and asphalt dumped along Military Road near the Jersey barrier.





**Photo 3:** 07-10-13 Tires continue to be discarded in ravine along Military Road. The NYSDEC had removed and disposed of several hundred discarded tires from this location. Note that the tires are slightly covered by silt and sand.



**Photo 4:** 07-10-13 The double swing gate located at the southwest corner of the landfill was removed. One side of the gate was found lying in the grass to the side of the gate opening.





**Photo 5:** 07-10-13 Looking northeast at top of landfill. Erosion rills approximately 10 inches deep are forming on the access road on top of the landfill.



**Photo 6:** 07-10-13 Looking southwest at top of landfill. Erosion rills approximately 10 inches deep are forming on the access road on top of the landfill.





**Photo 7:** 07-10-13 The double swing gate located at the southwest corner of the landfill was removed. One side of the gate was found lying against the western perimeter fence (center of picture).



**Photo 8:** 07-10-13 Looking downslope and east along the southern boundary of the landfill at the south stormwater detention pond.



**Photo 9:** 07-10-13 Looking west from the bottom of the landfill near the north stormwater management pond at a portion of the final cover that Marcy did not mow. Note that this is the area in which there were two slides during construction. Given the steepness of the slope, this area should be minimally maintained, only to correct any erosion that may occur (none was noted) and to remove woody vegetation.





**Photo 10:** 07-10-13 Marcy Excavation Services mowing the cap.



**Photo 11:** 07-10-13 Looking north at the approximate location of erosion (to the right of the tree) along the northern edge of the landfill.



**Photo 12:** 07-10-13 Looking north along the western perimeter fence and vandalism barrier.





**Photo 13:** 07-10-13 Looking east towards top of landfill. Traffic from all-terrain vehicles are causing erosion rills to form on the access road.



**Photo 14:** 07-10-13 Looking northeast at main all-terrain vehicle recreation area/hill in background.





**Photo 15:** 07-10-13 Camp fire locations were discovered near the main all-terrain vehicle recreation area/hill.



**Photo 16:** 07-10-13 Temporary shelter located at top of all-terrain vehicle recreation area/hill.



**Photo 17:** 07-10-13 Looking south across the landfill from on top of the all-terrain vehicle recreation area/hill.