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GROUNDWATER MONITORING REPORT
ASH LANDFILL
THIRD QUARTER 2002

Prepared for:

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK
and
U.S. ARMY CORPS OF ENGINEERS
HUNTSVILLE, ALABAMA

Prepared by:

PARSONS
30 Dan Road
Canton, Massachusetts

Contract Number DACA87-95-0031
Delivery Order #6
730769

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1 INTRODUCTION

This report summarizes results of Third Quarter 2002 (3Q 2002) groundwater sampling and monitoring activities at the Ash Landfill Operable Unit (Ash Landfill) of the Seneca Army Depot Activity (SEDA), Romulus, New York. The goal of groundwater monitoring at the Ash Landfill is to monitor the extent of the well-defined chlorinated ethene contaminant plume at this operable unit. This work was performed in accordance with the requirements of Delivery Order 0006 of Contract DACA87-95-D-0031, Optional Task No. 6.

Previously collected groundwater data is combined with information collected during the 3Q 2002 sampling event to evaluate flow and chemistry in the shallow groundwater aquifer at the Ash Landfill. Section 2.0 provides a summary of quarterly monitoring activities, Section 3.0 provides a summary of monitoring results, and Section 4.0 summarizes the results and conclusions drawn from the 3Q 2002 sampling and monitoring event.

2 QUARTERLY MONITORING ACTIVITIES

3Q 2002 sampling and monitoring activities at the Ash Landfill consisted of measurements of groundwater elevations at 46 locations, field measurements of groundwater physical and chemical properties at 10 locations, and sample collection and laboratory analysis at 11 locations. A description of these activities is provided below.

2.1 GROUNDWATER ELEVATION MEASUREMENTS

From August 15 through August 16, 2002, Parsons measured the depth to groundwater at 46 monitoring wells in the overburden aquifer at the Ash Landfill. The depth to groundwater was measured from the top of the well casing using an electronic water level indicator. Groundwater elevations were then calculated by subtracting the depth to groundwater from the surveyed elevation of the top of each well casing.

2.2 GROUNDWATER SAMPLING

From August 15 through August 16, 2002, Parsons collected groundwater samples from ten monitoring wells and one farmhouse well. Groundwater samples were collected following EPA Region II low-flow groundwater sampling procedures. The selected monitoring wells were purged and sampled using bladder pumps and dedicated Teflon® tubing. The shallow aquifer well located outside the farm house was sampled using a new certified clean Teflon bailer.

2.3 GROUNDWATER ANALYSES

Table 2-1 contains the groundwater quality-sampling matrix for the 3Q 2002 sampling event. As shown in **Table 2-1**, groundwater quality measurements were performed on samples from the same 11 locations that were described in Section 2.2. **Table 2-1** also lists the laboratory analyses performed on the seven quality assurance/quality control (QA/QC) samples that were part of this sampling event. Field parameters (groundwater temperature, pH, specific conductivity, dissolved oxygen (DO), oxidation-reduction potential (ORP), turbidity, sulfide and ferrous iron) were measured during well purging and recorded when a particular field parameter was observed to stabilize. Field parameter stabilization marked the completion of the well purging procedure, and groundwater samples for laboratory analysis were therefore collected immediately following stabilization and recording of the field parameters. A Model U-22 Water Quality Monitoring System with flow cell (Horiba, Ltd., Kyoto, Japan) was used to measure groundwater temperature, pH, specific conductivity, DO, ORP, and turbidity. A Model DR/700 colorimeter (Hach Company, Loveland, CO) was used to measure sulfide and ferrous iron.

Groundwater samples were collected and sent to Severn Trent Laboratories (STL; Colchester, VT) for analysis of volatile organic compounds (VOCs). VOC concentrations were measured using USEPA Methods 524.2 and 8260B. The Missouri River Division (MRD) of the US Army Corps of Engineers (USACOE) analyzed one QA sample (MWT-6) for VOCs (Method 524.2 only).

3 QUARTERLY MONITORING RESULTS

3.1 GROUNDWATER ELEVATION CONDITIONS

Table 3-1 contains historical groundwater table elevation information on 60 monitoring wells at the Ash Landfill. **Table 3-1** also contains the calculated Mean Sea Level (MSL) groundwater elevations for the 48 monitoring wells sampled during the 3Q 2002 sampling event. Of the 48 overburden monitoring wells that were sampled, six were found to be dry. The saturated thickness at monitoring wells in and around the permeable reactive barrier ranged between 1.74 ft (MWT-11) and 3.72 ft (MWT-7). The saturated thicknesses are significantly lower than those recorded during the April 2002 sampling round. Based on a review of the historical data of the 60 monitoring wells listed in **Table 3-1**, the average seasonal variation in groundwater elevation is 6 ft and the maximum-recorded seasonal variation in groundwater elevation is 13.52 ft (MW-50D). Appendix A contains a summary of all groundwater elevation data collected at the Ash Landfill between the 1995 and 3Q 2002.

Figure 3-1 depicts a groundwater elevation contour map for the Ash Landfill Operable Unit that was drawn using 3Q 2002 groundwater elevation data. The groundwater flow direction is generally to the west with an average horizontal hydraulic gradient of approximately 0.02 $^{ft}/_{ft}$.

The 3Q 2002 groundwater elevation data are consistent with recorded groundwater elevations at the Ash Landfill site at this time of the year in previous years. The elevations near the well show that the groundwater flows through the wall at all locations during low flow conditions. During the wetter season in April 2002, there was actually a slight flow back into the wall in the center near MWT-4, 5 and 6.

3.2 GROUNDWATER FIELD PARAMETER RESULTS

Table 3-2 provides a summary of all field measurements (groundwater temperature, pH, specific conductivity, DO, ORP, turbidity, sulfide, and ferrous iron) for the 10 monitoring wells that were sampled during 3Q 2002. Field parameter measurements were not obtained during the groundwater sampling of the farmhouse well. The values presented were recorded after parameter stabilization and immediately prior to groundwater collection for laboratory sampling.

In general, field measurements of DO, ORP and pH during 3Q 2002 sampling were consistent with previous sampling events. Dissolved oxygen concentrations for the 3Q 2002 sampling event ranged from 0.56 mg/L (PT-24) to 3.40 mg/L (MWT-7). Groundwater ORP values for the 10 wells monitored during this sampling event range between -35 mV (MWT-9) and +317 mV (MWT-11). The average ORP for this round of sampling was +144.4 mV. The average ORP for 3Q 2002 is higher than the averages calculated for 2Q 2002 (+98.3), 3Q 2001 (+69.5 mV), 4Q 1999 (+50.78 mV) and 1Q 2000 (+64.6 mV). Groundwater pH measurements ranged from 6.7 to 9.75.

3.3 GROUNDWATER ANALYTICAL RESULTS

Groundwater analytical results are presented in **Tables 3-3 and 3-4**. VOC results from eleven samples are reported in **Table 3-3**. **Table 3-4** provides a summary of only those VOCs that were detected. Results of 3Q 2002 monitoring for trichloroethene (TCE) and cis-1,2 dichloroethene (DCE) concentrations are shown by location in **Figure 3-2**. The maximum measured concentration of TCE in groundwater was 540 µg/L at MWT-7. The maximum measured concentration of DCE in groundwater was 170 µg/L at MWT-9.

In the eight monitoring wells sampled around the permeable reactive barrier, the maximum measured TCE concentration was 540 µg/L TCE at monitoring well MWT-7. Monitoring well MWT-7 is located on the upgradient side of the barrier, as shown on **Figure 3-2**. The maximum measured DCE concentration in wells near the permeable reactive barrier was 170 DCE µg/ L at MWT-9. Monitoring well MWT-9 is located approximately 12 feet downgradient of both MWT-7 and 6 feet downgradient of the permeable reactive barrier, as shown on **Figure 3-2**. Detectable levels of DCE were found at all four monitoring wells that are immediately downgradient of the permeable reactive barrier (MWT-3, MWT-6, MWT-9, and PT-24). TCE was found in all wells except MWT-10 and BN-S. The maximum and minimum TCE concentrations in these four wells were 140 µg/ L at MWT-9 and 0.53 µg/L at MWT-6, respectively. The maximum and minimum DCE concentrations in these four wells were 170

µg/ L at MWT-9 and 21 µg/L at MWT-3 and MWT-6, respectively. No detectable levels of chlorinated ethenes were found in groundwater samples from the farmhouse well (BN-S). DCE and TCE were detected in MW-28 at concentrations of 17 µg/L and 20 µg/L, respectively.

Historical groundwater monitoring data from wells PT-12A, PT-18, MW-44A, MW-28, MW-30, and PT-24 are presented in **Figures 3-3, 3-4, 3-5, 3-6, 3-7**, and **3-8**, respectively. The graphs for PT-12A, PT-18, MW-30 and MW-44A were not updated since these wells were not sampled during 3Q 2002. These figures illustrate the seasonal and historical trends for TCE and DCE concentrations in monitoring wells that were sampled during previous monitoring events. As shown in **Figure 3-3**, TCE and DCE concentrations at PT-12A have been observed to vary seasonally, with the maximum concentrations observed in the third quarter, and minimum concentrations observed in the first quarter of each year. As shown in **Figure 3-4**, TCE and DCE concentrations at PT-18 were observed to decrease significantly following an Interim Removal Measure (IRM) that was initiated at the Ash Landfill in August 1994 and completed in June 1995. As with PT-12A, recent TCE and DCE concentrations have also been observed to vary seasonally, with the maximum concentrations observed in the third quarter. **Figures 3-5A** depicts historic concentrations of TCE, DCE, and vinyl chloride for all monitoring events at MW-44A since July 1993. **Figure 3-5B** depicts historic concentrations of TCE, DCE, and vinyl chloride for all monitoring events since December 1994 on a smaller scale so that variation in chlorinated ethane concentrations can be more readily observed. The reason for the marked decrease in chlorinated VOC concentrations at MW-44A between the November 1993 and December 1994 sampling events is a result of the IRM. As shown in **Figure 3-6**, TCE and DCE concentrations at MW-28 appear to be stabilizing with a slight overall downward trend observed. As shown in **Figure 3-7**, TCE and DCE have not been detected at MW-30 since October 1999. As shown in **Figure 3-8**, the 2Q 2002 DCE concentration was the lowest measured at this well (54 ug/L). The DCE concentration increased in 3Q 2002 slightly, however, a general trend downward is apparent. The TCE concentrations have generally been consistent over the last three years. Appendix C of this report contains a summary of groundwater monitoring data collected in recent sampling events.

3.4 RESULTS INTERPRETATION AT THE PERMEABLE REACTIVE BARRIER

During the 3Q 2002 sampling event, samples were collected from three well pairs at the existing permeable reactive barrier (PRB). The three well pairs are MW-1 and MW-3, MW-4 and MW-6, and MW-7 and MW-9. As shown on **Figure 3-9**, wells MW-1, MW-4, and MW-7 are located immediately upgradient of the PRB and wells MW-3, MW-6, and MW-9 are located immediately downgradient of the PRB. **Table 3-5** presents TCE and DCE concentrations for the three sampling events at the downgradient wells. The purpose of sample collection at these points was to evaluate whether the PRB was continuing to chemically remove chlorinated ethenes from groundwater at the Ash Landfill. Measurements of chlorinated ethenes at the PRB showed mixed results. The measured TCE and DCE concentrations at downgradient MW-3 (TCE = 3.5 µg/L; DCE = 21 µg/L) were slightly lower than the concentrations at upgradient MW-1 (TCE = 6.0 µg/L; DCE = 25 µg/L). This suggests that some

chemical destruction of chlorinated ethenes is occurring in this portion of the wall. Residual concentrations downgradient of the wall suggest that existing TCE and DCE concentrations in the groundwater are present downgradient of the wall. In the next well cluster (MW-4/MW-6), TCE and DCE concentrations measured at downgradient MW-6 (TCE = 0.53μg/L ; DCE = 21μg/L) were significantly lower than the concentrations measured at upgradient MW-4 (TCE = 3.7μg/L; DCE = 95μg/L), indicating that the PRB has continued to remove chlorinated ethenes from groundwater in this portion of the wall. In the final well cluster (MW-7/MW-9), the concentration of TCE was observed to decrease from 540μg/L at MW-7 to 140 μg/L at MW-9, but the DCE concentration was observed to increase from 32μg/L at MW-7 to 170μg/L at MW-9. This data from MW-7 and MW-9 demonstrates that the PRB has continued to chemically reduce TCE concentrations, but that there is inadequate retention time or that the PRB does not contain an adequate iron content to remove the intermediate product (DCE) that is produced during TCE reduction to ethane or ethene. Subsurface anomalies in this area may lead to higher permeable zones that reduce retention times.

Performance of the PRB can also be evaluated by examining other geochemical parameters that were measured at the PRB. In general, the physical and chemical parameter trends observed at the existing PRB are consistent with observations at other sites where PRBs have been installed for treatment of chlorinated ethenes in groundwater. That is, the PRB is producing an environment downgradient of the PRB that is more reduced than conditions on the upgradient side. For example, the decreased Oxidation-Reduction Potential (ORP) is an indicator of a reduction in the redox condition downgradient of the wall. The observed decreases in specific conductivity are also consistent with observations the PRB is continuing to react with groundwater. It should be noted that these observations should be confirmed with subsequent quarterly groundwater sampling.

4 SUMMARY AND CONCLUSIONS

In summary, the 3Q 2002 groundwater monitoring and sampling event found:

1. Groundwater flow direction, and horizontal gradients are consistent with previous data collected in the area.
2. Groundwater elevations were low as expected for the summer.
3. Groundwater analytical results are generally consistent with seasonal trends in the October 1999, January 2000, September 2001, and April 2002 sampling events.
4. There does appear to be a slight downward trend in TCE and DCE concentrations in MW-28, MW-30 and PT-24. MW-28 and MW-30 are located upgradient of the wall and PT-24 is located downgradient of the wall.
5. TCE and DCE concentrations from monitoring wells along the permeable reactive barrier have shown little variation between the last four sampling events.
6. The combined observed changes in TCE concentrations, DCE concentrations, reaction endproduct concentrations, redox indicator concentrations, and other chemical and physical

parameters between wells upgradient and downgradient of the existing PRB generally indicate that the iron in the PRB is continuing to react with site groundwater and reductively dechlorinate chlorinated ethenes at the Ash Landfill.

TABLE 2-1
DRAFT GROUNDWATER SAMPLING MATRIX - THIRD QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

Location	Sample ID	QC Code	Well Depth (ft)	Pump Intake	Field Parameters							Lab Parameters				
					pH	Spec Cond	ORP	DO	Turbidity	Sulfide	Fe^{2+}	VOC 524.2	VOC CLP (8260B)	Nitrate/ Nitrite	Alkalinity / Sulfate/ Chlorides	Hydrogen
Wells																
	ARD2168	SA	na	na								X				
	No Sample	SA	--	na												
	No Sample	SA	--	na												
ring Wells																
	ARD2177	SA	10.39	9.4	X	X	X	X	X	X	X		X			
	No Sample	SA	--	--												
	No Sample	SA	--	--												
	ARD2180	SA	11.88	10.9	X	X	X	X	X	X	X		X			
Reactive Barrier Monitoring Wells																
	TR2091	SA	9.75	9.5	X	X	X	X	X	X	X	X				
	TR2092	SA	10	9.0	X	X	X	X	X	X	X	X				
	TR2093	SA	12.28	12.0	X	X	X	X	X	X	X	X				
	TR2094	SA	12.42	11.4	X	X	X	X	X	X	X	X				
	TR2095	SA	13.92	13.4	X	X	X	X	X	X	X	X				
	TR2096	SA	14.08	13.6	X	X	X	X	X	X	X	X				
	TR2097	SA	8.95	8.5	X	X	X	X	X	X	X	X				
	TR2098	SA	9.95	9.5	X	X	X	X	X	X	X	X				
ples																
IWT-6)	TR2099	DU	12.42	11.4	X	X	X	X	X	X	X	X				
T-24)	ARD2181	DU	11.88	10.9	X	X	X	X	X	X	X		X			
	TR2095MS	MS	13.92	13.4	X	X	X	X	X	X	X	X				
7)	TR2095MSD	MSD	13.92	13.4	X	X	X	X	X	X	X	X				
	TR0037	RB	na	na								X				
	TR0038	TB	na	na								X				
6) (QA-LIMS# 6463)	TR2084MRD	SA	12.42	10.4	X	X	X	X	X	X	X	X				

indicate sample or parameter not collected due to low water conditions or low recovery rates
o
rding to EPA Reion II low-flow sampling procedures

DU - Duplicate
MS - Matrix Spike
MSD - Matrix Spike Duplicate

MRD - Missouri River Division ACOE

TABLE 3-1
GROUNDWATER ELEVATION DATA - THIRD QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

Monitoring Well	Top of Riser Elevation (ft)	3Q 2002 Data				Historical Data			
		Date Measured	Saturated Thickness (ft)	Depth to Groundwater (ft)	Water Level Elevation (ft)	Groundwater Elevation (ft)			Well Depth (ft)
						Maximum	Minimum	Range	
PT-10	681.52	08/15/2002	37.66	8.70	672.82	676.90	671.02	5.88	46.36
PT-11	658.22	08/15/2002	9.25	10.30	647.92	654.03	647.79	6.24	19.55
PT-12A	652.15	08/15/2002	3.87	9.51	642.64	649.01	642.26	6.75	13.38
PT-15	637.76	08/15/2002	9.40	10.10	627.66	633.74	627.38	6.36	19.50
PT-16	637.51	08/15/2002	3.89	7.15	630.36	634.85	629.83	5.02	11.04
PT-17	640.14	08/15/2002	0.90	10.75	629.39	635.85	629.05	6.80	11.65
PT-18	656.68	08/15/2002	3.07	8.63	648.05	652.28	646.30	5.98	11.70
PT-19	645.26	08/15/2002	1.45	10.25	635.01	643.09	635.01	8.08	11.70
MW-20	647.28	08/15/2002		Dry		642.34	637.41	4.93	11.80
MW-21A	647.73	08/15/2002	9.21	10.25	637.48	643.84	637.22	6.62	19.46
MW-22	648.61	08/15/2002	0.96	10.85	637.76	644.30	637.51	6.79	11.81
PT-23	641.58	NA	NA	Not Measured		638.14	632.35	5.79	12.08
PT-24	636.40	08/15/2002	4.53	7.35	629.05	632.76	627.99	4.77	11.88
PT-25	637.09	08/15/2002	0.58	11.45	625.64	633.51	625.64	7.87	12.03
PT-26	614.64	NA	NA	Not Measured		611.60	601.53	10.07	14.00
MW-27	639.32	08/15/2002	1.69	8.85	630.47	634.88	630.09	4.79	10.54
MW-28	637.21	08/15/2002	2.79	7.60	629.61	632.57	628.71	3.86	10.39
MW-29	637.31	08/15/2002	0.99	9.55	627.76	632.10	627.30	4.80	10.54
MW-30	640.32	08/15/2002		Dry		636.38	629.88	6.50	10.52
MW-31	636.70	08/15/2002		Dry		634.22	627.02	7.20	10.35
MW-32	641.68	08/15/2002		Dry		637.84	632.70	5.14	10.37
MW-33	639.56	08/15/2002		Dry		635.65	629.72	5.93	10.39
MW-34	632.89	NA	NA	Not Measured		630.15	622.36	7.79	18.15
MW-35D	631.82	NA	NA	Removed		629.44	624.62	4.82	56.64
MW-36	631.79	NA	NA	Removed		629.47	622.26	7.21	16.58
MW-37	632.89	NA	NA	Not Measured		630.65	625.77	4.88	13.62
MW-38D	637.90	08/15/2002	24.44	7.80	630.1	635.39	628.99	6.40	32.24
MW-39	659.54	NA	NA	Not Measured		657.84	650.47	7.37	11.89
MW-40	659.30	NA	NA	Not Measured		655.85	650.16	5.69	14.71
MW-41D	694.02	NA	NA	Not Measured		687.92	685.21	2.71	47.02
MW-42D	683.04	NA	NA	Not Measured		680.67	671.39	9.28	47.38
MW-43	657.73	08/15/2002	0.52	6.95	650.78	655.13	650.73	4.40	7.47
MW-44A	653.85	08/15/2002	1.81	10.67	643.18	650.37	642.42	7.95	12.48
MW-45	650.90	08/15/2002	0.74	7.60	643.3	648.16	643.12	5.04	8.34
MW-46	650.41	08/15/2002	2.31	9.14	641.27	647.53	641.12	6.41	11.45
MW-47	628.06	08/15/2002	0.39	8.17	619.89	625.76	619.88	5.88	8.56
MW-48	648.32	08/15/2002	3.65	7.85	640.47	645.46	639.94	5.52	11.50
MW-49D	650.50	08/15/2002	28.59	8.95	641.55	647.62	641.55	6.07	37.54
MW-50D	649.88	08/15/2002	50.96	8.70	641.18	647.40	633.88	13.52	59.66
MW-51D	628.24	NA	NA	Not Measured		628.24	620.49	7.75	36.87
MW-52D	626.35	NA	NA	Not Measured		624.17	618.67	5.50	59.36
MW-53	639.41	08/15/2002	0.45	9.90	629.51	633.84	629.46	4.38	10.35
MW-54D	639.11	08/15/2002	24.54	10.45	628.66	633.43	628.66	4.77	34.99
MW-55D	639.16	08/15/2002	47.98	10.20	628.96	633.41	627.96	5.45	58.18
MW-56	630.51	08/15/2002	0.00	Dry		627.56	621.66	5.90	6.88
MW-57D	629.82	08/15/2002	29.14	5.95	623.87	628.13	621.76	6.37	35.09
MW-58D	629.69	08/15/2002	51.54	5.75	623.94	628.37	623.94	4.43	57.29

TABLE 3-1
GROUNDWATER ELEVATION DATA - THIRD QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

Monitoring Well	Top of Riser Elevation (ft)	3Q 2002 Data				Historical Data			
		Date Measured	Saturated Thickness (ft)	Depth to Groundwater (ft)	Water Level Elevation (ft)	Groundwater Elevation (ft)			Well Depth (ft)
						Maximum	Minimum	Range	
MW-59	656.83	NA	NA	Not Measured		654.93	649.85	5.08	9.10
MW-60	660.15	08/15/2002	2.30	7.20	652.95	658.20	652.23	5.97	9.50
MWT-1	637.24	08/15/2002	2.55	7.20	630.04	632.47	629.06	3.41	9.75
MWT-2	637.19	08/15/2002	2.30	7.25	629.94	632.27	629.94	2.33	9.55
MWT-3	637.31	08/15/2002	2.65	7.35	629.96	632.20	628.99	3.21	10.00
MWT-4	637.68	08/15/2002	3.68	8.75	628.93	632.47	627.28	5.19	12.43
MWT-5	637.72	08/15/2002	2.90	9.05	628.67	632.45	628.67	3.78	11.95
MWT-6	637.59	08/15/2002	3.28	9.00	628.59	632.38	627.24	5.14	12.28
MWT-7	638.34	08/15/2002	3.72	10.25	628.09	632.87	626.58	6.29	13.97
MWT-8	638.40	08/15/2002	2.10	10.45	627.95	632.58	627.95	4.63	12.55
MWT-9	638.08	NA	NA	Not Measured		632.42	626.04	6.38	14.14
MWT-10	636.07	08/15/2002	3.20	5.75	630.32	632.23	629.55	2.68	8.95
MWT-11	635.90	08/15/2002	1.74	8.21	627.69	632.95	626.92	6.03	9.95

TABLE 3-2
FIELD MONITORING RESULTS - AUGUST 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

Well ID	Sample Number	DO (mg/l)	Temp (deg.C)	Spec. Cond. (S/m)	pH (units)	ORP (mV)	Turbidity (ntu)	Fe+2 (mg/l)	Sulfide (mg/l)
PT-24	ARD2180	0.56	16.8	0.590	7.30	5	10.50	0.02	0.010
MW-28	ARD2177	1.20	18.3	0.676	6.98	192	4.70	0.20	0.198
MW-30	NA	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-56	NA	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
FH-D	NA	NA	NA	NA	NA	NA	NA	NA	NA
FH-S	NA	NA	NA	NA	NA	NA	NA	NA	NA
BN-S	ARD2176	NA	NA	NA	NA	NA	NA	NA	NA
MWT-1	TR2091	2.40	15.8	0.707	7.10	144	14.10	0.06	0.030
MWT-3	TR2092	0.80	16.3	0.562	7.17	146	9.00	0.00	0.027
MWT-4	TR2093	2.68	15.5	1.110	6.86	244	18.50	0.01	0.032
MWT-6	TR2094	0.82	16.1	0.487	7.46	6	9.80	0.04	0.019
MWT-7	TR2095	3.40	14.8	0.861	6.71	285	3.10	0.06	0.029
MWT-9	TR2096	0.66	16.7	0.553	7.31	-35	16.80	0.21	0.049
MWT-10	TR2097	0.65	17.8	0.093	9.75	140	6.70	0.06	0.037
MWT-11	TR2098	1.24	18.5	0.785	6.77	317	16.20	DRY	DRY

ND = Not Detected
NA = Not Analyzed

TABLE 3-3
RESULTS OF VOC ANALYSIS - THIRD QUARTER 2002
GROUINDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

			ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
			BN-S	MW-28	MWT-1	MWT-10	MWT-11
			GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
			ARD2176	ARD2177	TR2091	TR2097	TR2098
			0	7.6	7.2	5.75	8.21
			0	10.39	9.75	8.95	9.95
			8/16/02	8/16/02	8/15/02	8/16/02	8/16/02
			SA	SA	SA	SA	SA
			ASH REMEDIAL	ASH REMEDIAL	ASH TRENCH	ASH TRENCH	ASH TRENCH
			18	18	18	18	18
eter	Units	ction Lev	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
-Tetrachloroethane	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
richloroethane	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
-Tetrachloroethane	UG/L		0.5 U	1 U	0.65 U	0.5 U	0.5 U
richloro-1,2,2-Trifluoroethane	UG/L	5		1 U			
richloroethane	UG/L	1	0.5 U	1 U	0.65 U	0.5 U	0.5 U
hloroethane	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
hloroethene	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
hloropropene	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
richlorobenzene	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
richloropropane	UG/L	0.04	0.5 U	1 U	0.65 U	0.5 U	0.5 U
richlorobenzene	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
rimethylbenzene	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
romo-3-chloropropane	UG/L	0.04	0.5 U	1 U	0.65 U	0.5 U	0.5 U
romoethane	UG/L	0.0006	0.5 U	1 U	0.65 U	0.5 U	0.5 U
hlorobenzene	UG/L	3	0.5 U	1 U	0.65 U	0.5 U	0.5 U
hloroethane	UG/L	0.6	0.5 U	1 U	0.65 U	0.5 U	0.5 U
hloroethene (total)	UG/L	70					
hloropropane	UG/L	1	0.5 U	1 U	0.65 U	0.5 U	0.5 U
rimethylbenzene	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
hlorobenzene	UG/L	3	0.5 U	1 U	0.65 U	0.5 U	0.5 U
hloropropane	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
hlorobenzene	UG/L	3	0.5 U	1 U	0.65 U	0.5 U	0.5 U
xane	UG/L			50 R			
hloropropane	UG/L		0.5 U	1 U	0.65 U	0.5 U	0.5 U
roethylvinylether	UG/L			1 U			
rotoluene	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
propane	UG/L		10 U		13 U	10 U	10 U
e	UG/L		5 UJ	5 U	6.5 UJ	2 UJ	2.2 UJ
n	UG/L	5		5 R			
itrile	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
loride	UG/L	5	0.5 U	1 U	0.65 U	0.63	0.5 U
ne	UG/L	1	0.5 U	1 U	0.65 U	0.65	0.5 U
benzene	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
chloromethane	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
dichloromethane	UG/L	80	0.5 U	1 U	0.65 U	0.5 U	0.5 U
form	UG/L	80	0.5 U	1 U	0.65 U	0.5 U	0.5 U
hloride	UG/L	5	0.5 U		0.65 U	0.5 U	0.5 U
disulfide	UG/L		0.5 U	1 U	0.65 U	0.5 U	0.5 U
tetrachloride	UG/L	5	0.5 U	1 UJ	0.65 U	0.5 U	0.5 U
acetonitrile	UG/L		25 R		32 R	25 R	25 R

de indicates concentration above detection limit
de indicates concentration above action level

TABLE 3-3
RESULTS OF VOC ANALYSIS - THIRD QUARTER 2002
GROUINDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

			ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
			BN-S	MW-28	MWT-1	MWT-10	MWT-11
			GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
			ARD2176	ARD2177	TR2091	TR2097	TR2098
			0	7.6	7.2	5.75	8.21
			0	10.39	9.75	8.95	9.95
			8/16/02	8/16/02	8/15/02	8/16/02	8/16/02
			SA	SA	SA	SA	SA
			ASH REMEDIAL	ASH REMEDIAL	ASH TRENCH	ASH TRENCH	ASH TRENCH
			18	18	18	18	18
eter	Units	ction Lev	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
benzene	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
dibromomethane	UG/L	80	0.5 U	1 U	0.65 U	0.5 U	0.5 U
ethane	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
form	UG/L	7	0.5 U	1 U	0.65 U	0.5 U	0.5 U
prene	UG/L	5		1 U			
2-Dichloroethene	UG/L	5	0.5 U	16	25	0.6	0.5 U
3-Dichloropropene	UG/L	0.4	0.5 U	1 U	0.65 U	0.5 U	0.5 U
rodifluoromethane	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
romethyl methyl ketone	UG/L		10 R		13 R	10 R	10 R
benzene	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
ether	UG/L		0.5 U		0.65 U	0.5 U	0.5 U
methacrylate	UG/L		0.5 U	1 U	0.65 U	0.5 U	0.5 U
hlorobutadiene	UG/L	0.5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
hloroethane	UG/L	5	0.5 U		0.65 U	0.5 U	0.5 U
yl alcohol	UG/L			50 R			
pylbenzene	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
crylonitrile	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
l 2-propenoate	UG/L		0.5 U		0.65 U	0.5 U	0.5 U
l Tertbutyl Ether	UG/L		0.6	1 U	0.65 U	0.5 U	0.5 U
l bromide	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
l butyl ketone	UG/L		2.5 UJ	5 U	3.2 UJ	2.5 UJ	2.5 UJ
l chloride	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
l ethyl ketone	UG/L		5 R	5 R	6.5 R	5 R	5 R
l iodide	UG/L	5	0.5 U	1 UJ	0.65 U	0.5 U	0.5 U
l isobutyl ketone	UG/L		2.5 U	5 U	3.2 U	2.5 U	2.5 U
l methacrylate	UG/L	50	0.5 U	1 U	0.65 U	0.5 U	0.5 U
lene bromide	UG/L	5	0.5 UJ	1 UJ	0.65 UJ	0.5 UJ	0.5 UJ
lene chloride	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
halene	UG/L		0.5 U	1 U	0.65 U	0.5 U	0.5 U
enzene	UG/L	0.4	25 R		32 R	25 R	25 R
Xylene	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
chloroethane	UG/L	5	0.5 U		0.65 U	0.5 U	0.5 U
nitrile	UG/L		25 R	4 R	32 R	25 R	25 R
benzene	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
e	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
hloroethene	UG/L	5	0.5 UJ	1 U	0.65 UJ	0.5 UJ	0.5 UJ
ydrofuran	UG/L		2.5 U	14 U	3.2 U	2.5 U	2.5 U
e	UG/L	5	0.5 U	1 U	0.65 U	0.28 J	0.5 U
Xylenes	UG/L	5	0.5 U		0.65 U	0.5 U	0.5 U
Xylenes-A	UG/L			1 U			

ade indicates concentration above detection limit
ade indicates concentration above action level

TABLE 3-3
RESULTS OF VOC ANALYSIS - THIRD QUARTER 2002
GROUINDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

			ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
			BN-S	MW-28	MWT-1	MWT-10	MWT-11
			GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
			ARD2176	ARD2177	TR2091	TR2097	TR2098
			0	7.6	7.2	5.75	8.21
			0	10.39	9.75	8.95	9.95
			8/16/02	8/16/02	8/15/02	8/16/02	8/16/02
			SA	SA	SA	SA	SA
			ASH REMEDIAL	ASH REMEDIAL	ASH TRENCH	ASH TRENCH	ASH TRENCH
			18	18	18	18	18
neter	Units	ction Lev	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
-1,2-Dichloroethene	UG/L	5	0.5 U	0.3 J	0.65 U	0.5 U	0.5 U
-1,3-Dichloropropene	UG/L	0.4	0.5 U	1 U	0.65 U	0.5 U	0.5 U
-1,4-Dichloro-2-butene	UG/L		0.5 U	1 U	0.65 U	0.5 U	0.5 U
proethene	UG/L	5	0.5 U	20	6	0.5 U	J
profluoromethane	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
acetate	UG/L			1 U			
chloride	UG/L	2	0.5 U	1 U	0.65 U	0.5 U	0.5 U
4-Dichloro-2-butene	UG/L			1 U			
ylbenzene	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
protoluene	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
propyltoluene	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
utylbenzene	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U
utylbenzene	UG/L	5	0.5 U	1 U	0.65 U	0.5 U	0.5 U

ade indicates concentration above detection limit
ade indicates concentration above action level

TABLE 3-3
RESULTS OF VOC ANALYSIS - THIRD QUARTER 2002
GROUINDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

			ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
			MWT-3	MWT-4	MWT-6	MWT-6	MWT-7	MWT-9	PT-24	PT-24
			GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
			TR2092	TR2093	TR2094	TR2099	TR2095	TR2096	ARD2180	ARD2181
			7.35	8.75	9	9	10.25	11.48	7.35	7.35
			10	12.28	12.42	12.42	13.92	14.08	11.88	11.88
			8/15/02	8/15/02	8/15/02	8/15/02	8/15/02	8/16/02	8/15/02	8/15/02
			SA	SA	SA	SA	SA	SA	SA	SA
			ASH TRENCH	ASH TRENCH	ASH TRENCH	ASH TRENCH	ASH TRENCH	ASH TRENCH	ASH REMEDIAL	ASH REMEDIAL
			18	18	18	18	18	18	18	18
eter	Units	ction Lev	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
-Tetrachloroethane	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
richloroethane	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
-Tetrachloroethane	UG/L		0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
richloro-1,2,2-Trifluoroethane	UG/L	5							2.4 U	2.7 U
richloroethane	UG/L	1	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
hloroethane	UG/L	5	0.5 U	3 U	0.5	0.53	14 U	4.4 U	0.6 J	2.7 U
hloroethene	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
hloropropene	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
richlorobenzene	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
richloropropane	UG/L	0.04	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
richlorobenzene	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
rimethylbenzene	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
romo-3-chloropropane	UG/L	0.04	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
romoethane	UG/L	0.0006	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
hlorobenzene	UG/L	3	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
hloroethane	UG/L	0.6	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
hloroethene (total)	UG/L	70								2
hloropropane	UG/L	1	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
rimethylbenzene	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
hlorobenzene	UG/L	3	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
hloropropane	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
hlorobenzene	UG/L	3	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
xane	UG/L								120 R	140 R
hloropropane	UG/L		0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
oethylvinylether	UG/L								2.4 U	2.7 U
otoluene	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
propane	UG/L		10 U	61 U	10 U	10 U	280 U	88 U		
e	UG/L		5 UJ	30 UJ	5 UJ	5 UJ	140 UJ	44 UJ	J	9.4 J
n	UG/L	5							12 R	14 R
itrile	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
loride	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
e	UG/L	1	0.22 J	3 U	0.43 J	J	14 U	4.4 U	2.4 U	2.7 U
benzene	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
chloromethane	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
dichloromethane	UG/L	80	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
orm	UG/L	80	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
hloride	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U		
disulfide	UG/L		0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
tetrachloride	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 UJ	2.7 UJ
acetonitrile	UG/L		25 R	150 R	25 R	25 R	690 R	220 R		

de indicates concentration above detection limit
de indicates concentration above action level

TABLE 3-3
RESULTS OF VOC ANALYSIS - THIRD QUARTER 2002
GROUINDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

			ASH LANDFILL MWT-3 GROUNDWATER TR2092	ASH LANDFILL MWT-4 GROUNDWATER TR2093	ASH LANDFILL MWT-6 GROUNDWATER TR2094	ASH LANDFILL MWT-6 GROUNDWATER TR2099	ASH LANDFILL MWT-7 GROUNDWATER TR2095	ASH LANDFILL MWT-9 GROUNDWATER TR2096	ASH LANDFILL PT-24 GROUNDWATER ARD2180	ASH LANDFILL PT-24 GROUNDWATER ARD2181
			7.35	8.75	9	9	10.25	11.48	7.35	7.35
			10	12.28	12.42	12.42	13.92	14.08	11.88	11.88
			8/15/02	8/15/02	8/15/02	8/15/02	8/15/02	8/16/02	8/15/02	8/15/02
			SA ASH TRENCH	SA ASH TRENCH	SA ASH TRENCH	SA ASH TRENCH	SA ASH TRENCH	SA ASH TRENCH	SA ASH REMEDIAL	SA ASH REMEDIAL
			18	18	18	18	18	18	18	18
eter	Units	ction Lev	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
benzene	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
dibromomethane	UG/L	80	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
ethane	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
form	UG/L	7	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
prene	UG/L	5							2.4 U	2.7 U
2-Dichloroethene	UG/L	5	20	95	19	23	32	170	66	71
3-Dichloropropene	UG/L	0.4	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
rodifluoromethane	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
romethyl methyl ketone	UG/L		10 R	61 R	10 R	10 R	280 R	88 R		
benzene	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
ether	UG/L		0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U		
methacrylate	UG/L		0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
hlorobutadiene	UG/L	0.5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
hloroethane	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U		
yl alcohol	UG/L								120 R	140 R
pylbenzene	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
crylonitrile	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
2-propenoate	UG/L		0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U		
Tertbutyl Ether	UG/L		0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
bromide	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
butyl ketone	UG/L		2.5 UJ	15 UJ	2.5 UJ	2.5 UJ	69 UJ	22 UJ	12 U	14 U
chloride	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
ethyl ketone	UG/L		5 R	30 R	5 R	5 R	140 R	44 R	12 R	14 R
iodide	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 UJ	2.7 UJ
isobutyl ketone	UG/L		2.5 U	15 U	2.5 U	2.5 U	69 U	22 U	12 U	14 U
methacrylate	UG/L	50	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
lene bromide	UG/L	5	0.5 UJ	3 UJ	0.5 UJ	0.5 UJ	14 UJ	4.4 UJ	2.4 UJ	2.7 UJ
lene chloride	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	1.7 J	1.9 J
halene	UG/L		0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
enzene	UG/L	0.4	25 R	150 R	25 R	25 R	690 R	220 R		
Xylene	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
chloroethane	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U		
nitrile	UG/L		25 R	150 R	25 R	25 R	690 R	220 R	9.6 R	11 R
benzene	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
e	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
hloroethene	UG/L	5	0.5 UJ	3 UJ	0.5 UJ	0.5 UJ	14 UJ	4.4 UJ	2.4 U	2.7 U
ydrofuran	UG/L		2.5 U	15 U	2.5 U	2.5 U	69 U	22 U	34 U	38 U
e	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
Xylenes	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U		
Xylenes-A	UG/L								2.4 U	2.7 U

ade indicates concentration above detection limit
ade indicates concentration above action level

TABLE 3-3
RESULTS OF VOC ANALYSIS - THIRD QUARTER 2002
GROUINDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

			ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
			MWT-3	MWT-4	MWT-6	MWT-6	MWT-7	MWT-9	PT-24	PT-24
			GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
			TR2092	TR2093	TR2094	TR2099	TR2095	TR2096	ARD2180	ARD2181
			7.35	8.75	9	9	10.25	11.48	7.35	7.35
			10	12.28	12.42	12.42	13.92	14.08	11.88	11.88
			8/15/02	8/15/02	8/15/02	8/15/02	8/15/02	8/16/02	8/15/02	8/15/02
			SA	SA	SA	SA	SA	SA	SA	SA
			ASH TRENCH	ASH TRENCH	ASH TRENCH	ASH TRENCH	ASH TRENCH	ASH TRENCH	ASH REMEDIAL	ASH REMEDIAL
			18	18	18	18	18	18	18	18
eter	Units	ction Lev	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
1,2-Dichloroethene	UG/L	5	0.55	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
1,3-Dichloropropene	UG/L	0.4	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
1,4-Dichloro-2-butene	UG/L		0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
roethene	UG/L	5	[illegible]	3.7	0.4 J	[illegible] J	540	140	[illegible]	[illegible]
rofluoromethane	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
cetate	UG/L								2.4 U	2.7 U
hloride	UG/L	2	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
-Dichloro-2-butene	UG/L								2.4 U	2.7 U
lbenzene	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
rotoluene	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
ropyltoluene	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
tylbenzene	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U
tylbenzene	UG/L	5	0.5 U	3 U	0.5 U	0.5 U	14 U	4.4 U	2.4 U	2.7 U

ade indicates concentration above detection limit
ade indicates concentration above action level

TABLE 3-4
SUMMARY OF VOC DETECTIONS
GROUNDWATER MONITORING-ASH LANDFILL
August 2002
SENECA ARMY DEPOT

meter	Groundwater Standard [1]	Units	PT-24	MW-28	BN-S	MWT-1	MWT-3	MWT-4	MWT-6	MWT-7	MWT-9	MWT-10
roform	7.0	ug/l	--	--	--	--	--	--	--	--	--	--
)ichloroethane	5.0	ug/l	0.6J	--	--	--	--	--	0.51	--	--	--
)ichloroethene (Total)	70	ug/l	68.5	17	--	25	21	95	21	32	170	0.8
one	NS	ug/l	8.9J	--	--	--	--	--	--	--	--	--
chloride	5	ug/l	--	--	--	--	--	--	--	--	--	0.63
ene	1.0	ug/l	--	--	--	--	0.22J	--	0.43J	--	--	0.65
,2-Dichloroethene	5.0	ug/l	69.5	16	--	25	20	95	21	32	170	0.8
yl Tertbutyl Ether	10	ug/l	--	--	0.6	--	--	--	--	--	--	--
ylene Chloride	5.0	ug/l	1.8J	--	--	--	--	--	--	--	--	--
ene	5.0	ug/l	--	--	--	--	--	--	--	--	--	0.28J
s-1,2-Dichloroethene	5.0	ug/l	--	0.3J	--	--	0.55	--	--	--	--	--
loroethene	5.0	ug/l	4	20	--	6	3.5	3.7	0.53J	540	140	--

s:

The groundwater standard is the lower value of the following:
New York State Class GA Groundwater Standard
Federal Primary or Secondary Drinking Water Maximum Contaminant Levels
NS = No Standard
Shaded values exceed the groundwater standard.
Only those parameters that were detected are shown.
The average value was used for MWT-6 and PT-24 where duplicate samples were collected.

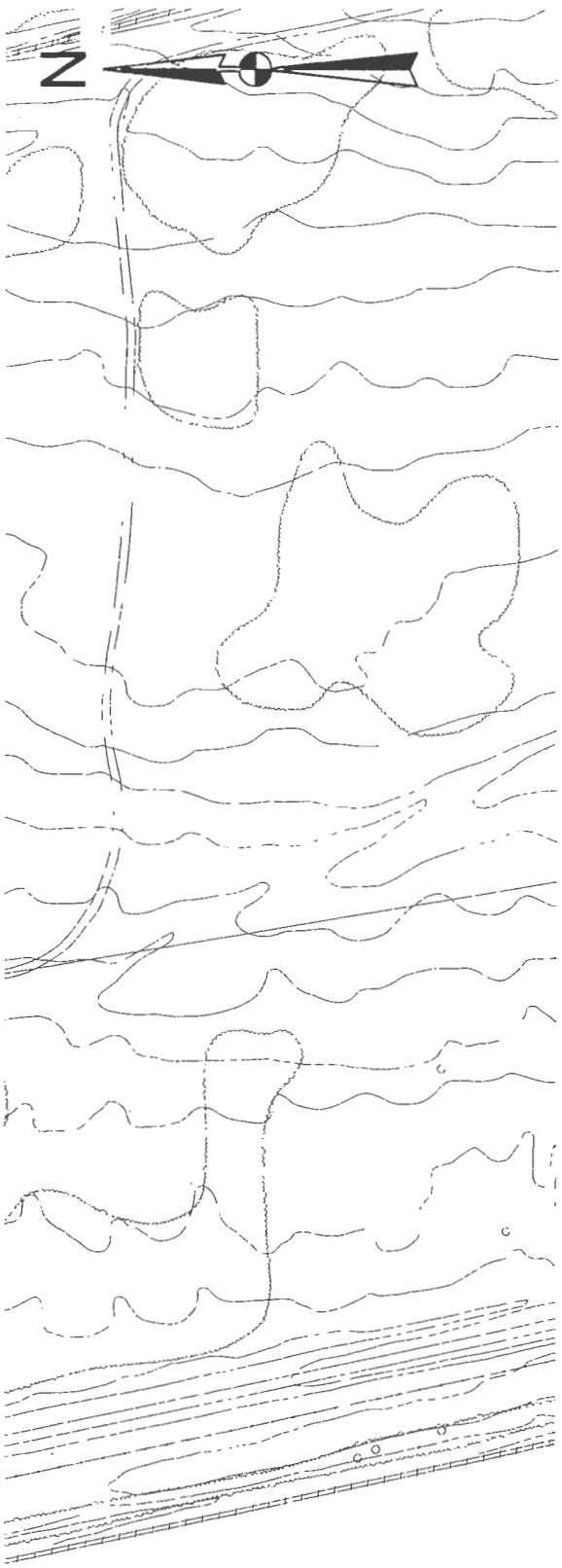
Table 3-5
Historic TCE and DCE Concentrations Downgradient of PRB

Seneca Army Depot

	Groundwater Standard [1]	Units	April-99	September-02	April-02	August-02
Trichloroethene						
MWT-3	5.0	ug/l	1.0 J	6.5	5.2	3.5
MWT-6	5.0	ug/l	ND	0.9	ND	0.53J
MWT-9	5.0	ug/l	43	28	100	140
Cis 1,2-Dichloroethene						
MWT-3	70	ug/l	27	26	28	20
MWT-6	70	ug/l	3.0	28	8.2	21
MWT-9	70	ug/l	32	160	82	170

Notes:

(1) The groundwater standard is the lower value of the following:
New York State Class GA Groundwater Standard
Federal Primary or Secondary Drinking Water Maximum Contaminant Levels



LEGEND

PAVED ROAD

GROUND CONTOUR AND ELEVATION

WETLAND & DESIGNATION

OUTLINE OF FORMER TRASH PITS (IDENTIFIED FROM AERIAL PHOTO)

APPROXIMATE EXTENT OF DEBRIS PILE

BRUSH

CHAIN LINK FENCE

UTILITY POLE

APPROXIMATE LOCATION OF FIRE HYDRANT

RAILROAD

6" WATER MAIN

MW-1 MONITORING WELL WITH LOCATION DESIGNATION

GROUNDWTER ELEVATION (FT MSL)

640 GROUNDWATER ELEVATION CONTOUR (FT)

NOTES:
GROUNDWATER MEASUREMENTS TAKEN IN AUGUST 2002

GROUNDWATER ELEVATIONS CONTOURS BASED ON CONDITIONS AT THE TIME OF MEASUREMENT. GROUNDWATER CONDITONS AT OTHER TIMES MAY VARY.

250' 0 250'

SCALE: 1" = 250'

PARSONS

SENECA ARMY DEPOT ACTIVITY

ASH LANDFILL
GROUNDWATER MONITORING
THIRD QUARTER 2002

ENVIRONMENTAL ENGINEERING	730769-01010

FIGURE 3-1
GROUNDWATER ELEVATION CONTOURS IN THE TILL/WEATHERED SHALE AQUIFER (3Q 2002)

SCALE: 1 INCH = 250 FEET	November 2002

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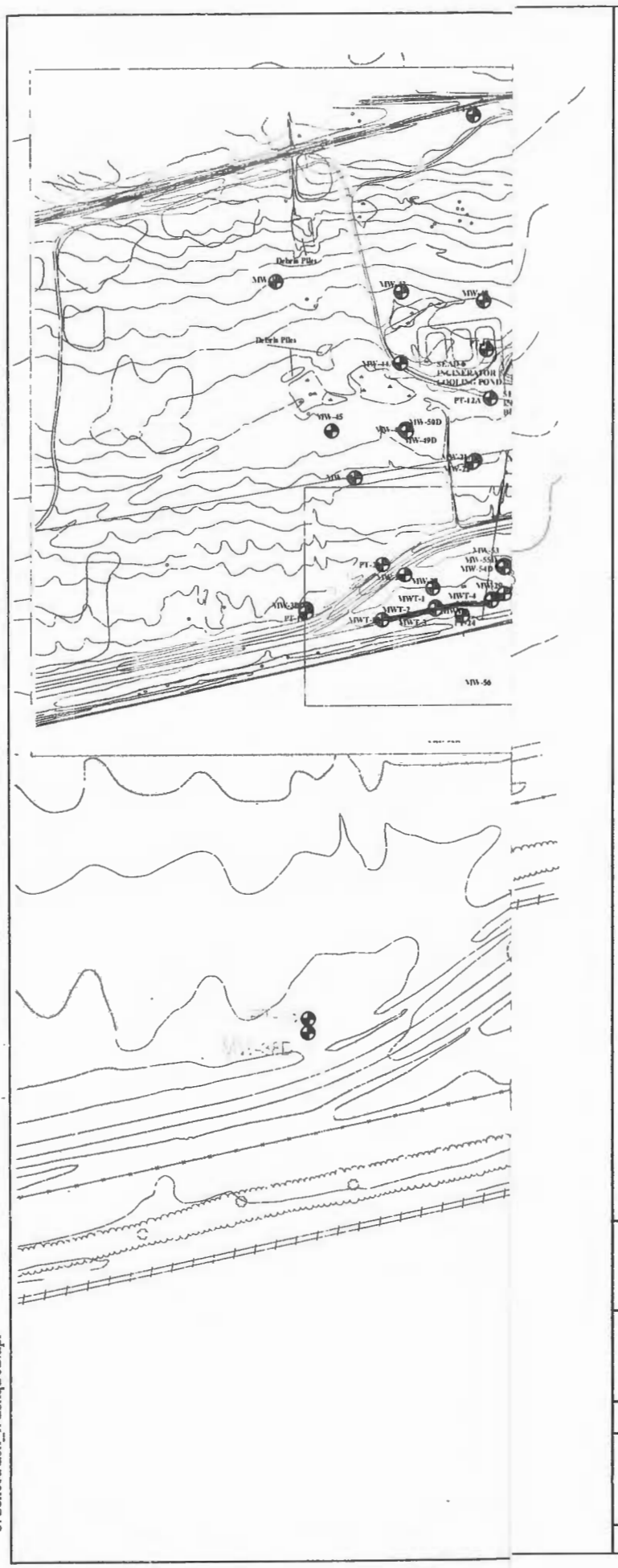

LEGEND

PAVED ROAD

GROUND CONTOUR AND ELEVATION

WETLAND & DESIGNATION

OUTLINE OF FORMER TRASH PITS (IDENTIFIED FROM AERIAL PHOTO)

APPROXIMATE EXTENT OF DEBRIS PILE

BRUSH

CHAIN LINK FENCE

UTILITY POLE
APPROXIMATE LOCATION OF FIRE HYDRANT

RAILROAD

6" WATER MAIN

PT-22 MONITORING WELL W/ DESIGNATION
TCE TRICHLOROETHENE (TCE) - ug/L
DCE 1,2 DICHLOROETHENE (DCE) - ug/L

ND NO DETECTION FOR TRICHLOROETHLENE (TCE) - ug/L
ND NO DETECTION DICHLOROETHLENE (DCE) - ug/L

PERMEABLE REACTIVE BARRIER

NOTES:
GROUNDWATER SAMPLES COLLECTED FOLLOWING EPA REGION II LOW-FLOW SAMPLING PROTOCOL SAMPLES FOR GROUND WATER QUALITY ANALYSIS COLLECTED ON AUGUST 15 AND 16, 2002

GROUNDWATER ANALYTICAL DATA BASED ON CONDITIONS AT THE TIME OF SAMPLING. GROUNDWATER CONDITONS AT OTHER TIMES MAY VARY.

150' 0 150'

SCALE: 1" = 150'

PARSONS

SENECA ARMY DEPOT ACTIVITY
ASH LANDFILL
GROUNDWATER MONITORING
THIRD QUARTER 2002

ENVIRONMENTAL ENGINEERING	730769-01010

FIGURE 3-2
GROUNDWATER ANALYTICAL DATA
TCE AND DCE CONCENTRATIONS (3Q 2002)
IN THE TILL/WEATHERED SHALE AQUIFER

SCALE: 1 INCH = 150 FEET	NOVEMBER 2002

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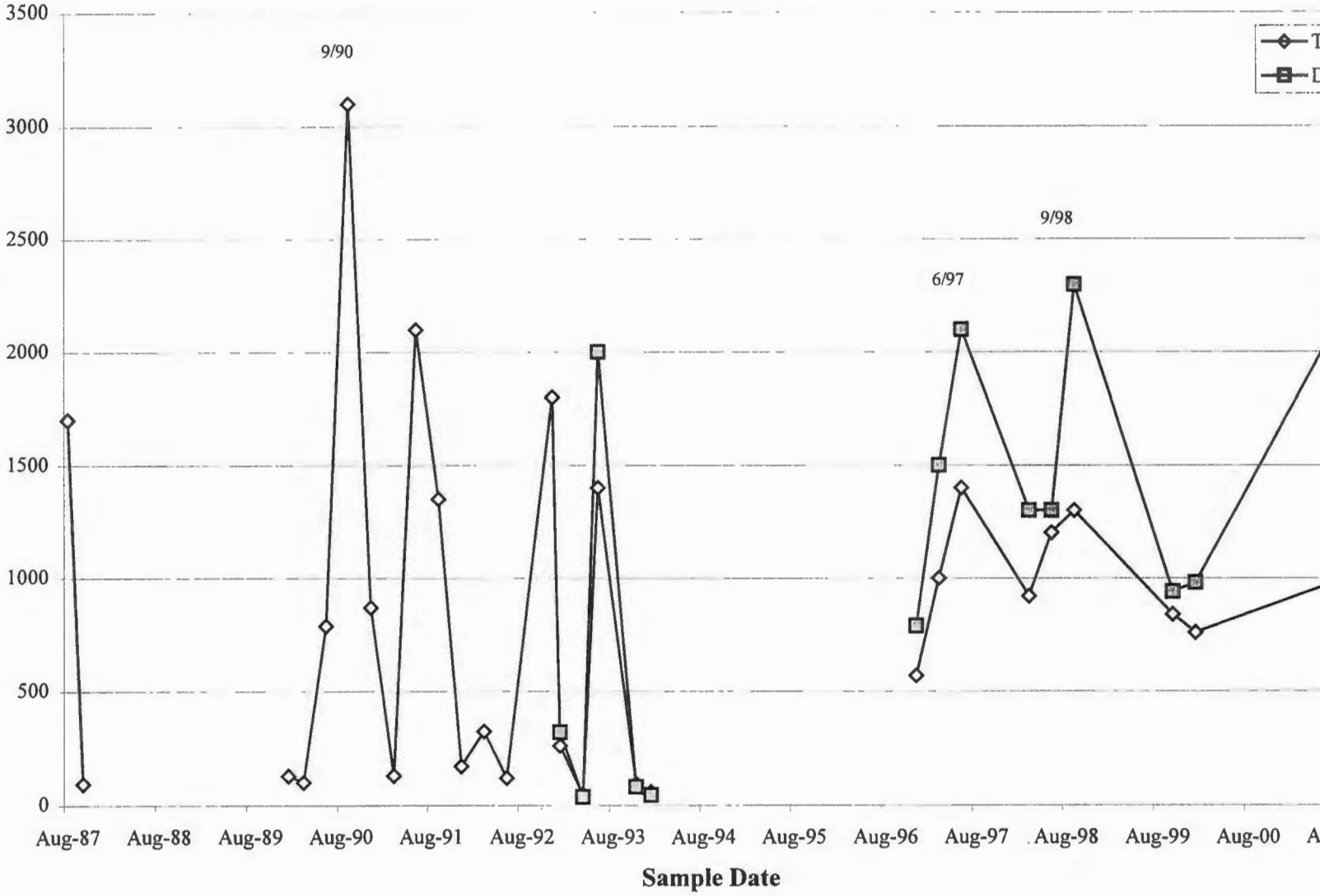
FIGURE 3-3
HISTORIC TCE AND DCE CONCENTRATIONS AT PT-12A
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY



2A Chart Chart 1

FIGURE 3-4
HISTORIC TCE AND DCE CONCENTRATIONS AT PT-18
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

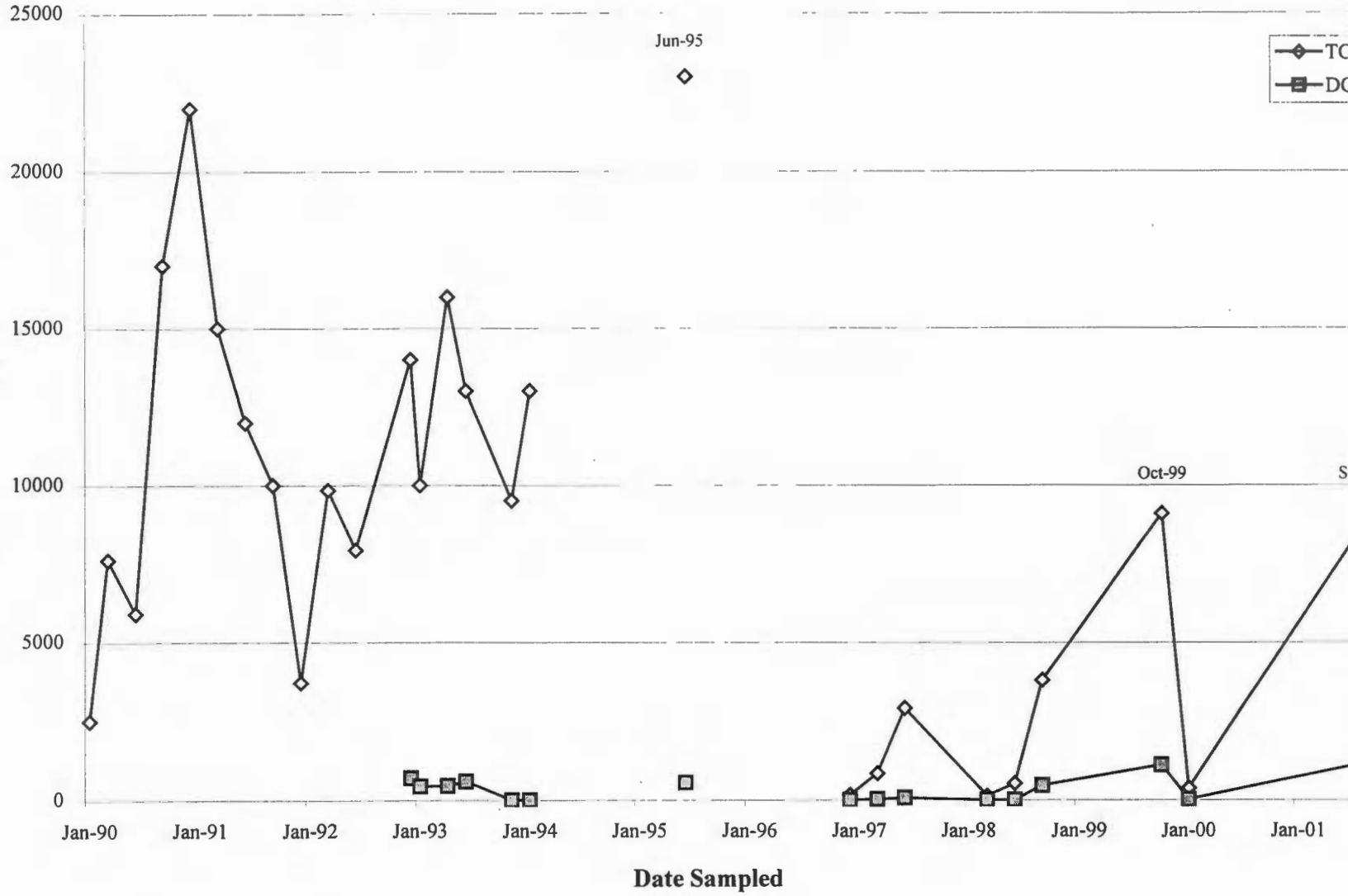
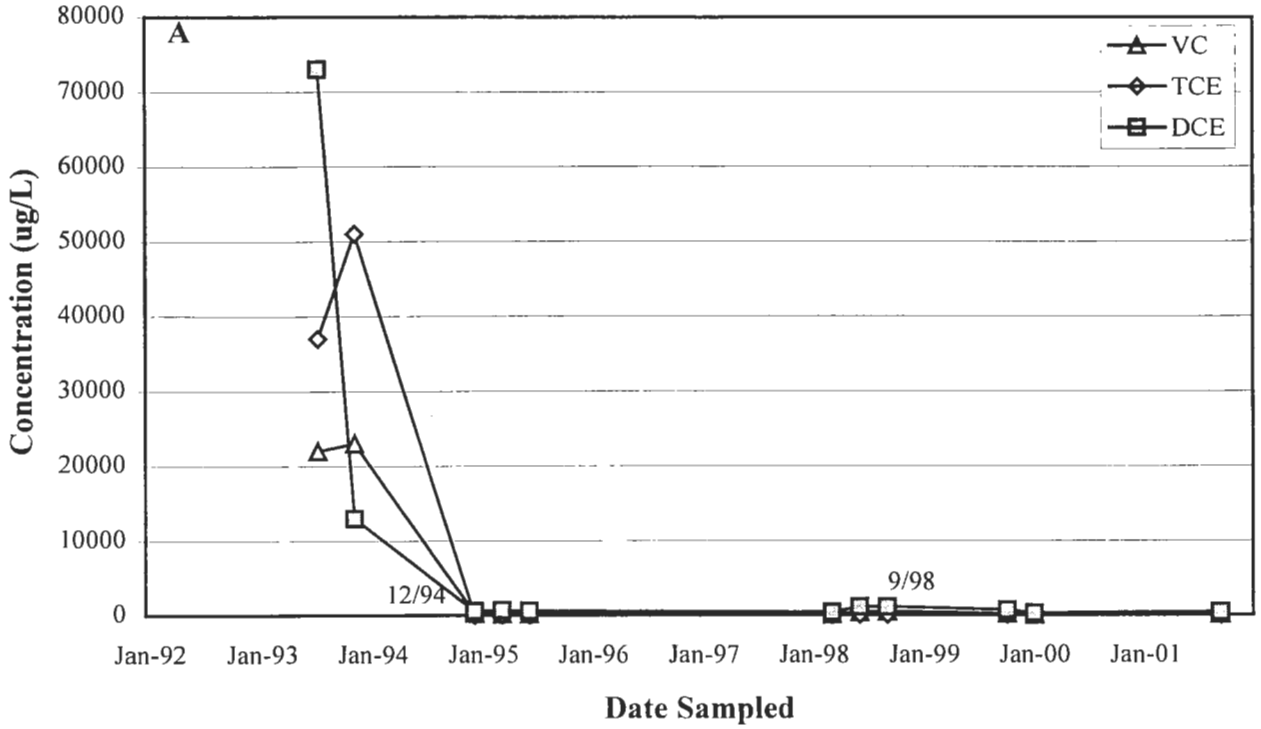
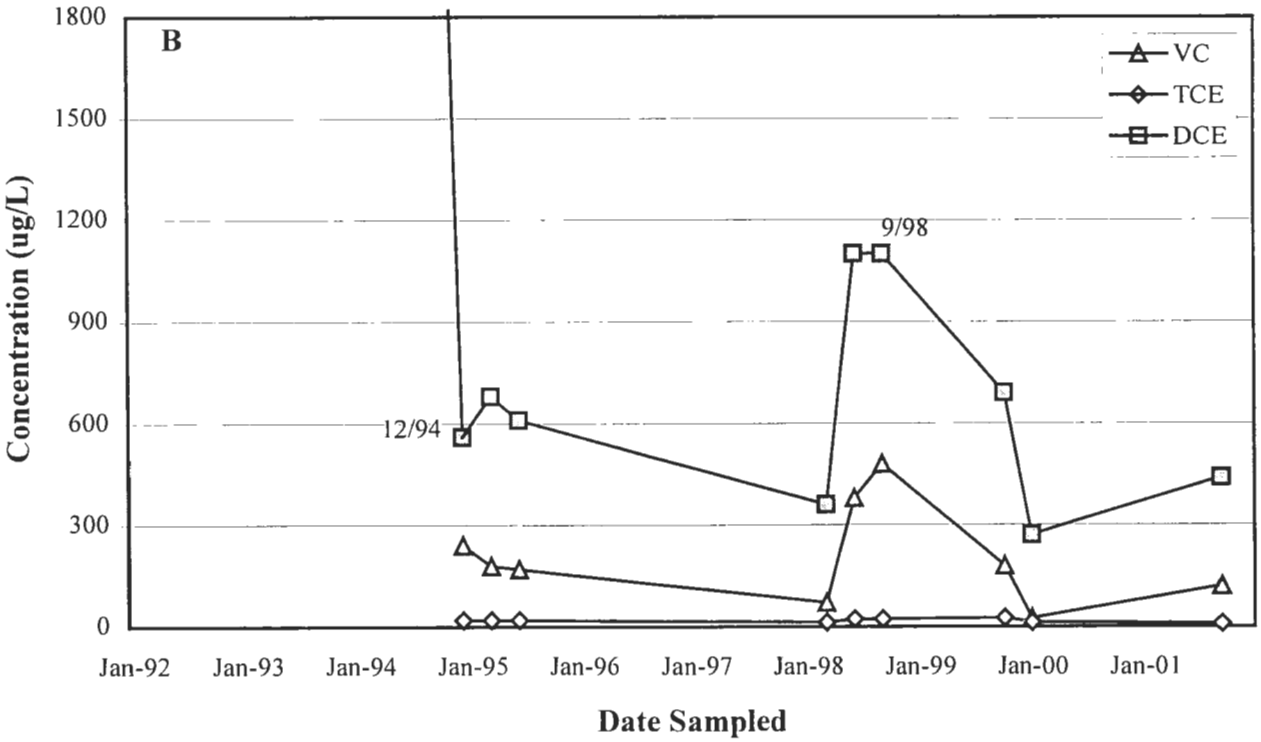


chart Chart 1

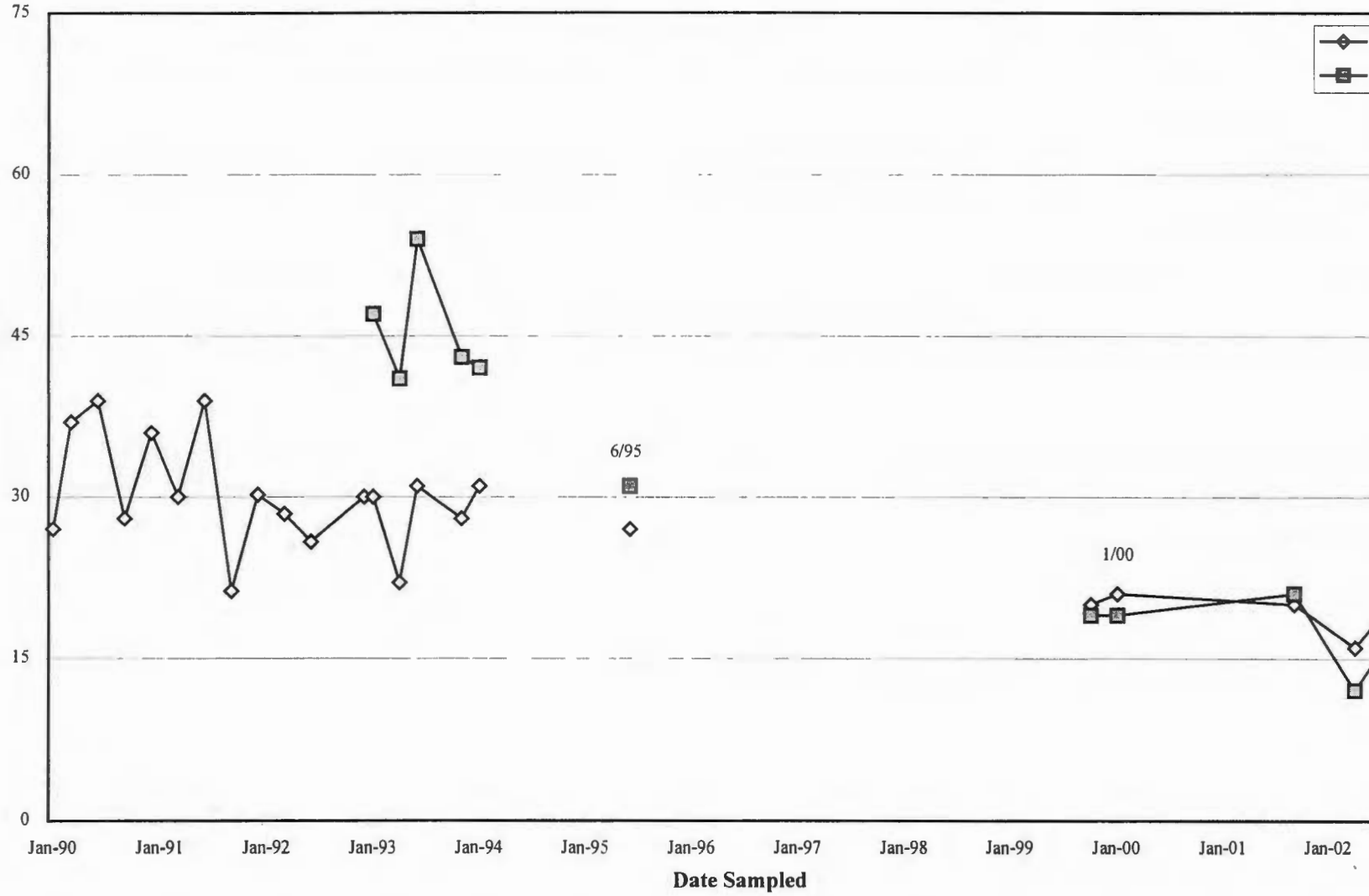
FIGURE 3-5
HISTORIC TCE, DCE, AND VINYL CHLORIDE CONCENTRATIONS AT MW -44A
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY





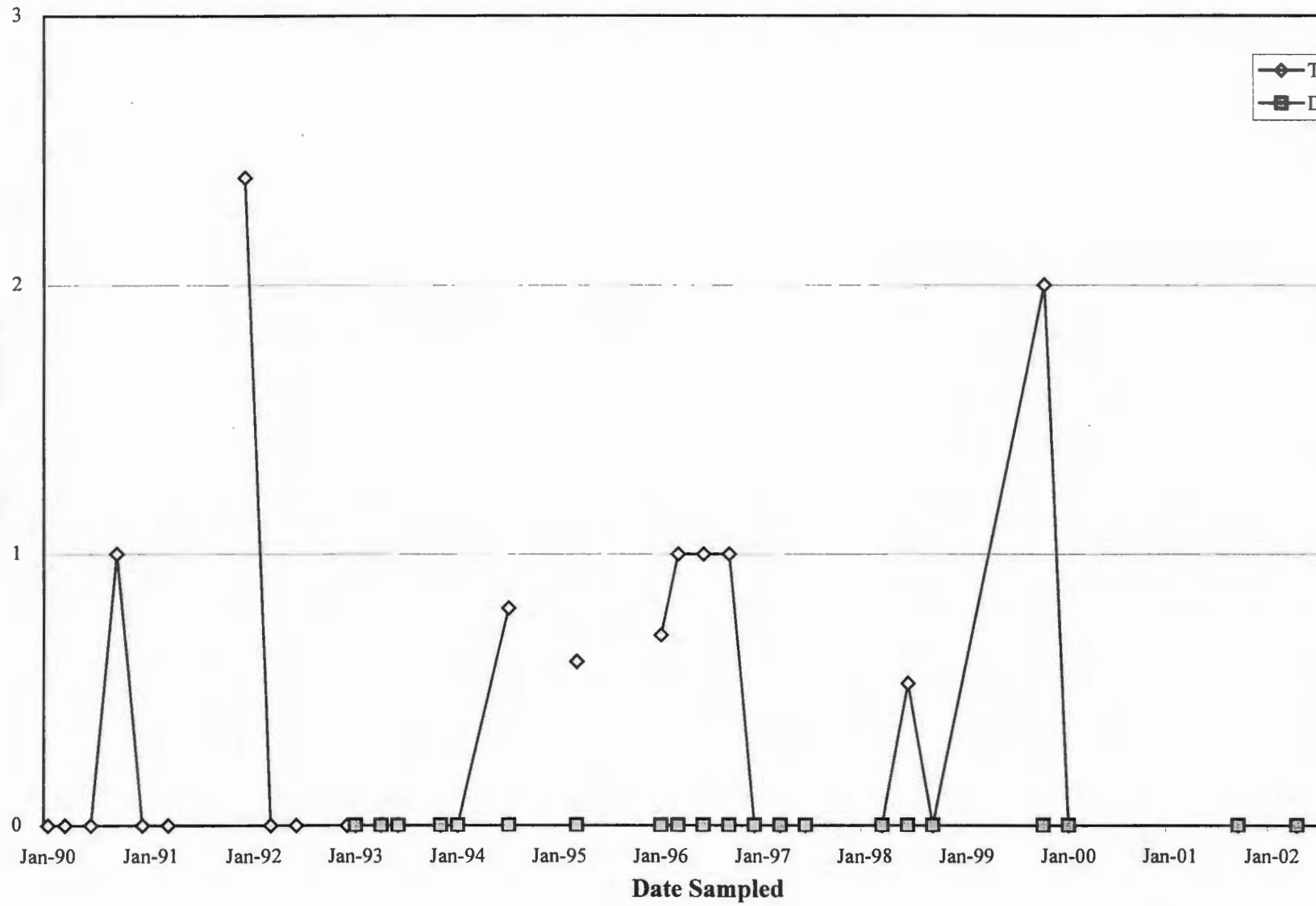
historic chart.xls; mw44a chart

FIGURE 3-6
HISTORIC TCE AND DCE CONCENTRTATIONS AT MW-28
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY



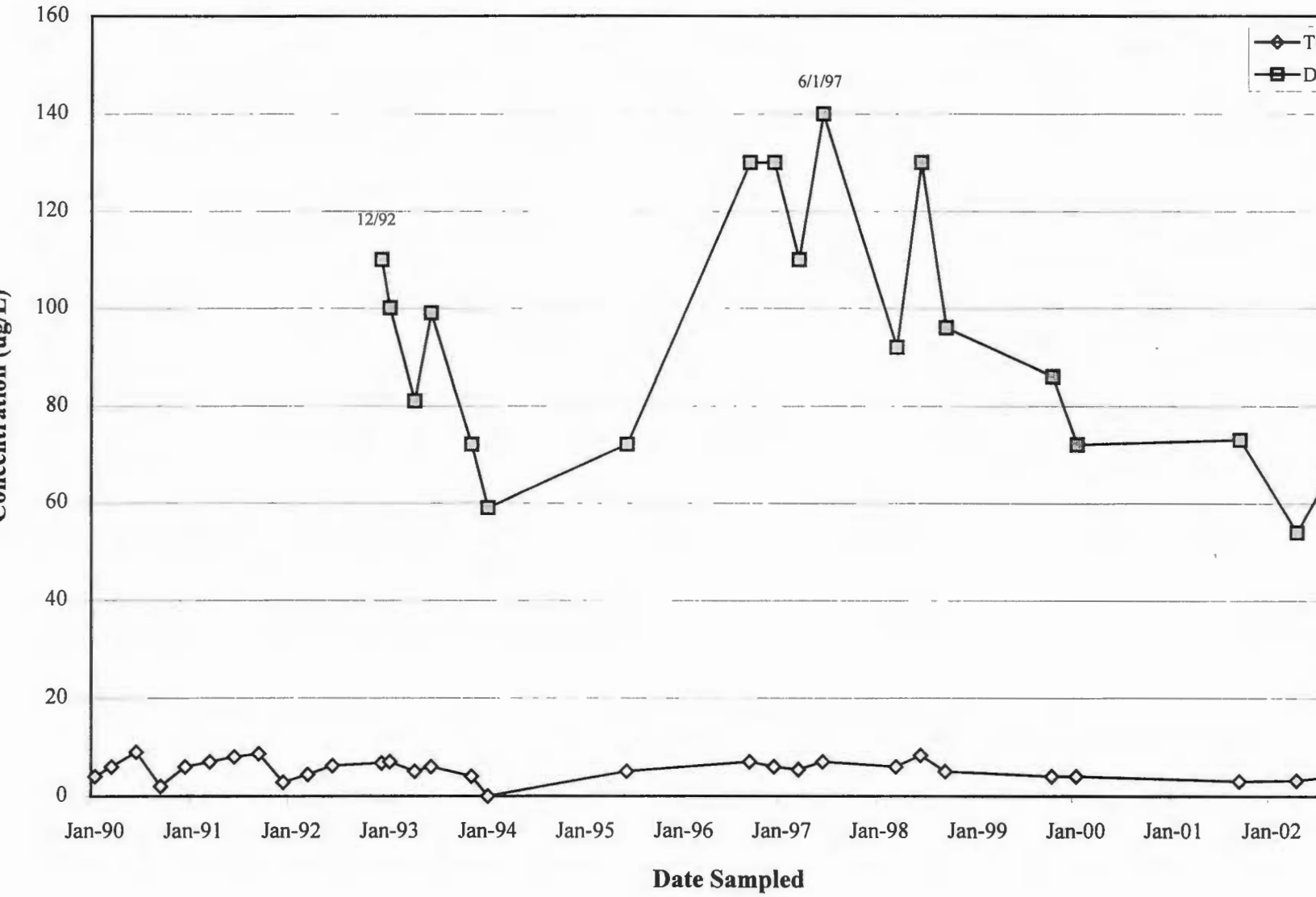
3 chart Chart 1

FIGURE 3-7
HISTORIC TCE AND DCE CONCENTRATIONS AT MW-30
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY



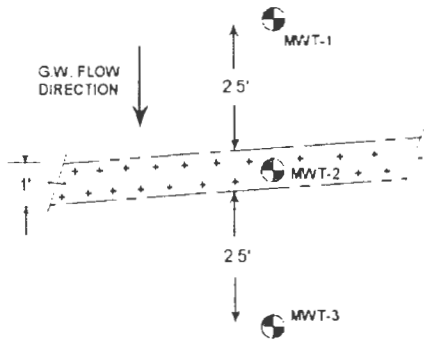
)chart Chart 1

FIGURE 3-8
HISTORIC TCE AND DCE CONCENTRATIONS AT PT-24
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY



hart Chart 1

DETAIL A



TYPICAL PLACEMENT OF WELLS AROUND TRENCH SECTION

NOT TO SCALE

LEGEND

PAVED ROAD

GROUND CONTOUR AND ELEVATION

WETLAND & DESIGNATION

BRUSH

CHAIN LINK FENCE

UTILITY POLE

APPROXIMATE LOCATION OF FIRE HYDRANT

PT-22

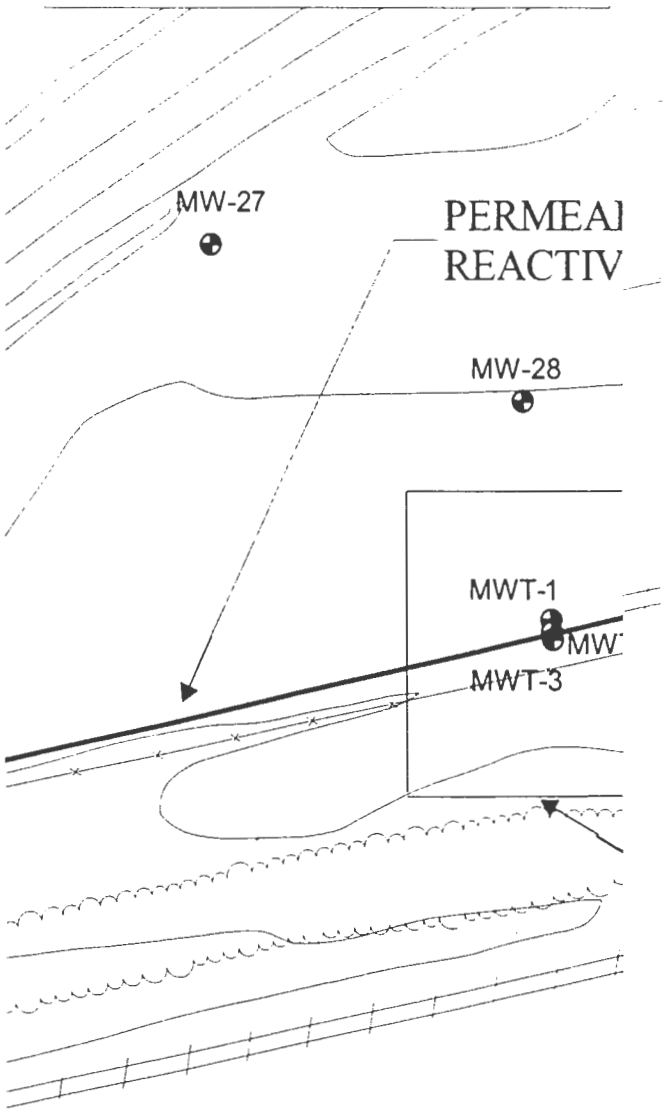
MONITORING WELL AND DESIGNATION

MW-37

RAILROAD

8" WATER MAIN

CONTINUOUS REACTIVE WALL



60' 0 60'

PARSONS

SENECA ARMY DEPOT ACTIVITY

ASH LANDFILL GROUNDWATER MONITORING

ENVIRONMENTAL ENGINEERING	730769-01 010

FIGURE 3-9

APPROXIMATE LOCATION OF WELLS NEAR THE CONTINUOUS REACTIVE WALL

SCALE: 1 INCH = 60 FEET	NOVEMBER 2002

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APPENDIX A

GROUNDWATER ELEVATION DATA

A1. HISTORICAL GROUNDWATER ELEVATIONS
(1Q1995 TO PRESENT)

A2. FIELD DATA SHEETS

A1. HISTORICAL GROUNDWATER ELEVATIONS (1Q1995 TO PRESENT)

TABLE 3-1
GROUNDWATER ELEVATION DATA - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

Monitoring Well	Top of Riser Elevation (ft)	First Quarter 1995			Second Quarter 1995			Third Quarter 1995			Fourth Quarter 1995			First Quarter 1996		
		Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f
PT-10	681.52				06/05/1995	10.4	671.12	09/12/1995	10.5	671.02	1/11/96	8.22	673.3	03/14/1996	7.26	674.26
PT-11	658.22	03/16/1995	4.28	653.94	06/05/1995	7.2	651.02	09/12/1995	8.39	649.83	1/11/96	4.94	653.28	03/14/1996	4.44	653.78
PT-12A	652.15				06/05/1995	Destroyed								03/14/1996	7.94	644.21
PT-15	637.76				06/05/1995	8.2	629.56	09/12/1995	9.73	628.03	1/11/96	4.94	632.82	03/14/1996	5.73	632.03
PT-16	637.51				06/05/1995	4.68	632.83	09/12/1995	5.36	632.15	1/11/96	3.18	634.33	03/14/1996	2.66	634.85
PT-17	640.14				06/05/1995	7.87	632.27	09/12/1995	8.66	631.48	1/11/96	6.16	633.98	03/14/1996	5.04	635.1
PT-18	656.68				06/05/1995	8.24	648.44	09/12/1995	8.81	647.87	1/11/96	7.22	649.46	03/14/1996	7.08	649.6
PT-19	645.26	03/17/1995	3.1	642.16	06/05/1995	6.33	638.93	09/12/1995	7.57	637.69	1/10/96	4.14	641.12	03/14/1996	2.62	642.64
MW-20	647.28				06/05/1995	7.69	639.59	09/12/1995	8.83	638.45	1/11/96	6.89	640.39	03/14/1996	6.64	640.64
MW-21A	647.73				06/05/1995	Destroyed								03/14/1996	8.16	639.57
MW-22	648.61				06/05/1995	8.92	639.69	09/12/1995	9.74	638.87	1/11/96	8.9	639.71	03/14/1996	8.66	639.95
PT-23	641.58				06/05/1995	6.95	634.63	09/12/1995	7.94	633.64	1/11/96	4.74	636.84	03/14/1996	4.17	637.41
PT-24	636.40				06/05/1995	5.41	630.99	09/12/1995	5.64	630.76	1/11/96	5.08	631.32	03/14/1996	4.48	631.92
PT-25	637.09				06/05/1995	7.2	629.89	09/12/1995	9.84	627.25	1/10/96	5.63	631.46	03/14/1996	4.04	633.05
PT-26	614.64				06/05/1995	7.02	607.62	09/12/1995	Not Measured		1/11/96	Not Measured		03/14/1996	Not Measured	
MW-27	639.32	03/16/1995	5.13	634.19	06/05/1995	6.85	632.47	09/12/1995	6.74	632.58	1/11/96	6.04	633.28	03/14/1996	5.7	633.62
MW-28	637.21				06/05/1995	5.93	631.28	09/12/1995	6.12	631.09	1/11/96	5.66	631.55	03/14/1996	5.23	631.98
MW-29	637.31				06/05/1995	7.38	629.93	09/12/1995	7.78	629.53	1/11/96	6.68	630.63	03/14/1996	6.2	631.01
MW-30	640.32	03/17/1995	4.1	636.22	06/05/1995	Dry		09/12/1995	10.42	629.9	1/11/96	7.65	632.67	03/14/1996	5.88	634.44
MW-31	636.70				06/05/1995	6.49	630.21	09/12/1995	8.7	628.00	1/11/96	4.88	631.82	03/14/1996	3.38	633.32
MW-32	641.68				06/05/1995	8	633.68	09/12/1995	8.9	632.78	1/11/96	6.86	634.82	03/14/1996	5.45	636.23
MW-33	639.56				06/05/1995	8.76	630.8	09/12/1995	9.62	629.94	1/11/96	6.24	633.32	03/14/1996	4.96	634.6
MW-34	632.89				06/05/1995	5.93	626.96	09/12/1995	8.9	623.99	1/10/96	4.72	628.17	03/14/1996	3.16	629.73
MW-35D	631.82				06/05/1995	4.15	627.67	09/12/1995	5.43	626.39	1/10/96	2.89	628.93	03/14/1996	2.38	629.44
MW-36	631.79	03/16/1995	2.34	629.45	06/05/1995	4.36	627.43	09/12/1995	5.94	625.85	1/10/96	2.97	628.82	03/14/1996	2.32	629.47
MW-37	632.89	09/23/1901			06/05/1995	4.58	628.31	09/12/1995	5.96	626.93	1/11/96	3.32	629.57	03/14/1996	2.24	630.65
MW-38D	637.90	09/28/1901			06/05/1995	5.23	632.67	09/12/1995	8.91	628.99	1/11/96	3.88	634.02	03/14/1996	3.47	634.43
MW-39	659.54	10/20/1901			06/05/1995	3.96	655.58	09/12/1995	5.27	654.27	1/11/96	1.91	657.63	03/14/1996	Frozen	
MW-40	659.30	10/20/1901	3.61	655.69	06/05/1995	6.48	652.82	09/12/1995	7.46	651.84	1/11/96	4.44	654.86	03/14/1996	3.81	
MW-41D	694.02	11/24/1901			06/05/1995	8.48	685.54	09/12/1995	8.76	685.26	1/11/96	7.32	686.7	03/14/1996	7	687.02
MW-42D	683.04				06/05/1995	5.97	677.07	09/12/1995	8.34	674.70	1/11/96	4.02	679.02	03/14/1996	3.53	679.51
MW-43	657.73				06/05/1995	4.72	653.01	09/12/1995	5.73	652.00	1/11/96	Frozen	NA	03/14/1996	Frozen	
MW-44A	653.85				06/05/1995	Destroyed								03/14/1996	8.93	644.92
MW-45	650.90	03/17/1995	3.05	647.85	06/05/1995	5.26	645.64	09/12/1995	6.34	644.56	1/11/96	Frozen	NA	03/14/1996	Frozen	
MW-46	650.41				06/05/1995	7.06	643.35	09/12/1995	7.96	642.45	1/11/96	6.16	644.25	03/14/1996	5.72	644.69
MW-47	628.06	03/16/1995	2.84	625.22	06/05/1995	6.48	621.58	09/12/1995	5.96	622.10	1/11/96	Frozen	NA	03/14/1996	Frozen	
MW-48	648.32	03/17/1995	3.1	645.22	06/05/1995	6.13	642.19	09/12/1995	6.86	641.46	1/11/96	3.7	644.62	03/14/1996	Frozen	
MW-49D	650.50				06/05/1995	7.1	643.4	09/12/1995	7.88	642.62	1/11/96	6.09	644.41	03/14/1996	5.71	644.79
MW-50D	649.88				06/05/1995	6.88	643	09/12/1995	7.69	642.19	1/11/96	6.02	643.86	03/14/1996	5.78	644.1
MW-51D	628.24				06/05/1995	6.63	621.61	09/12/1995	6.12	622.12	1/11/96		628.24	03/14/1996	2.78	625.46
MW-52D	626.35				06/05/1995	6.12	620.23	09/12/1995	5.68	620.67	1/11/96	3	623.35	03/14/1996	Frozen	
MW-53	639.41				06/05/1995	8.45	630.96	09/12/1995	8.94	630.47	1/11/96	7.86	631.55	03/14/1996	6.98	632.43
MW-54D	639.11				06/05/1995	8.3	630.81	09/12/1995	8.76	630.35	1/11/96	7.66	631.45	03/14/1996	6.97	632.14
MW-55D	639.16				06/05/1995	8.18	630.98	09/12/1995	8.62	630.54	1/11/96	7.42	631.74	03/14/1996	6.88	632.28
MW-56	630.51	03/16/1995	2.95	627.56	06/05/1995	4.14	626.37	09/12/1995	4.31	626.20	1/11/96	Frozen	NA	03/14/1996	Frozen	
MW-57D	629.82				06/05/1995	3.79	626.03	09/12/1995	3.7	626.12	1/11/96	2.42	627.4	03/14/1996	1.91	627.91
MW-58D	629.69				06/05/1995	3.6	626.09	09/12/1995	3.52	626.17	1/11/96	2.2	627.49	03/14/1996	2.25	627.44

TABLE 3-1
GROUNDWATER ELEVATION DATA - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

Monitoring Well	Top of Riser Elevation (ft)	First Quarter 1995			Second Quarter 1995			Third Quarter 1995			Fourth Quarter 1995			First Quarter 1996		
		Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f
MW-59	656.83	03/17/1995	1.9	654.93	06/05/1995	3.26	653.57	09/12/1995	4.58	652.25	1/11/96	2.14	654.69	03/14/1996	Frozen	
MW-60	660.15	03/17/1995	2.02	658.13	06/05/1995	3.83	656.32	09/12/1995	5.33	654.82	1/11/96	2.34	657.81	03/14/1996	Frozen	
MWT-1	637.24															
MWT-2	637.19															
MWT-3	637.31															
MWT-4	637.68															
MWT-5	637.72															
MWT-6	637.59															
MWT-7	638.34															
MWT-8	638.40															
MWT-9	638.08															
MWT-10	636.07															
MWT-11	635.90															

TABLE 3-1
GROUNDWATER ELEVATION DATA - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

oring ell	Top of Riser Elevation (ft)	Second Quarter 1996			Third Quarter 1996			Fourth Quarter 1996			First Quarter 1997			Second Quarter 1997			First Quarter
		Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.
-10	681.52	06/20/1996	9.65	671.87	09/23/1996	6.62	674.9	01/06/1997	5.31	676.21	03/18/1997	5.3	676.22	06/17/1997	9.03	672.49	03/23/98	4.62
-11	658.22	06/20/1996	6.54	651.68	09/23/1996	6.15	652.07	01/06/1997	4.19	654.03	03/18/1997	4.41	653.81	06/17/1997	6.23	651.99	03/23/98	4.24
12A	652.15	06/20/1996	7.88	644.27	09/23/1996	7.31	644.84	01/06/1997	4.25	647.9	03/18/1997	5.85	646.3	06/17/1997	7.53	644.62	03/23/98	3.14
-15	637.76	06/20/1996	7.7	630.06	09/23/1996	8.04	629.72	01/06/1997	5.05	632.71	03/18/1997	4.59	633.17	06/17/1997	6.48	631.28	03/23/98	4.02
-16	637.51	06/20/1996	3.2	634.31	09/23/1996	3.62	633.89	01/06/1997	3.02	634.49	03/18/1997	2.93	634.58	06/17/1997	4.05	633.46	03/23/98	2.8
-17	640.14	06/20/1996	6.36	633.78	09/23/1996	4.99	635.15	01/06/1997	4.7	635.44	03/18/1997	4.75	635.39	06/17/1997	7.4	632.74	03/23/98	4.29
-18	656.68	06/20/1996	7.4	649.28	09/23/1996	7.44	649.24	01/06/1997	4.97	651.71	03/18/1997	5.55	651.13	06/17/1997	7.09	649.59	03/23/98	4.4
-19	645.26	06/20/1996	6.27	638.99	09/23/1996	6.34	638.92	01/06/1997	3.18	642.08	03/18/1997	3.34	641.92	06/17/1997	5.34	639.92	03/23/98	2.17
-20	647.28	06/20/1996	6.89	640.39	09/23/1996	5.92	641.36	01/06/1997	5.74	641.54	03/18/1997	5.72	641.56	06/17/1997	7.21	640.07	03/23/98	4.94
-21A	647.73	06/20/1996	8.47	639.26	09/23/1996	7.02	640.71	01/06/1997	6.09	641.64	03/18/1997	5.19	642.54	06/17/1997	8.21	639.52	03/23/98	3.89
-22	648.61	06/20/1996	8.97	639.64	09/23/1996	Not Measured		01/06/1997	6.5	642.11	03/18/1997	6.63	641.98	06/17/1997	7.61	641	03/23/98	4.31
-23	641.58	06/20/1996	6.15	635.43	09/23/1996	5.11	636.47	01/06/1997	3.44	638.14	03/18/1997	3.94	637.64	06/17/1997	6.37	635.21	03/23/98	3.66
-24	636.40	06/20/1996	5.07	631.33	09/23/1996	4.8	631.6	01/06/1997	4.64	631.76	03/18/1997	4.69	631.71	06/17/1997	5.04	631.36	03/23/98	3.64
-25	637.09	06/20/1996	6.54	630.55	09/23/1996	6.16	630.93	01/06/1997	3.96	633.13	03/18/1997	3.92	633.17	06/17/1997	5.96	631.13	03/23/98	3.58
-26	614.64	06/20/1996	6.72	607.92	09/23/1996	Not Measured		01/06/1997	Not Measured		03/18/1997	Not Measured		06/17/1997	Not Measured		03/23/98	3.04
-27	639.32	06/20/1996	6.58	632.74	09/23/1996	5.54	633.78	01/06/1997	5.21	634.11	03/18/1997	5.25	634.07	06/17/1997	6.48	632.84	03/23/98	4.44
-28	637.21	06/20/1996	5.76	631.45	09/23/1996	5.35	631.86	01/06/1997	5.22	631.99	03/18/1997	5.18	632.03	06/17/1997	5.61	631.6	03/23/98	4.64
-29	637.31	06/20/1996	6.96	630.35	09/23/1996	6.34	630.97	01/06/1997	6.14	631.17	03/18/1997	6.09	631.22	06/17/1997	6.65	630.66	03/23/98	6.1
-30	640.32	06/20/1996	6.9	633.42	09/23/1996	7.17	633.15	01/06/1997	4.2	636.12	03/18/1997	4.33	635.99	06/17/1997	8.35	631.97	03/23/98	3.94
-31	636.70	06/20/1996	5.86	630.84	09/23/1996	5.26	631.44	01/06/1997	2.92	633.78	03/18/1997	2.96	633.74	06/17/1997	5.3	631.4	03/23/98	2.48
-32	641.68	06/20/1996	7.02	634.66	09/23/1996	7.42	634.26	01/06/1997	4.53	637.15	03/18/1997	4.95	636.73	06/17/1997	7.93	633.75	03/23/98	3.84
-33	639.56	06/20/1996	8.05	631.51	09/23/1996	7.4	632.16	01/06/1997	4.29	635.27	03/18/1997	4.44	635.12	06/17/1997	7.45	632.11	03/23/98	3.91
-34	632.89	06/20/1996	5.33	627.56	09/23/1996	4.99	627.9	01/06/1997	3.07	629.82	03/18/1997	3.22	629.67	06/17/1997	4.63	628.26	03/23/98	2.74
-35D	631.82	06/20/1996	5.33	626.49	09/23/1996	Not Measured		01/06/1997	Not Measured		03/18/1997	Not Measured		06/17/1997	Not Measured		03/23/98	2.6
-36	631.79	06/20/1996	3.00	628.79	09/23/1996	3.30	628.49	01/06/1997	3.30	628.49	03/18/1997	2.46	629.33	06/17/1997	3.58	628.21	03/23/98	2.60
-37	632.89	06/20/1996	3.4	629.49	09/23/1996	4.34	628.55	01/06/1997	2.48	630.41	03/18/1997	2.59	630.3	06/17/1997	Not Measured		03/23/98	2.51
-38D	637.90	06/20/1996	4.09	633.81	09/23/1996	4.26	633.64	01/06/1997	3.7	634.2	03/18/1997	3.61	634.29	06/17/1997	Not Measured		03/23/98	3.48
-39	659.54	06/20/1996	1.82	Frozen	09/23/1996	2.16	657.38	01/06/1997	2.06	657.48	03/18/1997	1.78	657.76	06/17/1997	2.09	657.45	03/23/98	1.7
-40	659.30	06/20/1996	6.2	653.1	09/23/1996	4.78	654.52	01/06/1997	3.64	655.66	03/18/1997	3.64	655.66	06/17/1997	5.78	653.52	03/23/98	3.45
-41D	694.02	06/20/1996	8.16	685.86	09/23/1996	7.82	686.2	01/06/1997	6.1	687.92	03/18/1997	6.45	687.57	06/17/1997	Not Measured		03/23/98	8.12
-42D	683.04	06/20/1996	5.54	677.5	09/23/1996	4.79	678.25	01/06/1997	4.79	678.25	03/18/1997	2.61	680.43	06/17/1997	4.73	678.31	03/23/98	2.37
-43	657.73	06/20/1996	3.03	654.7	09/23/1996	3.16	654.57	01/06/1997	2.9	654.83	03/18/1997	3.84	653.89	06/17/1997	3.72	654.01	03/23/98	2.6
-44A	653.85	06/20/1996	8.05	645.8	09/23/1996	9.66	644.19	01/06/1997	3.74	650.11	03/18/1997	4.7	649.15	06/17/1997	6.9	646.95	03/23/98	3.48
-45	650.90	06/20/1996	3.47	647.43	09/23/1996	3.23	647.67	01/06/1997	2.94	647.96	03/18/1997	2.83	648.07	06/17/1997	3.9	647	03/23/98	2.85
-46	650.41	06/20/1996	5.75	644.66	09/23/1996	5.94	644.47	01/06/1997	3.72	646.69	03/18/1997	4.51	645.9	06/17/1997	6.06	644.35	03/23/98	2.88
-47	628.06	06/20/1996	3.6	624.46	09/23/1996	4.34	623.72	01/06/1997	2.88	625.18	03/18/1997	2.88	625.18	06/17/1997	4.22	623.84	03/23/98	2.3
-48	648.32	06/20/1996	4.77	643.55	09/23/1996	3.72	644.6	01/06/1997	3.26	645.06	03/18/1997	3.31	645.01	06/17/1997	5.3	643.02	03/23/98	2.86
-49D	650.50	06/20/1996	5.87	644.63	09/23/1996	5.9	644.6	01/06/1997	3.6	646.9	03/18/1997	4.32	646.18	06/17/1997	5.91	644.59	03/23/98	2.88
-50D	649.88	06/20/1996	6.2	643.68	09/23/1996	5.71	644.17	01/06/1997	3.6	646.28	03/18/1997	4.09	645.79	06/17/1997	5.88	644	03/23/98	2.48
-51D	628.24	06/20/1996	3.7	624.54	09/23/1996	4.42	623.82	01/06/1997	2.99	625.25	03/18/1997	3	625.24	06/17/1997	4.35	623.89	03/23/98	2.35
-52D	626.35	06/20/1996	3.66	622.69	09/23/1996	4.03	622.32	01/06/1997	2.38	623.97	03/18/1997	2.6	623.75	06/17/1997	3.62	622.73	03/23/98	2.3
-53	639.41	06/20/1996	8.28	631.13	09/23/1996	7.02	632.39	01/06/1997	6.6	632.81	03/18/1997	6.6	632.81	06/17/1997	7.7	631.71	03/23/98	5.78
-54D	639.11	06/20/1996	8.08	631.03	09/23/1996	6.92	632.19	01/06/1997	6.55	632.56	03/18/1997	6.56	632.55	06/17/1997	7.69	631.42	03/23/98	5.92
-55D	639.16	06/20/1996	7.91	631.25	09/23/1996	6.78	632.38	01/06/1997	6.34	632.82	03/18/1997	6.36	632.8	06/17/1997	7.47	631.69	03/23/98	5.86
-56	630.51	06/20/1996	3.01	627.5	09/23/1996	3.2	627.31	01/06/1997	3.09	627.42	03/18/1997	3.05	627.46	06/17/1997	3.48	627.03	03/23/98	3.13
-57D	629.82	06/20/1996	2.2	627.62	09/23/1996	2.29	627.53	01/06/1997	1.82	628	03/18/1997	1.95	627.87	06/17/1997	2.76	627.06	03/23/98	1.69
-58D	629.69	06/20/1996	2.09	627.6	09/23/1996	2.06	627.63	01/06/1997	1.51	628.18	03/18/1997	1.73	627.96	06/17/1997	2.56	627.13	03/23/98	1.32

TABLE 3-1
GROUNDWATER ELEVATION DATA - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

oring ell	Top of Riser Elevation (ft)	Second Quarter 1996			Third Quarter 1996			Fourth Quarter 1996			First Quarter 1997			Second Quarter 1997			First Quarter
		Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.
-59	656.83	06/20/1996	1.91	654.92	09/23/1996	2.69	654.14	01/06/1997	2.1	654.73	03/18/1997	2.16	654.67	06/17/1997	2.15	654.68	03/23/98	2.13
-60	660.15	06/20/1996	2.58	Frozen	09/23/1996	2.46	657.69	01/06/1997	1.97	658.18	03/18/1997	2.14	658.01	06/17/1997	2.98	657.17	03/23/98	1.95
T-1	637.24																	
T-2	637.19																	
T-3	637.31																	
T-4	637.68																	
T-5	637.72																	
T-6	637.59																	
T-7	638.34																	
T-8	638.40																	
T-9	638.08																	
T-10	636.07																	
T-11	635.90																	

TABLE 3-1
GROUNDWATER ELEVATION DATA - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

	Second Quarter 1998			Third Quarter 1998			Measured on 10/7/99			Measured on 10/27/99			Round 2 (1/3/00)			3Q 2001 Dat		
Top of Riser Elevation (ft)	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date Measured	Saturated Thickness (ft)	De Grou
681.52	06/16/98	6.3	675.22	09/18/98	10.29	671.23	10/07/1999	8.10	673.42	10/27/1999	9.26	672.26	01/03/2000	6.84	674.68	NA	NA	
658.22	06/16/98	4.43	653.79	09/18/98	9.57	648.65	10/07/1999	10.03	648.19	10/27/1999	9.39	648.83	01/03/2000	5.36	652.86	08/27/2001	9.12	1
652.15	06/16/98	5.25	646.9	09/18/98	9.29	642.86	10/07/1999	7.00	645.15	10/27/1999	7.60	644.55	01/03/2000	6.62	645.53	08/27/2001	3.49	9
637.76	06/16/98	7.14	630.62	09/18/98	9.82	627.94	10/07/1999	10.36	627.4	10/27/1999	DRY		01/03/2000	6.04	631.72	08/27/2001	9.12	1
637.51	06/16/98	3.8	633.71	09/18/98	6.52	630.99	10/07/1999	7.20	630.31	10/27/1999	6.64	630.87	01/03/2000	3.10	634.41	08/27/2001	3.36	7
640.14	06/16/98	4.97	635.17	09/18/98	9.96	630.18	10/07/1999	7.26	632.88	10/27/1999	7.90	632.24	01/03/2000	5.08	635.06	08/27/2001	0.56	1
656.68	06/16/98	6.34	650.34	09/18/98	9.06	647.62	10/07/1999	9.40	647.28	10/27/1999	8.23	648.45	01/03/2000	6.34	650.34	08/28/2001	1.32	1
645.26	06/16/98	4.9	640.36	09/18/98	7.83	637.43	10/07/1999	7.33	637.93	10/27/1999	7.22	638.04	01/03/2000	3.94	641.32	08/27/2001	3.01	8
647.28	06/16/98	5.69	641.59	09/18/98	9.87	637.41	10/07/1999	7.58	639.7	10/27/1999	7.60	639.68	01/03/2000	6.76	640.52	08/27/2001	0.00	
647.73	06/16/98	6.46	641.27	09/18/98	9.79	637.94	10/07/1999	9.12	638.61	10/27/1999	8.14	639.59	01/03/2000	7.08	640.65	08/27/2001	8.95	1
648.61	06/16/98	6.96	641.65	09/18/98	10.35	638.26	10/07/1999	9.80	638.81	10/27/1999	8.65	639.96	01/03/2000	7.54	641.07	08/27/2001	0.71	1
641.58	06/16/98	4.02	637.56	09/18/98	8.47	633.11	10/07/1999	7.92	633.66	10/27/1999	7.76	633.82	01/03/2000	4.10	637.48	08/27/2001	2.85	9
636.40	06/16/98	4.69	631.71	09/18/98	7.1	629.3	10/07/1999	7.44	628.96	10/27/1999	6.12	630.28	01/03/2000	4.88	631.52	08/27/2001	3.47	8
637.09	06/16/98	4.48	632.61	09/18/98	11.35	625.74	10/07/1999	8.92	628.17	10/27/1999	8.31	628.78	01/03/2000	5.26	631.83	08/27/2001	0.00	
614.64	06/16/98	Not Measured		09/18/98	10.54	604.1	10/07/1999	13.11	601.53	10/27/1999	12.16	602.48	01/03/2000	6.88	607.76	NA	NA	
639.32	06/16/98	5.36	633.96	09/18/98	7.67	631.65	10/07/1999	5.92	633.4	10/27/1999	6.64	632.68	01/03/2000	5.46	633.86	08/27/2001	1.31	9
637.21	06/16/98	5.14	632.07	09/18/98	7.46	629.75	10/07/1999	7.44	629.77	10/27/1999	6.36	630.85	01/03/2000	5.16	632.05	08/27/2001	1.89	8
637.31	06/16/98	6.39	630.92	09/18/98	9.9	627.41	10/07/1999	10.01	627.3	10/27/1999	8.00	629.31	01/03/2000	6.34	630.97	08/27/2001	0.00	
640.32	06/16/98	5.32	635	09/18/98	10.44	629.88	10/07/1999	8.94	631.38	10/27/1999	9.30	631.02	01/03/2000	6.76	633.56	08/27/2001	0.00	
636.70	06/16/98	3.62	633.08	09/18/98	9.68	627.02	10/07/1999	7.91	628.79	10/27/1999	7.29	629.41	01/03/2000	4.48	632.22	08/27/2001	0.00	
641.68	06/16/98	6.23	635.45	09/18/98	8.98	632.7	10/07/1999	7.55	634.13	10/27/1999	8.30	633.38	01/03/2000	6.16	635.52	08/27/2001	0.00	
639.56	06/16/98	6.17	633.39	09/18/98	9.84	629.72	10/07/1999	8.74	630.82	10/27/1999	9.50	630.06	01/03/2000	6.04	633.52	08/27/2001	0.00	
632.89	06/16/98	3.73	629.16	09/18/98	10.53	622.36	10/07/1999	10.42	622.47	10/27/1999	9.10	623.79	01/03/2000	4.64	628.25	NA	NA	
631.82	06/16/98	2.4	629.22	09/18/98	7.2	624.62	10/07/1999	6.86	624.96	10/27/1999	5.20	626.62	01/03/2000	2.76	629.06	NA	NA	
631.79	06/16/98	2.57	629.22	09/18/98	7.81	623.98	10/07/1999	7.57	624.22	10/27/1999	5.63	626.16	01/03/2000	2.94	628.85	08/28/2001	7.05	9
632.89	06/16/98	2.75	630.38		Not Measured		10/07/1999	7.12	625.77	10/27/1999	6.47	626.42	01/03/2000	3.40	629.49	NA	NA	
637.90	06/16/98	3.65	635.39	09/18/98	7.29	630.61	10/07/1999	7.78	630.12	10/27/1999	7.28	630.62	01/03/2000	3.78	634.12	NA	NA	
659.54	06/16/98	1.82	657.72	09/18/98	6.47	653.07	10/07/1999	3.98	655.56	10/27/1999	3.74	655.8	01/03/2000	1.94	657.6	08/27/2001	2.82	9
659.30	06/16/98	4.14	655.16	09/18/98	8.22	651.08	10/07/1999	7.96	651.34	10/27/1999	6.62	652.68	01/03/2000	4.08	655.22	08/28/2001	5.57	9
694.02	06/16/98	Not Measured			Not Measured		10/07/1999	8.81	685.21	10/27/1999	n/a	n/a	01/03/2000	7.24	686.78	NA	NA	
683.04	06/16/98	3.34	679.7		Not Measured		10/07/1999	11.65	671.39	10/27/1999	9.78	673.26	01/03/2000	3.72	679.32	NA	NA	
657.73	06/16/98	2.81	654.92	09/18/98	6.5	651.23	10/07/1999	7.00	650.73	10/27/1999	5.86	651.87	01/03/2000	2.84	654.89	NA	NA	
653.85	06/16/98	6.73	647.12	09/18/98	10.42	643.43	10/07/1999	11.43	642.42	10/27/1999	10.08	643.77	01/03/2000	5.50	648.35	08/27/2001	1.60	1
650.90	06/16/98	2.83	648.07	09/18/98	6.93	643.97	10/07/1999	7.78	643.12	10/27/1999	4.99	645.91	01/03/2000	2.78	648.12	08/27/2001	NA	
650.41	06/16/98	4.12	646.29	09/18/98	8.49	641.92	10/07/1999	8.84	641.57	10/27/1999	7.35	643.06	01/03/2000	4.18	646.23	08/27/2001	2.16	9
628.06	06/16/98	3.06	625	09/18/98	8.18	619.88	10/07/1999	7.70	620.36	10/27/1999	5.42	622.64	01/03/2000	3.32	624.74	08/28/2001	0.41	8
648.32	06/16/98	3.29	645.03	09/18/98	7.42	640.9	10/07/1999	7.78	640.54	10/27/1999	6.70	641.62	01/03/2000	3.32	645	08/27/2001	3.12	8
650.50	06/16/98	4.07	646.43	09/18/98	7.32	643.18	10/07/1999	8.74	641.76	10/27/1999	7.32	643.18	01/03/2000	4.10	646.4	NA	NA	
649.88	06/16/98	3.99	645.89	09/18/98	7.27	642.61	10/07/1999	8.48	641.4	10/27/1999	16.00	633.88	01/03/2000	5.90	643.98	NA	NA	
628.24	06/16/98	3.14	625.1		Not Measured		10/07/1999	7.75	620.49	10/27/1999	5.60	622.64	01/03/2000	3.48	624.76	NA	NA	
626.35	06/16/98	2.73	623.62	09/18/98	7.68	618.67	10/07/1999	7.24	619.11	10/27/1999	5.10	621.25	01/03/2000	2.18	624.17	NA	NA	
639.41	06/16/98	7.01	632.4	09/18/98	9.95	629.46	10/07/1999	9.48	629.93	10/27/1999	8.72	630.69	01/03/2000	6.70	632.71	08/27/2001	0.45	9
639.11	06/16/98	6.94	632.17	09/18/98	10.4	628.71	10/07/1999	9.52	629.59	10/27/1999	8.58	630.53	01/03/2000	6.74	632.37	NA	NA	
639.16	06/16/98	6.84	632.32	09/18/98	10.06	629.1	10/07/1999	9.40	629.76	10/27/1999	11.20	627.96	01/03/2000	6.68	632.48	NA	NA	
630.51	06/16/98	3.17	627.34	09/18/98	8.85	621.66	10/07/1999	5.61	624.9	10/27/1999	4.42	626.09	01/03/2000	3.46	627.05	08/28/2001	0.32	6
629.82	06/16/98	1.95	627.87	09/18/98	8.06	621.76	10/07/1999	4.67	625.15	10/27/1999	3.52	626.3	01/03/2000	2.30	627.52	NA	NA	
629.69	06/16/98	1.66	628.03	09/18/98	4.9	624.79	10/07/1999	4.46	625.23	10/27/1999	3.33	626.36	01/03/2000	2.06	627.63	NA	NA	

TABLE 3-1
GROUNDWATER ELEVATION DATA - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

	Second Quarter 1998			Third Quarter 1998			Measured on 10/7/99			Measured on 10/27/99			Round 2 (1/3/00)			3Q 2001 Data		
op of Riser levation (ft)	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date	of Riser (ft.)	ater Level (f	Date Measured	Saturated Thickness (ft)	Dep Groun (
656.83	06/16/98	2	654.83	09/18/98	5.83	651	10/07/1999	5.10	651.73	10/27/1999	4.19	652.64	01/03/2000	2.16	654.67	08/27/2001	2.12	6.
660.15	06/16/98	2.14	658.01	09/18/98	6.9	653.25	10/07/1999	3.32	656.83	10/27/1999	3.86	656.29	01/03/2000	2.16	657.99	08/27/2001	1.58	7.
637.24																08/27/2001	1.57	8.
637.19																NA	NA	
637.31																08/27/2001	1.68	8.
637.68																08/27/2001	2.03	10
637.72																NA	NA	
637.59																08/27/2001	1.93	10
638.34																08/27/2001	2.21	11
638.40																NA	NA	
638.08																08/27/2001	2.10	12
636.07																08/27/2001	2.43	6.
635.90																08/28/2001	0.97	8.

TABLE 3-1
GROUNDWATER ELEVATION DATA - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

Monitoring Well	Top of Riser Elevation (ft)	2Q 2002 Data				3Q 2002 Data				Historical Data			
		Date Measured	Saturated Thickness (ft)	Depth to Groundwater (ft)	Water Level Elevation (ft)	Date Measured	Saturated Thickness (ft)	Depth to Groundwater (ft)	Water Level Elevation (ft)	Groundwater Elevation (ft)			Well Depth (ft)
										Maximum	Minimum	Range	
PT-10	681.52	04/08/2002	41.09	5.27	676.25	04/08/2002	37.66	8.70	672.82	676.90	671.02	5.88	46.36
PT-11	658.22	04/08/2002	14.77	4.78	653.44	04/08/2002	9.25	10.30	647.92	654.03	647.79	6.24	19.55
PT-12A	652.15	04/08/2002	9.22	4.16	647.99	04/08/2002	3.87	9.51	642.64	649.01	642.26	6.75	13.38
PT-15	637.76	04/08/2002	15.35	4.15	633.61	04/08/2002	9.40	10.10	627.66	633.74	627.38	6.36	19.50
PT-16	637.51	04/08/2002	7.12	3.92	633.59	04/08/2002	3.89	7.15	630.36	634.85	629.83	5.02	11.04
PT-17	640.14	04/08/2002	7.12	4.53	635.61	04/08/2002	0.90	10.75	629.39	635.85	629.05	6.80	11.65
PT-18	656.68	04/08/2002	6.84	4.86	651.82	04/08/2002	3.07	8.63	648.05	652.28	646.30	5.98	11.70
PT-19	645.26	04/08/2002	8.71	2.99	642.27	04/08/2002	1.45	10.25	635.01	643.09	635.01	8.08	11.70
MW-20	647.28	04/08/2002	5.81	5.99	641.29	04/08/2002		Dry		642.34	637.41	4.93	11.80
MW-21A	647.73	04/08/2002	14.02	5.44	642.29	04/08/2002	9.21	10.25	637.48	643.84	637.22	6.62	19.46
MW-22	648.61	04/08/2002	5.88	5.93	642.68	04/08/2002	0.96	10.85	637.76	644.30	637.51	6.79	11.81
PT-23	641.58	04/08/2002	8.20	3.88	637.7	NA	NA	Not Measured		638.14	632.35	5.79	12.08
PT-24	636.40	04/08/2002	7.39	4.49	631.91	04/08/2002	4.53	7.35	629.05	632.76	627.99	4.77	11.88
PT-25	637.09	04/08/2002	8.13	3.90	633.19	04/08/2002	0.58	11.45	625.64	633.51	625.64	7.87	12.03
PT-26	614.64	NA	NA	Not Measured		NA	NA	Not Measured		611.60	601.53	10.07	14.00
MW-27	639.32	04/08/2002	5.66	4.88	634.44	04/08/2002	1.69	8.85	630.47	634.88	630.09	4.79	10.54
MW-28	637.21	04/09/2002	5.61	4.78	632.43	04/09/2002	2.79	7.60	629.61	632.57	628.71	3.86	10.39
MW-29	637.31	04/08/2002	5.33	5.21	632.1	04/08/2002	0.99	9.55	627.76	632.10	627.30	4.80	10.54
MW-30	640.32	04/10/2002	5.74	4.78	635.54	04/10/2002		Dry		636.38	629.88	6.50	10.52
MW-31	636.70	04/08/2002	7.41	2.94	633.76	04/08/2002		Dry		634.22	627.02	7.20	10.35
MW-32	641.68	04/08/2002	6.13	4.24	637.44	04/08/2002		Dry		637.84	632.70	5.14	10.37
MW-33	639.56	04/08/2002	6.13	4.26	635.3	04/08/2002		Dry		635.65	629.72	5.93	10.39
MW-34	632.89	04/08/2002	14.30	3.85	629.04	NA	NA	Not Measured		630.15	622.36	7.79	18.15
MW-35D	631.82	04/08/2002	53.72	2.92	628.9	NA	NA	Removed		629.44	624.62	4.82	56.64
MW-36	631.79	04/08/2002	12.97	3.61	628.18	NA	NA	Removed		629.47	622.26	7.21	16.58
MW-37	632.89	04/08/2002	10.57	3.05	629.84	NA	NA	Not Measured		630.65	625.77	4.88	13.62
MW-38D	637.90	04/08/2002	28.63	3.61	634.29	04/08/2002	24.44	7.80	630.1	635.39	628.99	6.40	32.24
MW-39	659.54	04/08/2002	10.02	1.87	657.67	NA	NA	Not Measured		657.84	650.47	7.37	11.89
MW-40	659.30	04/08/2002	10.95	3.76	655.54	NA	NA	Not Measured		655.85	650.16	5.69	14.71
MW-41D	694.02	NA	NA	Not Measured		NA	NA	Not Measured		687.92	685.21	2.71	47.02
MW-42D	683.04	04/08/2002	44.85	2.53	680.51	NA	NA	Not Measured		680.67	671.39	9.28	47.38
MW-43	657.73	04/08/2002	4.55	2.92	654.81	04/08/2002	0.52	6.95	650.78	655.13	650.73	4.40	7.47
MW-44A	653.85	04/08/2002	8.46	4.02	649.83	04/08/2002	1.81	10.67	643.18	650.37	642.42	7.95	12.48
MW-45	650.90	04/08/2002	5.60	2.74	648.16	04/08/2002	0.74	7.60	643.3	648.16	643.12	5.04	8.34
MW-46	650.41	04/08/2002	8.11	3.34	647.07	04/08/2002	2.31	9.14	641.27	647.53	641.12	6.41	11.45
MW-47	628.06	04/08/2002	5.65	2.91	625.15	04/08/2002	0.39	8.17	619.89	625.76	619.88	5.88	8.56
MW-48	648.32	04/08/2002	8.60	2.90	645.42	04/08/2002	3.65	7.85	640.47	645.46	639.94	5.52	11.50
MW-49D	650.50	04/08/2002	34.24	3.30	647.2	04/08/2002	28.59	8.95	641.55	647.62	641.55	6.07	37.54
MW-50D	649.88	04/08/2002	56.36	3.30	646.58	04/08/2002	50.96	8.70	641.18	647.40	633.88	13.52	59.66
MW-51D	628.24	04/08/2002	33.07	3.80	624.44	NA	NA	Not Measured		628.24	620.49	7.75	36.87
MW-52D	626.35	04/08/2002	56.79	2.57	623.78	NA	NA	Not Measured		624.17	618.67	5.50	59.36
MW-53	639.41	04/08/2002	4.78	5.57	633.84	04/08/2002	0.45	9.90	629.51	633.84	629.46	4.38	10.35
MW-54D	639.11	04/08/2002	29.31	5.68	633.43	04/08/2002	24.54	10.45	628.66	633.43	628.66	4.77	34.99
MW-55D	639.16	04/08/2002	52.43	5.75	633.41	04/08/2002	47.98	10.20	628.96	633.41	627.96	5.45	58.18
MW-56	630.51	04/10/2002	3.13	3.75	626.76	04/10/2002	0.00	Dry		627.56	621.66	5.90	6.88
MW-57D	629.82	04/08/2002	33.13	1.96	627.86	04/08/2002	29.14	5.95	623.87	628.13	621.76	6.37	35.09
MW-58D	629.69	04/08/2002	55.67	1.62	628.07	04/08/2002	51.54	5.75	623.94	628.37	623.94	4.43	57.29

TABLE 3-1
GROUNDWATER ELEVATION DATA - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

Monitoring Well	Top of Riser Elevation (ft)	2Q 2002 Data				3Q 2002 Data				Historical Data			
		Date Measured	Saturated Thickness (ft)	Depth to Groundwater (ft)	Water Level Elevation (ft)	Date Measured	Saturated Thickness (ft)	Depth to Groundwater (ft)	Water Level Elevation (ft)	Groundwater Elevation (ft)			Well Depth (ft)
										Maximum	Minimum	Range	
MW-59	656.83	04/08/2002	6.89	2.21	654.62	NA	NA	Not Measured		654.93	649.85	5.08	9.10
MW-60	660.15	04/08/2002	7.40	2.10	658.05	04/08/2002	2.30	7.20	652.95	658.20	652.23	5.97	9.50
MWT-1	637.24	04/09/2002	4.98	4.77	632.47	04/09/2002	2.55	7.20	630.04	632.47	629.06	3.41	9.75
MWT-2	637.19	04/08/2002	4.63	4.92	632.27	04/08/2002	2.30	7.25	629.94	632.27	629.94	2.33	9.55
MWT-3	637.31	04/09/2002	4.89	5.11	632.2	04/09/2002	2.65	7.35	629.96	632.20	628.99	3.21	10.00
MWT-4	637.68	04/09/2002	7.22	5.21	632.47	04/09/2002	3.68	8.75	628.93	632.47	627.28	5.19	12.43
MWT-5	637.72	04/08/2002	6.68	5.27	632.45	04/08/2002	2.90	9.05	628.67	632.45	628.67	3.78	11.95
MWT-6	637.59	04/09/2002	7.07	5.21	632.38	04/09/2002	3.28	9.00	628.59	632.38	627.24	5.14	12.28
MWT-7	638.34	04/09/2002	8.50	5.47	632.87	04/09/2002	3.72	10.25	628.09	632.87	626.58	6.29	13.97
MWT-8	638.40	04/08/2002	6.73	5.82	632.58	04/08/2002	2.10	10.45	627.95	632.58	627.95	4.63	12.55
MWT-9	638.08	04/09/2002	8.48	5.66	632.42	NA	NA	Not Measured		632.42	626.04	6.38	14.14
MWT-10	636.07	04/09/2002	5.11	3.84	632.23	04/09/2002	3.20	5.75	630.32	632.23	629.55	2.68	8.95
MWT-11	635.90	04/10/2002	7.00	2.95	632.95	04/10/2002	1.74	8.21	627.69	632.95	626.92	6.03	9.95

A2. FIELD DATA SHEETS

GROUNDWATER ELEVALTION AND WELL MONITORING
GROUNDWATER MONITORING - ASH LANDFILL
DELIVERY ORDER #006
SENECA ARMY DEPOT ACTIVITY

Monitoring Well (1)	Elevation at Top of Riser (2)	Well Depth (rel. TOC historic)	December, 2001		
			Date	Depth from Top of Riser (ft.)	Comments/ well condition
BN-S	NA	NA		—	Dry??
FH-D	NA	NA		—	—
FH-S	NA	NA		—	—
PT-10	681.52	46.39		8.70	
PT-11	658.22	19.55		[illegible]	10.30
PT-12A	652.15	13.38		9.51	
PT-15	637.76	19.5		10.10	
PT-16	637.51	11.04		7.15	
PT-17	640.14	11.65		10.75	
PT-18	656.68	11.7		8.63	
PT-19	645.26	11.7		10.25	
MW-20	647.28	11.8		DRY	No water
MW-21A	647.73	19.46		[illegible]	10.25
MW-22/PT-22	648.61	11.81		10.85	
PT-23	641.58	12.8		—	Yellow Jacks
PT-24	636.40	11.88		7.35	
PT-25	637.09	12.03		11.45	
PT-26	614.64	14		—	Yellow Jackets
MW-27	639.32	10.54		8.85	
MW-28	637.21	10.39		7.60	
MW-29	637.31	10.54		9.55	
MW-30	640.32	10.52		10.52	NO Water
MW-31	636.70	10.34		10.34	No Water
MW-32/PT-32	641.68	10.37		DRY	No Water
MW-33	639.56	10.36		10.36	No water
MW-34	632.89	18.15		—	Yellow Jackets
MW-35D	631.82	56.64			Offsite Removed
MW-36	631.79	16.58			Offsite Remove
MW-37	632.89	13.62			Yellow Jackets
MW-38D	637.90	32.24		7.80	
MW-39	659.54	11.89			Yellow Jackets
MW-40	659.30	14.71			Yellow Jackets
MW-41D	694.02	47.02		—	
MW-42D	683.04	47.38		—	
MW-43	657.73	7.47		6.95	
MW-44A	653.85	12.48		10.67	
MW-45	650.90	8.34		7.60	
MW-46	650.41	11.45		9.14	
MW-47	628.06	8.56		8.17	Offsite

GROUNDWATER ELEVALTION AND WELL MONITORING
GROUNDWATER MONITORING - ASH LANDFILL
DELIVERY ORDER #006
SENECA ARMY DEPOT ACTIVITY

Monitoring Well (1)	Elevation at Top of Riser (2)	Well Depth (rel. TOC historic)	December, 2001		
			Date	Depth from Top of Riser (ft.)	Comments/ well condition
MW-48	648.32	11.5		7.85	
MW-49D	650.50	37.54		8.95	
MW-50D	649.88	59.66		8.70	
MW-51D	628.24	36.87			Offsite
MW-52D	626.35	59.36			Offsite
MW-53	639.41	10.35		9.90	
MW-54D	639.11	34.99		10.45	
MW-55D	639.16	58.18		10.20	
MW-56	630.51	6.88		DRY	Offsite
MW-57D	629.82	35.09		5.95	offsite
MW-58D	629.69	57.29		5.75	offsite
MW-59	656.83	9.1			Yellow Jackets
MW-60	660.15	9.5		7.20	
MWT-1	637.24	10.13		7.20	
MWT-2	637.19	9.7		7.25	
MWT-3	637.31	10.13		7.35	
MWT-4	637.68	12.43		8.75	
MWT-5	637.72	12.1		9.05	
MWT-6	637.59	12.65		9.00	
MWT-7	638.34	13.64		10.25	
MWT-8	638.40	12.8		10.45	
MWT-9	638.08	14.14		[illegible]	Yellow Jackets
MWT-10	636.07	9	5.75	[illegible]	
MWT-11	635.90	9.94		8.21	

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #: BN-S

PROJECT: QUARTERLY SAMPLING -ASH LANDFILL
LOCATION: ROMULUS, NY

DATE: 8/16/02
INSPECTORS: Ben / Dale
PUMP #:
SAMPLE ID #:

WEATHER / FIELD CONDITIONS CHECKLIST (RECORD MAJOR CHANGES)

TIME (24 HR)	TEMP (APPRX)	WEATHER (APPRX)	REL. HUMIDITY (GEN)	WIND VELOCITY (APPRX)	(FROM) DIRECTION (0 - 360)	GROUND / SITE SURFACE CONDITIONS	MONITORING INSTRUMENT	MONITORING DETECTOR
							OVM-580	PID

WELL VOLUME CALCULATION FACTORS

DIAMETER (INCHES):	0.25	1	2	3	4	6
GALLONS / FOOT:	0.0026	0.041	0.163	0.367	0.654	1.47
LITERS/FOOT	0.010	0.151	0.617	1.389	2.475	5.564

ONE WELL VOLUME (GAL) = [(POW - STABILIZED WATER LEVEL) X WELL DIAMETER FACTOR (GAL/FT)]

HISTORIC DATA	DEPTH TO POINT OF WELL (TOC)	DEPTH TO TOP OF SCREEN (TOC)	SCREEN LENGTH (FT)	WELL DEVELOPMENT TURBIDITY	WELL DEVELOPMENT pH	WELL DEVELOPMENT SPEC COND

DATA COLLECTED AT WELL SITE	PID READING (OPENING WELL)	DEPTH TO STATIC WATER LEVEL (TOC)	DEPTH TO STABILIZED WATER LEVEL (TOC)	DEPTH TO PUMP INTAKE (TOC)	PUMPING START TIME

RADIATION SCREENING DATA	PUMP PRIOR TO SAMPLING (cps)		PUMP AFTER SAMPLING (cps)	

MONITORING DATA COLLECTED DURING PURGING OPERATIONS

TIME (min)	WATER LEVEL	PUMPING RATE (ml/min)	CUMULATIVE VOL (GALLONS)	DISSOLVED OXYGEN (mg/L)	TEMP (C)	SPEC. COND (umhos)	pH	ORP (mV)	TURBIDITY (NTU)
			Barn	well	Shallow				
			Sample time		1315				
								ARD3174	
									10/01/02
						Sample ID		ARD2168	
						Analysis	Requested	8260-2	

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #:

SAMPLING ORDER		PRESERVATIVES	BOTTLES COUNT/ VOLUME	BOTTLES TYPE	SAMPLE NUMBER	TIME	CHECKED BY/ DATE
1	VOC -CLP(Low Level) or 524.2	4 deg C HCL	3/ 40 ml	VOA			
2	DOC	4 deg C H_2SO_4	2/ 40 ml	VOA			
3	Methane/Ethane/Ethene	4 deg C HCL	3/ 40 ml	VOA			
4	Nitrate/Nitrogen 352.1	4 deg C	1 x 500 ml	HDPE			
7	Alkalinity/Sulfate/Chlorides	4 deg C	1 x 1L	HDPE			
5	Ferrous Iron	Field Analysis					
6	Sulfide	Field Analysis					
8	Hydrogen	4 deg C	2/ 40 ml	VOA			
9							
10							

COMMENTS: (QA/QC?)

IDW INFORMATION:

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #: PT.24

PROJECT: QUARTERLY SAMPLING -ASH LANDFILL
LOCATION: ROMULUS, NY

DATE: 8.15.02
INSPECTORS: Ben / Dale
PUMP #:
SAMPLE ID #:

WEATHER / FIELD CONDITIONS CHECKLIST (RECORD MAJOR CHANGES)

TIME (24 HR)	TEMP (APPRX)	WEATHER (APPRX)	REL. HUMIDITY (GEN)	WIND VELOCITY (APPRX)	(FROM) DIRECTION (0 - 360)	GROUND / SITE SURFACE CONDITIONS

MONITORING INSTRUMENT	MONITORING DETECTOR
OVM-580	PID

WELL VOLUME CALCULATION FACTORS

DIAMETER (INCHES):	0.25	1	2	3	4	6
GALLONS / FOOT:	0.0026	0.041	0.163	0.367	0.654	1.47
LITERS/FOOT	0.010	0.151	0.617	1.389	2.475	5.564

ONE WELL VOLUME (GAL) = [(POW - STABILIZED WATER LEVEL) X WELL DIAMETER FACTOR (GAL/FT)]
4.53 x .163 x 3 = 2.21 gallons

HISTORIC DATA	DEPTH TO POINT OF WELL (TOC)	DEPTH TO TOP OF SCREEN (TOC)	SCREEN LENGTH (FT)	WELL DEVELOPMENT TURBIDITY	WELL DEVELOPMENT pH	WELL DEVELOPMENT SPEC. COND
	11.88					

DATA COLLECTED AT WELL SITE	PID READING (OPENING WELL)	DEPTH TO STATIC WATER LEVEL (TOC)	DEPTH TO STABILIZED WATER LEVEL (TOC)	DEPTH TO PUMP INTAKE (TOC)	PUMPING START TIME
	Ø	7.35		10.88	1030

RADIATION SCREENING DATA	PUMP PRIOR TO SAMPLING (cps)		PUMP AFTER SAMPLING (cps)	

MONITORING DATA COLLECTED DURING PURGING OPERATIONS

TIME (min)	WATER LEVEL	PUMPING RATE (ml/min)	CUMULATIVE VOL (GALLONS)	DISSOLVED OXYGEN (mg/L)	TEMP (C)	SPEC. COND (umhos)	pH	ORP (mV)	TURBIDITY (NTU)
1030	7.55	300	0	5.02	16.2	.628	8.04	-7.4	14.3
1032	7.77	300	600 ml	3.10	16.3	.627	7.98	-9.1	11.6
1034	7.77	300	1200 ml	1.33	16.5	.618	7.82	-87	11.2
1036	7.78	300	1800 ml	.89	16.8	.608	7.62	-65	10.5
1038	7.80	300	2400 ml	.78	16.8	.603	7.57	-50	10.1
1040	7.80	300	3000 ml	.72	16.7	.600	7.50	-41	10.1
1042	7.80	300	3600 ml	.67	16.7	.598	7.45	-34	10.2
1044	7.80	300	4200 ml	.64	16.8	.596	7.39	-25	10.2
1046	7.80	300	4800 ml	.62	16.8	.595	7.37	-16	10.2
1048	7.80	300	5400 ml	.60	16.9	.595	7.35	-11	10.1
1050	7.80	300	6000 ml	.59	16.9	.594	7.33	-7	10.3
1052	7.8	300	6600 ml	.58	16.8	.592	7.31	0	10.5
1054	7.8	300	7200 ml	.56	16.8	.590	7.30	5	
			Sample time			11:00			
								ARO2180 on COC	
						Sample	ID	~~ARO 2081~~	just 10/01/02
						Duplicate	ID	ARO 2181	
						Analysis	Requested	8260B	

7.55

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #:

	SAMPLING ORDER	PRESERVATIVES	BOTTLES COUNT/ VOLUME	BOTTLES TYPE	SAMPLE NUMBER	TIME	CHECKED BY/ DATE
1	VOC -CLP(Low Level) or 524.2	4 deg C HCL	3/ 40 ml	VOA			
2	DOC	4 deg C H_2SO_4	2/ 40 ml	VOA			
3	Methane/Ethane/Ethene	4 deg C HCL	3/ 40 ml	VOA			
4	Nitrate/Nitrogen 352.1	4 deg C	1 x 500 ml	HDPE			
7	Alkalinity/Sulfate/Chlorides	4 deg C	1 x 1L	HDPE			
5	Ferrous Iron	Field Analysis	0.02	mg/l	(a)	1680	
6	Sulfide	Field Analysis	0.010	mg/l	(a)	1680	
8	Hydrogen	4 deg C	2/ 40 ml	VOA			
9							
10							

COMMENTS: (QA/QC?)

IDW INFORMATION:

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #: MW-28

PROJECT: QUARTERLY SAMPLING -ASH LANDFILL
LOCATION: ROMULUS, NY

DATE: 8-15-02
INSPECTORS: Ben/Dale
PUMP #:
SAMPLE ID #:

WEATHER / FIELD CONDITIONS CHECKLIST (RECORD MAJOR CHANGES)

TIME (24 HR)	TEMP (APPRX)	WEATHER (APPRX)	REL. HUMIDITY (GEN)	WIND VELOCITY (APPRX)	(FROM) DIRECTION (0 - 360)	GROUND / SITE SURFACE CONDITIONS	MONITORING INSTRUMENT	MONITORING DETECTOR
							OVM-580	PID

WELL VOLUME CALCULATION FACTORS

DIAMETER (INCHES):	0.25	1	2	3	4	6
GALLONS / FOOT:	0.0026	0.041	0.163	0.367	0.654	1.47
LITERS/FOOT	0.010	0.151	[illegible]	1.389	2.475	5.564

ONE WELL VOLUME (GAL) = [(POW - STABILIZED WATER LEVEL) X WELL DIAMETER FACTOR (GAL/FT)]
2.79 x .163 x 3 = 1.36 gallons

HISTORIC DATA	DEPTH TO POINT OF WELL (TOC)	DEPTH TO TOP OF SCREEN (TOC)	SCREEN LENGTH (FT)	WELL DEVELOPMENT TURBIDITY	WELL DEVELOPMENT pH	WELL DEVELOPMENT SPEC COND
	10.39					

DATA COLLECTED AT WELL SITE	PID READING (OPENING WELL)	DEPTH TO STATIC WATER LEVEL (TOC)	DEPTH TO STABILIZED WATER LEVEL (TOC)	DEPTH TO PUMP INTAKE (TOC)	PUMPING START TIME
	Ø	7.60	TOP	9.39	1130

RADIATION SCREENING DATA	PUMP PRIOR TO SAMPLING (cps)		PUMP AFTER SAMPLING (cps)	

MONITORING DATA COLLECTED DURING PURGING OPERATIONS

TIME (min)	WATER LEVEL	PUMPING RATE (ml/min)	CUMULATIVE VOL (GALLONS) ~~(ml)~~	DISSOLVED OXYGEN (mg/L)	TEMP (C)	SPEC. COND (mmhos)	pH	ORP (mV)	TURBIDITY (NTU)
1136	TOP	200	1200	1.27	18.6	.680	6.97	196	16.9
1138	TOP	200	1400	1.14	18.5	.680	6.97	190	15.9
1140	TOP	200	1600	1.06	18.2	.679	6.97	184	16.9
1142	TOP	200	1800	1.06	18.2	.679	6.97	183	11.4
1144	TOP	200	2000	1.06	18.2	.678	6.98	183	7.9
1146	TOP	200	2200	1.08	18.3	.678	6.98	183	6.3
1148	TOP	200	2400	1.10	18.3	.678	6.98	184	5.8
1150	TOP	200	2600	1.17	18.3	.677	6.97	187	5.5
1152	TOP	200	2800	1.22	18.3	.677	6.97	190	5.0
1154	TOP	200	3000	1.21	18.3	.677	6.97	191	4.7
1156	TOP	200	3400	1.20	18.3	.676	6.98	192	4.7

Sample Time is 1200

Sample ID ARD217

Analysis Requested 8260B

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #:

	SAMPLING ORDER	PRESERVATIVES	BOTTLES COUNT/ VOLUME	BOTTLES TYPE	SAMPLE NUMBER	TIME	CHECKED BY/ DATE
1	VOC -CLP(Low Level) or 524.2	4 deg C HCL	3/ 40 ml	VOA			
2	DOC	4 deg C H_2SO_4	2/ 40 ml	VOA			
3	Methane/Ethane/Ethene	4 deg C HCL	3/ 40 ml	VOA			
4	Nitrate/Nitrogen 352.1	4 deg C	1 x 500 ml	HDPE			
7	Alkalinity/Sulfate/Chlorides	4 deg C	1 x 1L	HDPE			
5	Ferrous Iron	Field Analysis	0.20	Mg/l	@18.3	°C	
6	Sulfide	Field Analysis	0.198	Mg/l	@18.3	°C	
8	Hydrogen	4 deg C	2/ 40 ml	VOA			
9							
10							

COMMENTS: (QA/QC?)

IDW INFORMATION:

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #: MW-30

PROJECT: QUARTERLY SAMPLING -ASH LANDFILL
LOCATION: ROMULUS, NY

DATE: 8.15.02
INSPECTORS: Ben/Dale
PUMP #:
SAMPLE ID #:

WEATHER / FIELD CONDITIONS CHECKLIST (RECORD MAJOR CHANGES)

TIME (24 HR)	TEMP (APPRX)	WEATHER (APPRX)	REL. HUMIDITY (GEN)	WIND VELOCITY (APPRX)	(FROM) DIRECTION (0 - 360)	GROUND / SITE SURFACE CONDITIONS	MONITORING INSTRUMENT	MONITORING DETECTOR
							OVM-580	PID

WELL VOLUME CALCULATION FACTORS

DIAMETER (INCHES):	0.25	1	2	3	4	6
GALLONS / FOOT:	0.0026	0.041	0.163	0.367	0.654	1.47
LITERS/FOOT	0.010	0.151	0.617	1.389	2.475	5.564

ONE WELL VOLUME (GAL) = [(POW - STABILIZED WATER LEVEL) X WELL DIAMETER FACTOR (GAL/FT)]

HISTORIC DATA	DEPTH TO POINT OF WELL (TOC)	DEPTH TO TOP OF SCREEN (TOC)	SCREEN LENGTH (FT)	WELL DEVELOPMENT TURBIDITY	WELL DEVELOPMENT pH	WELL DEVELOPMENT SPEC COND

DATA COLLECTED AT WELL SITE	PID READING (OPENING WELL)	DEPTH TO STATIC WATER LEVEL (TOC)	DEPTH TO STABILIZED WATER LEVEL (TOC)	DEPTH TO PUMP INTAKE (TOC)	PUMPING START TIME

RADIATION SCREENING DATA	PUMP PRIOR TO SAMPLING (cps)		PUMP AFTER SAMPLING (cps)	

MONITORING DATA COLLECTED DURING PURGING OPERATIONS

TIME (min)	WATER LEVEL	PUMPING RATE (ml/min)	CUMULATIVE VOL (GALLONS)	DISSOLVED OXYGEN (mg/L)	TEMP (C)	SPEC. COND (umhos)	pH	ORP (mV)	TURBIDITY (NTU)
			NO water in well						

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #:

SAMPLING ORDER		PRESERVATIVES	BOTTLES COUNT/ VOLUME	BOTTLES TYPE	SAMPLE NUMBER	TIME	CHECKED BY/ DATE
1	VOC -CLP(Low Level) or 524.2	4 deg C HCL	3/ 40 ml	VOA			
2	DOC	4 deg C H_2SO_4	2/ 40 ml	VOA			
3	Methane/Ethane/Ethene	4 deg C HCL	3/ 40 ml	VOA			
4	Nitrate/Nitrogen 352.1	4 deg. C	1 x 500 ml	HDPE			
7	Alkalinity/Sulfate/Chlorides	4 deg C	1 x 1L	HDPE			
5	Ferrous Iron	Field Analysis					
6	Sulfide	Field Analysis					
8	Hydrogen	4 deg C	2/ 40 ml	VOA			
9							
10							

COMMENTS: (QA/QC?)

IDW INFORMATION:

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #: MW-56

PROJECT: QUARTERLY SAMPLING -ASH LANDFILL
LOCATION: ROMULUS, NY

DATE: 8.15.02
INSPECTORS: Ben / Dale
PUMP #:
SAMPLE ID #:

WEATHER / FIELD CONDITIONS CHECKLIST (RECORD MAJOR CHANGES)

TIME (24 HR)	TEMP (APPRX)	WEATHER (APPRX)	REL. HUMIDITY (GEN)	WIND VELOCITY (APPRX)	(FROM) DIRECTION (0 - 360)	GROUND / SITE SURFACE CONDITIONS	MONITORING INSTRUMENT	MONITORING DETECTOR
							OVM-580	PID

WELL VOLUME CALCULATION FACTORS

DIAMETER (INCHES):	0.25	1	2	3	4	6
GALLONS / FOOT:	0.0026	0.041	0.163	0.367	0.654	1.47
LITERS/FOOT	0.010	0.151	0.617	1.389	2.475	5.564

ONE WELL VOLUME (GAL) = [(POW - STABILIZED WATER LEVEL) X WELL DIAMETER FACTOR (GAL/FT)]

HISTORIC DATA	DEPTH TO POINT OF WELL (TOC)	DEPTH TO TOP OF SCREEN (TOC)	SCREEN LENGTH (FT)	WELL DEVELOPMENT TURBIDITY	WELL DEVELOPMENT pH	WELL DEVELOPMENT SPEC. COND
	6.88					

DATA COLLECTED AT WELL SITE	PID READING (OPENING WELL)	DEPTH TO STATIC WATER LEVEL (TOC)	DEPTH TO STABILIZED WATER LEVEL (TOC)	DEPTH TO PUMP INTAKE (TOC)	PUMPING START TIME

RADIATION SCREENING DATA	PUMP PRIOR TO SAMPLING (cps)		PUMP AFTER SAMPLING (cps)	

MONITORING DATA COLLECTED DURING PURGING OPERATIONS

TIME (min)	WATER LEVEL	PUMPING RATE (ml/min)	CUMULATIVE VOL (GALLONS)	DISSOLVED OXYGEN (mg/L)	TEMP (C)	SPEC. COND (umhos)	pH	ORP (mV)	TURBIDITY (NTU)
			NO WATER						

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #:

	SAMPLING ORDER	PRESERVATIVES		BOTTLES COUNT/ VOLUME	BOTTLES TYPE	SAMPLE NUMBER	TIME	CHECKED BY/ DATE
1	VOC -CLP(Low Level) or 524.2	4 deg C	HCL	3/ 40 ml	VOA			
2	DOC	4 deg C	H_2SO_4	2/ 40 ml	VOA			
3	Methane/Ethane/Ethene	4 deg C	HCL	3/ 40 ml	VOA			
4	Nitrate/Nitrogen 352.1	4 deg C		1 x 500 ml	HDPE			
7	Alkalinity/Sulfate/Chlorides	4 deg C		1 x 1L	HDPE			
5	Ferrous Iron	Field Analysis						
6	Sulfide	Field Analysis						
8	Hydrogen	4 deg C		2/ 40 ml	VOA			
9								
10								

COMMENTS: (QA/QC?)

IDW INFORMATION:

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #: MWT-1

PROJECT: QUARTERLY SAMPLING -ASH LANDFILL
LOCATION: ROMULUS, NY

DATE: 8·15·02
INSPECTORS: Ben/Dale
PUMP #:
SAMPLE ID #:

WEATHER / FIELD CONDITIONS CHECKLIST (RECORD MAJOR CHANGES)

TIME (24 HR)	TEMP (APPRX)	WEATHER (APPRX)	REL. HUMIDITY (GEN)	WIND VELOCITY (APPRX)	(FROM) DIRECTION (0 - 360)	GROUND / SITE SURFACE CONDITIONS	MONITORING INSTRUMENT	MONITORING DETECTOR
							OVM-580	PID

WELL VOLUME CALCULATION FACTORS

DIAMETER (INCHES):	0.25	1	2	3	4	6
GALLONS / FOOT:	0.0026	0.041	0.163	0.367	0.654	1.47
LITERS/FOOT	0.010	0.151	0.617	1.389	2.475	5.564

ONE WELL VOLUME (GAL) = [(POW - STABILIZED WATER LEVEL) X WELL DIAMETER FACTOR (GAL/FT)]
2.55 X .163 X 3 = 1.24 gallons

HISTORIC DATA	DEPTH TO POINT OF WELL (TOC)	DEPTH TO TOP OF SCREEN (TOC)	SCREEN LENGTH (FT)	WELL DEVELOPMENT TURBIDITY	WELL DEVELOPMENT pH	WELL DEVELOPMENT SPEC. COND
	9.75					

DATA COLLECTED AT WELL SITE	PID READING (OPENING WELL)	DEPTH TO STATIC WATER LEVEL (TOC)	DEPTH TO STABILIZED WATER LEVEL (TOC)	DEPTH TO PUMP INTAKE (TOC)	PUMPING START TIME
	Ø	7.20	TOP	9.50	1543

RADIATION SCREENING DATA	PUMP PRIOR TO SAMPLING (cps)		PUMP AFTER SAMPLING (cps)	

MONITORING DATA COLLECTED DURING PURGING OPERATIONS

TIME (min)	WATER LEVEL	PUMPING RATE (ml/min)	CUMULATIVE VOL (GALLONS)	DISSOLVED OXYGEN (mg/L)	TEMP (C)	SPEC. COND (umhos)	pH	ORP (mV)	TURBIDITY (NTU)
1545		400	.25	4.14	16.8	.728	7.11	170	45.7
1547	TOP		.80	4.11	16.3	.716	7.12	153	18.4
1549	TOP		1.0	3.44	16.1	.712	7.12	147	15.4
1551	TOP	400	1.3	2.40	15.8	.709	7.13	144	19.1
1553			1.6	2.40	15.8	.707	7.10	144	14.1
			Sample Time			1600			
						Sample	ID	TR2091	

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #:

SAMPLING ORDER		PRESERVATIVES	BOTTLES COUNT/ VOLUME	BOTTLES TYPE	SAMPLE NUMBER	TIME	CHECKED BY/ DATE
1	VOC -CLP(Low Level) or 524.2	4 deg C HCL	3/ 40 ml	VOA			
2	DOC	4 deg C H_2SO_4	2/ 40 ml	VOA			
3	Methane/Ethane/Ethene	4 deg C HCL	3/ 40 ml	VOA			
4	Nitrate/Nitrogen 352.1	4 deg C	1 x 500 ml	HDPE			
7	Alkalinity/Sulfate/Chlorides	4 deg C	1 x 1L	HDPE			
5	Ferrous Iron	Field Analysis	0.06	mg/l	@	15.8 °C	
6	Sulfide	Field Analysis	0.030	mg/l	@	15.8°C	
8	Hydrogen	4 deg C	2/ 40 ml	VOA			
9							
10							

COMMENTS: (QA/QC?)

IDW INFORMATION:

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #: MWT-3

PROJECT: QUARTERLY SAMPLING -ASH LANDFILL
LOCATION: ROMULUS, NY

DATE: 8·15·02
INSPECTORS: Ben/Dale
PUMP #:
SAMPLE ID #:

WEATHER / FIELD CONDITIONS CHECKLIST (RECORD MAJOR CHANGES)

TIME (24 HR)	TEMP (APPRX)	WEATHER (APPRX)	REL. HUMIDITY (GEN)	WIND VELOCITY (APPRX)	(FROM) DIRECTION (0 - 360)	GROUND / SITE SURFACE CONDITIONS	MONITORING INSTRUMENT	MONITORING DETECTOR
							OVM-580	PID

WELL VOLUME CALCULATION FACTORS

DIAMETER (INCHES):	0.25	1	2	3	4	6
GALLONS / FOOT:	0.0026	0.041	0.163	0.367	0.654	1.47
LITERS/FOOT	0.010	0.151	0.617	1.389	2.475	5.564

ONE WELL VOLUME (GAL) = [(POW - STABILIZED WATER LEVEL) X WELL DIAMETER FACTOR (GAL/FT)]
2.65 X .163 X 3 = 1.29 gallon

HISTORIC DATA	DEPTH TO POINT OF WELL (TOC)	DEPTH TO TOP OF SCREEN (TOC)	SCREEN LENGTH (FT)	WELL DEVELOPMENT TURBIDITY	WELL DEVELOPMENT pH	WELL DEVELOPMENT SPEC. COND
	10.0					

DATA COLLECTED AT WELL SITE	PID READING (OPENING WELL)	DEPTH TO STATIC WATER LEVEL (TOC)	DEPTH TO STABILIZED WATER LEVEL (TOC)	DEPTH TO PUMP INTAKE (TOC)	PUMPING START TIME
	Ø	7.35		9.0	1610

RADIATION SCREENING DATA	PUMP PRIOR TO SAMPLING (cps)		PUMP AFTER SAMPLING (cps)	

MONITORING DATA COLLECTED DURING PURGING OPERATIONS

TIME (min)	WATER LEVEL	PUMPING RATE (ml/min)	CUMULATIVE VOL (GALLONS)	DISSOLVED OXYGEN (mg/L)	TEMP (C)	SPEC. COND (umhos)	pH	ORP (mV)	TURBIDITY (NTU)
1610	TOP	400	.25	3.16	17.1	.678	7.15	212	85.3
1612	TOP	400	.6	1.44	16.8	.585	7.14	195	51.4
1613	TOP		.95	1.27	16.1	.578	7.14	188	35.5
1614	TOP		1.30	.95	16.3	.569	7.15	167	13.8
1615	TOP		1.70	.80	16.3	.562	7.17	146	9.0
			Sample time			16:20			
						Sample	ID	TR2092	

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #:

	SAMPLING ORDER	PRESERVATIVES	BOTTLES COUNT/ VOLUME	BOTTLES TYPE	SAMPLE NUMBER	TIME	CHECKED BY/ DATE
1	VOC -CLP(Low Level) or 524.2	4 deg C HCL	3/ 40 ml	VOA			
2	DOC	4 deg C H_2SO_4	2/ 40 ml	VOA			
3	Methane/Ethane/Ethene	4 deg C HCL	3/ 40 ml	VOA			
4	Nitrate/Nitrogen 352.1	4 deg C	1 x 500 ml	HDPE			
7	Alkalinity/Sulfate/Chlorides	4 deg C	1 x 1L	HDPE			
5	Ferrous Iron	Field Analysis	0.00				
6	Sulfide	Field Analysis	0.027		mg/l	@ 16.3	
8	Hydrogen	4 deg C	2/ 40 ml	VOA			
9							
10							

COMMENTS: (QA/QC?)

Well started to go dry turbidity on Fe+ is above 100 ntu.

IDW INFORMATION:

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #: MW1-4

PROJECT: QUARTERLY SAMPLING -ASH LANDFILL
LOCATION: ROMULUS, NY

DATE: 8·15·02
INSPECTORS: Ben/Dale
PUMP #:
SAMPLE ID #:

WEATHER / FIELD CONDITIONS CHECKLIST (RECORD MAJOR CHANGES)

TIME (24 HR)	TEMP (APPRX)	WEATHER (APPRX)	REL. HUMIDITY (GEN)	WIND VELOCITY (APPRX)	(FROM) DIRECTION (0 - 360)	GROUND / SITE SURFACE CONDITIONS	MONITORING INSTRUMENT	MONITORING DETECTOR
							OVM-580	PID

WELL VOLUME CALCULATION FACTORS

DIAMETER (INCHES):	0.25	1	2	3	4	6
GALLONS / FOOT:	0.0026	0.041	0.163	0.367	0.654	1.47
LITERS/FOOT	0.010	0.151	0.617	1.389	2.475	5.564

ONE WELL VOLUME (GAL) = [(POW - STABILIZED WATER LEVEL) X WELL DIAMETER FACTOR (GAL/FT)]
3.53 X .163 X 3 = 1.72 gallons

HISTORIC DATA	DEPTH TO POINT OF WELL (TOC)	DEPTH TO TOP OF SCREEN (TOC)	SCREEN LENGTH (FT)	WELL DEVELOPMENT TURBIDITY	WELL DEVELOPMENT pH	WELL DEVELOPMENT SPEC. COND
	12.28					

DATA COLLECTED AT WELL SITE	PID READING (OPENING WELL)	DEPTH TO STATIC WATER LEVEL (TOC)	DEPTH TO STABILIZED WATER LEVEL (TOC)	DEPTH TO PUMP INTAKE (TOC)	PUMPING START TIME
	Ø	8.75	Top of Pump	12.00	1430

RADIATION SCREENING DATA	PUMP PRIOR TO SAMPLING (cps)		PUMP AFTER SAMPLING (cps)	

MONITORING DATA COLLECTED DURING PURGING OPERATIONS

TIME (min)	WATER LEVEL	PUMPING RATE (ml/min)	CUMULATIVE VOL (GALLONS)	DISSOLVED OXYGEN (mg/L)	TEMP (C)	SPEC. COND (umhos)	pH	ORP (mV)	TURBIDITY (NTU)
1430	8.75	500	.25	4.87	16.2	1.12	6.88	249	39.9
1435	Top	500		3.46	15.6	1.12	6.86	246	24.2
1437	top	500		2.68	15.5	1.11	6.86	244	18.5
1440		100	Sample taken	@		1445			
						Sample	ID	TR2093	

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #:

	SAMPLING ORDER	PRESERVATIVES	BOTTLES COUNT/ VOLUME	BOTTLES TYPE	SAMPLE NUMBER	TIME	CHECKED BY/ DATE
1	VOC -CLP(Low Level) or 524.2	4 deg C HCL	3/ 40 ml	VOA			
2	DOC	4 deg C H_2SO_4	2/ 40 ml	VOA			
3	Methane/Ethane/Ethene	4 deg C HCL	3/ 40 ml	VOA			
4	Nitrate/Nitrogen 352.1	4 deg C	1 x 500 ml	HDPE			
7	Alkalinity/Sulfate/Chlorides	4 deg C	1 x 1L	HDPE			
5	Ferrous Iron	Field Analysis	0.01		mg/l	@ 5.5 °C	
6	Sulfide	Field Analysis	.032		mg/l	@ 15.5 °C	
8	Hydrogen	4 deg C	2/ 40 ml	VOA			
9							
10							

COMMENTS: (QA/QC?)

IDW INFORMATION:

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #: MWT-6

PROJECT: QUARTERLY SAMPLING -ASH LANDFILL
LOCATION: ROMULUS, NY

DATE: 8·15·02
INSPECTORS: Ben / Dale
PUMP #:
SAMPLE ID #:

WEATHER / FIELD CONDITIONS CHECKLIST (RECORD MAJOR CHANGES)

TIME (24 HR)	TEMP (APPRX)	WEATHER (APPRX)	REL. HUMIDITY (GEN)	WIND VELOCITY (APPRX)	(FROM) DIRECTION (0 - 360)	GROUND / SITE SURFACE CONDITIONS	MONITORING INSTRUMENT	MONITORING DETECTOR
							OVM-580	PID

WELL VOLUME CALCULATION FACTORS

DIAMETER (INCHES):	0.25	1	2	3	4	6
GALLONS / FOOT:	0.0026	0.041	0.163	0.367	0.654	1.47
LITERS/FOOT	0.010	0.151	0.617	1.389	2.475	5.564

ONE WELL VOLUME (GAL) = [(POW - STABILIZED WATER LEVEL) X WELL DIAMETER FACTOR (GAL/FT)]
3.42 X .163 X 3 = 1.67 gallons

HISTORIC DATA	DEPTH TO POINT OF WELL (TOC)	DEPTH TO TOP OF SCREEN (TOC)	SCREEN LENGTH (FT)	WELL DEVELOPMENT TURBIDITY	WELL DEVELOPMENT pH	WELL DEVELOPMENT SPEC. COND
	12.42					

DATA COLLECTED AT WELL SITE	PID READING (OPENING WELL)	DEPTH TO STATIC WATER LEVEL (TOC)	DEPTH TO STABILIZED WATER LEVEL (TOC)	DEPTH TO PUMP INTAKE (TOC)	PUMPING START TIME
	Ø	9.00		11.42	1500

RADIATION SCREENING DATA	PUMP PRIOR TO SAMPLING (cps)		PUMP AFTER SAMPLING (cps)	

MONITORING DATA COLLECTED DURING PURGING OPERATIONS

TIME (min)	WATER LEVEL	PUMPING RATE (ml/min)	CUMULATIVE VOL (GALLONS)	DISSOLVED OXYGEN (mg/L)	TEMP (C)	SPEC. COND (umhos)	pH	ORP (mV)	TURBIDITY (NTU)
1500	9.60	400	0.42	3.03	16.3	.730	7.27	36	23.2
1502	9.60	400	.8	1.60	16.0	.609	7.40	16	13.2
1504	9.60	400	1.2	1.31	16.0	.553	7.43	10	10.5
1506	9.60	400	1.6	1.10	16.1	.516	7.43	7	12.2
1507	9.60	400	1.8	.89	16.0	.494	7.45	6	10.2
1509	9.60	400	2.0	.82	16.1	.487	7.46	6	9.8
			Sample time		1515				
						Sample	ID	TR2094	1515
						Duplicate	ID	TR2099	1515
						Analysis	Requested	524.2	on both

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #:

SAMPLING ORDER		PRESERVATIVES	BOTTLES COUNT/ VOLUME	BOTTLES TYPE	SAMPLE NUMBER	TIME	CHECKED BY/ DATE
1	VOC -CLP(Low Level) or 524.2	4 deg C HCL	3/ 40 ml	VOA			
2	DOC	4 deg C H_2SO_4	2/ 40 ml	VOA			
3	Methane/Ethane/Ethene	4 deg C HCL	3/ 40 ml	VOA			
4	Nitrate/Nitrogen 352.1	4 deg C	1 x 500 ml	HDPE			
7	Alkalinity/Sulfate/Chlorides	4 deg C	1 x 1L	HDPE			
5	Ferrous Iron	Field Analysis	0.04		mg/l	@	16.1°C
6	Sulfide	Field Analysis	0.019		mg/l	@	16.1°C
8	Hydrogen	4 deg C	2/ 40 ml	VOA			
9							
10							

COMMENTS: (QA/QC?)

IDW INFORMATION:

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #: MWT-7

PROJECT: QUARTERLY SAMPLING -ASH LANDFILL
LOCATION: ROMULUS, NY

DATE: 8.15.02
INSPECTORS: Ben / Dale
PUMP #:
SAMPLE ID #:

WEATHER / FIELD CONDITIONS CHECKLIST (RECORD MAJOR CHANGES)

TIME (24 HR)	TEMP (APPRX)	WEATHER (APPRX)	REL. HUMIDITY (GEN)	WIND VELOCITY (APPRX)	(FROM) DIRECTION (0 - 360)	GROUND / SITE SURFACE CONDITIONS	MONITORING INSTRUMENT	MONITORING DETECTOR
							OVM-580	PID

WELL VOLUME CALCULATION FACTORS

DIAMETER (INCHES):	0.25	1	2	3	4	6
GALLONS / FOOT:	0.0026	0.041	0.163	0.367	0.654	1.47
LITERS/FOOT	0.010	0.151	0.617	1.389	2.475	5.564

ONE WELL VOLUME (GAL) = [(POW - STABILIZED WATER LEVEL) X WELL DIAMETER FACTOR (GAL/FT)]
3.67 x .163 x 3 = 1.79 gallons

HISTORIC DATA	DEPTH TO POINT OF WELL (TOC)	DEPTH TO TOP OF SCREEN (TOC)	SCREEN LENGTH (FT)	WELL DEVELOPMENT TURBIDITY	WELL DEVELOPMENT pH	WELL DEVELOPMENT SPEC. COND
	13.92					

DATA COLLECTED AT WELL SITE	PID READING (OPENING WELL)	DEPTH TO STATIC WATER LEVEL (TOC)	DEPTH TO STABILIZED WATER LEVEL (TOC)	DEPTH TO PUMP INTAKE (TOC)	PUMPING START TIME
	Ø	10.25	11.55	13.42	13:12

RADIATION SCREENING DATA	PUMP PRIOR TO SAMPLING (cps)		PUMP AFTER SAMPLING (cps)	

MONITORING DATA COLLECTED DURING PURGING OPERATIONS

TIME (min)	WATER LEVEL	PUMPING RATE (ml/min)	CUMULATIVE VOL (GALLONS)	DISSOLVED OXYGEN (mg/L)	TEMP (C)	SPEC. COND (umhos)	pH	ORP (mV)	TURBIDITY (NTU)
13:12	10.65	500	0	5.89	15.3	.883	7.04	295	48.9
13:17	11.20	500	2500 ml	4.41	15.1	.864	6.74	294	4.7
13:22	11.55	500	5000 ml	4.36	14.9	.861	6.71	289	3.1
1327	11.55	500	7500 ml	3.40	14.8	.861	6.71	285	
			Sample time			1345			
						Sample	ID	TR2095 @ 1345	
						MS	ID	TR 2095 MS	
						MSD	ID	TR2095 MSD	
						Analysis	Requested	524.2	

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #:

	SAMPLING ORDER	PRESERVATIVES		BOTTLES COUNT/ VOLUME	BOTTLES TYPE	SAMPLE NUMBER	TIME	CHECKED BY/ DATE
1	VOC -CLP(Low Level) or 524.2	4 deg C	HCL	3/ 40 ml	VOA			
2	DOC	4 deg C	H_2SO_4	2/ 40 ml	VOA			
3	Methane/Ethane/Ethene	4 deg C	HCL	3/ 40 ml	VOA			
4	Nitrate/Nitrogen 352.1	4 deg C		1 x 500 ml	HDPE			
7	Alkalinity/Sulfate/Chlorides	4 deg C		1 x 1L	HDPE			
5	Ferrous Iron	Field Analysis				0.06	1411 @	14.8°C
6	Sulfide	Field Analysis				0.029	" @	14.8°C
8	Hydrogen	4 deg C		2/ 40 ml	VOA			
9								
10								

COMMENTS: (QA/QC?)

IDW INFORMATION:

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #: MWT-9

PROJECT: QUARTERLY SAMPLING -ASH LANDFILL
LOCATION: ROMULUS, NY

DATE: 8·16·02
INSPECTORS: Ben/Dale
PUMP #:
SAMPLE ID #:

WEATHER / FIELD CONDITIONS CHECKLIST (RECORD MAJOR CHANGES)

TIME (24 HR)	TEMP (APPRX)	WEATHER (APPRX)	REL. HUMIDITY (GEN)	WIND VELOCITY (APPRX)	(FROM) DIRECTION (0 - 360)	GROUND / SITE SURFACE CONDITIONS	MONITORING INSTRUMENT	MONITORING DETECTOR
							OVM-580	PID

WELL VOLUME CALCULATION FACTORS

DIAMETER (INCHES):	0.25	1	2	3	4	6
GALLONS / FOOT:	0.0026	0.041	0.163	0.367	0.654	1.47
LITERS/FOOT	0.010	0.151	0.617	1.389	2.475	5.564

ONE WELL VOLUME (GAL) = [(POW - STABILIZED WATER LEVEL) X WELL DIAMETER FACTOR (GAL/FT)]
2.60 X .163 X 3 = 1.27 gallons

HISTORIC DATA	DEPTH TO POINT OF WELL (TOC)	DEPTH TO TOP OF SCREEN (TOC)	SCREEN LENGTH (FT)	WELL DEVELOPMENT TURBIDITY	WELL DEVELOPMENT pH	WELL DEVELOPMENT SPEC COND
	14.08					

DATA COLLECTED AT WELL SITE	PID READING (OPENING WELL)	DEPTH TO STATIC WATER LEVEL (TOC)	DEPTH TO STABILIZED WATER LEVEL (TOC)	DEPTH TO PUMP INTAKE (TOC)	PUMPING START TIME
	Ø	11.48		13.58	13.55

RADIATION SCREENING DATA	PUMP PRIOR TO SAMPLING (cps)		PUMP AFTER SAMPLING (cps)	1:35	8·16·02

MONITORING DATA COLLECTED DURING PURGING OPERATIONS

TIME (min)	WATER LEVEL	PUMPING RATE (ml/min)	CUMULATIVE VOL (GALLONS)	DISSOLVED OXYGEN (mg/L)	TEMP (C)	SPEC. COND (umhos)	pH	ORP (mV)	TURBIDITY (NTU)
1403	Well	waiting →	Well Turbidity	over 1000	will	let	wells	it & come	back
8·16·02	Return	to MWT-9	to Sample		Water level	10.70	with		
		pump	in well	well depth	pump	@	ml/min		
		Water	is very turbid	but clearing	up	after	5 gallons.		
1300	10.99	200 ml	.5	3.53	17.0	.616	7.43	-33	27.8
1350	11.0	300 ml	.6	.90	16.7	.578	7.32	-34	21.4
1352	11.0	300 ml	.8	.80	16.8	.571	7.32	-35	18.8
1354	11.0	300 ml	1.0	.71	16.6	.562	7.32	-35	17.8
1356	11.0	300 ml	1.2	.69	16.8	.560	7.31	-35	17.3
1358	11.0	300 ml	1.35	.66	16.8	.556	7.31	-35	17.5
1400	11.0	300 ml	1.50	.66	16.7	.553	7.31	-35	16.8
			Sample time		1400				
						Sample	ID	TR2096	
						Analysis	Requested	524.2	

~~[illegible]~~ 0.049 mg/l @ 16.7 °C

Sulfide =

Fe 2+ ~~0~~.21 mg/l @ 16.7 °C

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #: MWT-10

PROJECT: QUARTERLY SAMPLING -ASH LANDFILL
LOCATION: ROMULUS, NY

DATE: 8.15.02
INSPECTORS: Ben / Dale
PUMP #:
SAMPLE ID #:

WEATHER / FIELD CONDITIONS CHECKLIST (RECORD MAJOR CHANGES)

TIME (24 HR)	TEMP (APPRX)	WEATHER (APPRX)	REL. HUMIDITY (GEN)	WIND VELOCITY (APPRX)	(FROM) DIRECTION (0 - 360)	GROUND / SITE SURFACE CONDITIONS	MONITORING INSTRUMENT	MONITORING DETECTOR
							OVM-580	PID

WELL VOLUME CALCULATION FACTORS

DIAMETER (INCHES):	0.25	1	2	3	4	6
GALLONS / FOOT:	0.0026	0.041	0.163	0.367	0.654	1.47
LITERS/FOOT	0.010	0.151	0.617	1.389	2.475	5.564

ONE WELL VOLUME (GAL) = [(POW - STABILIZED WATER LEVEL) X WELL DIAMETER FACTOR (GAL/FT)]
3.20 X .163 X 3 = 1.56 gallons

HISTORIC DATA	DEPTH TO POINT OF WELL (TOC)	DEPTH TO TOP OF SCREEN (TOC)	SCREEN LENGTH (FT)	WELL DEVELOPMENT TURBIDITY	WELL DEVELOPMENT pH	WELL DEVELOPMENT SPEC. COND
	8.95					

DATA COLLECTED AT WELL SITE	PID READING (OPENING WELL)	DEPTH TO STATIC WATER LEVEL (TOC)	DEPTH TO STABILIZED WATER LEVEL (TOC)	DEPTH TO PUMP INTAKE (TOC)	PUMPING START TIME
		5.75	5.90	8.45	0945

RADIATION SCREENING DATA	PUMP PRIOR TO SAMPLING (cps)		PUMP AFTER SAMPLING (cps)
	5.82 8/15/02		

MONITORING DATA COLLECTED DURING PURGING OPERATIONS

TIME (min)	WATER LEVEL	PUMPING RATE (ml/min)	CUMULATIVE VOL (GALLONS)	DISSOLVED OXYGEN (mg/L)	TEMP (C)	SPEC. COND (mmhos)	pH	ORP (mV)	TURBIDITY (NTU)
0945	5.90	300	0	2.29	17.9	0.095	8.55	228	7.5
0948	5.90	300	900 ml	1.57	17.6	.115	8.86	216	13.0
950	5.90	300	1500	0.89	17.6	.096	9.55	188	9.1
952	5.90	300	2500	0.85	17.5	.095	9.63	176	6.6
955	5.90	300	2700	0.75	17.6	.094	9.70	164	6.4
957	5.90	300	3300 ml	0.71	17.7	.094	9.72	156	6.1
959	5.90	300	3900 ml	0.65	17.8	.093	9.75	142	6.7
10:00	5.9	300		0.65	17.8	.093	9.75	140	6.7
			Sample time			10:00			
						Sample ID		TR 2097	
						Analysis	Requested	524.2	
								52	

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #:

	SAMPLING ORDER	PRESERVATIVES	BOTTLES COUNT/ VOLUME	BOTTLES TYPE	SAMPLE NUMBER	TIME	CHECKED BY/ DATE
1	VOC -CLP(Low Level) or 524.2	4 deg C HCL	3/ 40 ml	VOA			
2	DOC	4 deg C H_2SO_4	2/ 40 ml	VOA			
3	Methane/Ethane/Ethene	4 deg C HCL	3/ 40 ml	VOA			
4	Nitrate/Nitrogen 352.1	4 deg C	1 x 500 ml	HDPE			
7	Alkalinity/Sulfate/Chlorides	4 deg C	1 x 1L	HDPE			
5	Ferrous Iron	Field Analysis	0.06	mg/l	@ 17.8	°C	
6	Sulfide	Field Analysis	0.037	mg/L	@ 17.8	°C	
8	Hydrogen	4 deg C	2/ 40 ml	VOA			
9							
10							

COMMENTS: (QA/QC?)

IDW INFORMATION:

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #: MWT-11

PROJECT: QUARTERLY SAMPLING -ASH LANDFILL
LOCATION: ROMULUS, NY

DATE: 8.16.02
INSPECTORS: Ben / Dale
PUMP #:
SAMPLE ID #:

WEATHER / FIELD CONDITIONS CHECKLIST (RECORD MAJOR CHANGES)

TIME (24 HR)	TEMP (APPRX)	WEATHER (APPRX)	REL. HUMIDITY (GEN)	WIND VELOCITY (APPRX)	(FROM) DIRECTION (0 - 360)	GROUND / SITE SURFACE CONDITIONS	MONITORING INSTRUMENT	MONITORING DETECTOR
							OVM-580	PID

WELL VOLUME CALCULATION FACTORS

DIAMETER (INCHES):	0.25	1	2	3	4	6
GALLONS / FOOT:	0.0026	0.041	0.163	0.367	0.654	1.47
LITERS/FOOT	0.010	0.151	0.617	1.389	2.475	5.564

ONE WELL VOLUME (GAL) = [(POW - STABILIZED WATER LEVEL) X WELL DIAMETER FACTOR (GAL/FT)]
1.74 X .163 X 3 = .85 gallons

HISTORIC DATA	DEPTH TO POINT OF WELL (TOC)	DEPTH TO TOP OF SCREEN (TOC)	SCREEN LENGTH (FT)	WELL DEVELOPMENT TURBIDITY	WELL DEVELOPMENT pH	WELL DEVELOPMENT SPEC COND
	9.95					

DATA COLLECTED AT WELL SITE	PID READING (OPENING WELL)	DEPTH TO STATIC WATER LEVEL (TOC)	DEPTH TO STABILIZED WATER LEVEL (TOC)	DEPTH TO PUMP INTAKE (TOC)	PUMPING START TIME
		8.21		9.45	1250

RADIATION SCREENING DATA	PUMP PRIOR TO SAMPLING (cps)		PUMP AFTER SAMPLING (cps)	

MONITORING DATA COLLECTED DURING PURGING OPERATIONS

TIME (min)	WATER LEVEL	PUMPING RATE (ml/min)	CUMULATIVE VOL (GALLONS)	DISSOLVED OXYGEN (mg/L)	TEMP (C)	SPEC. COND (umhos)	pH	ORP (mV)	TURBIDITY (NTU)
1252	8.9	500	500 ml	2.84	19.5	.815	6.52	482	48.2
1255	9.6	500	3000 ml	1.24	18.5	.785	6.77	317	16.2
			Well went Dry @ 1258 .75 gallons						
			Sample Collected @ 1422 No Darcum						
			well went dry after Sample collected.						
						Sample Analysis Requested	EP 524.2	TR2098	

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #:

SAMPLING ORDER		PRESERVATIVES	BOTTLES COUNT/ VOLUME	BOTTLES TYPE	SAMPLE NUMBER	TIME	CHECKED BY/ DATE
1	VOC -CLP(Low Level) or 524.2	4 deg C HCL	3/ 40 ml	VOA			
2	DOC	4 deg C H_2SO_4	2/ 40 ml	VOA			
3	Methane/Ethane/Ethene	4 deg C HCL	3/ 40 ml	VOA			
4	Nitrate/Nitrogen 352.1	4 deg C	1 x 500 ml	HDPE			
7	Alkalinity/Sulfate/Chlorides	4 deg C	1 x 1L	HDPE			
5	Ferrous Iron	Field Analysis					
6	Sulfide	Field Analysis					
8	Hydrogen	4 deg C	2/ 40 ml	VOA			
9							
10							

COMMENTS: (QA/QC?)

Well went dry on 8-15-02 well sampled 8-16-02
Well went dry soon after sample collected No parameters collected

IDW INFORMATION:

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #:

PROJECT: QUARTERLY SAMPLING -ASH LANDFILL
LOCATION: ROMULUS, NY

DATE: _____
INSPECTORS: _____
PUMP #: _____
SAMPLE ID #: _____

WEATHER / FIELD CONDITIONS CHECKLIST (RECORD MAJOR CHANGES)

TIME (24 HR)	TEMP (APPRX)	WEATHER (APPRX)	REL. HUMIDITY (GEN)	WIND VELOCITY (APPRX)	(FROM) DIRECTION (0 - 360)	GROUND / SITE SURFACE CONDITIONS	MONITORING INSTRUMENT	MONITORING DETECTOR
							OVM-580	PID

WELL VOLUME CALCULATION FACTORS

DIAMETER (INCHES):	0.25	1	2	3	4	6
GALLONS / FOOT:	0.0026	0.041	0.163	0.367	0.654	1.47
LITERS/FOOT	0.010	0.151	0.617	1.389	2.475	5.564

ONE WELL VOLUME (GAL) = [(POW - STABILIZED WATER LEVEL) X WELL DIAMETER FACTOR (GAL/FT)]

HISTORIC DATA	DEPTH TO POINT OF WELL (TOC)	DEPTH TO TOP OF SCREEN (TOC)	SCREEN LENGTH (FT)	WELL DEVELOPMENT TURBIDITY	WELL DEVELOPMENT pH	WELL DEVELOPMENT SPEC COND

DATA COLLECTED AT WELL SITE	PID READING (OPENING WELL)	DEPTH TO STATIC WATER LEVEL (TOC)	DEPTH TO STABILIZED WATER LEVEL (TOC)	DEPTH TO PUMP INTAKE (TOC)	PUMPING START TIME

RADIATION SCREENING DATA	PUMP PRIOR TO SAMPLING (cps)		PUMP AFTER SAMPLING (cps)	

MONITORING DATA COLLECTED DURING PURGING OPERATIONS

TIME (min)	WATER LEVEL	PUMPING RATE (ml/min)	CUMULATIVE VOL (GALLONS)	DISSOLVED OXYGEN (mg/L)	TEMP (C)	SPEC. COND (umhos)	pH	ORP (mV)	TURBIDITY (NTU)
			Rinse Blank Poured @ 1130 8/16/02						
			Trip Blank 0800						
			Rinse Blank 8/16/02			TR0037		524.2	
			Trip Blank 8/12/02			TR0039	0800	524.2	

Form # _____

SAMPLING RECORD - GROUNDWATER

SENECA ARMY DEPOT ACTIVITY	CONSULTANT: PARSONS ES	WELL #:

SAMPLING ORDER		PRESERVATIVES	BOTTLES COUNT/ VOLUME	BOTTLES TYPE	SAMPLE NUMBER	TIME	CHECKED BY/ DATE
1	VOC -CLP(Low Level) or 524.2	4 deg C HCL	3/ 40 ml	VOA			
2	DOC	4 deg C H_2SO_4	2/ 40 ml	VOA			
3	Methane/Ethane/Ethene	4 deg C HCL	3/ 40 ml	VOA			
4	Nitrate/Nitrogen 352.1	4 deg C	1 x 500 ml	HDPE			
7	Alkalinity/Sulfate/Chlorides	4 deg C	1 x 1L	HDPE			
5	Ferrous Iron	Field Analysis					
6	Sulfide	Field Analysis					
8	Hydrogen	4 deg C	2/ 40 ml	VOA			
9							
10							

COMMENTS: (QA/QC?)

IDW INFORMATION:

APPENDIX B

THIRD QUARTER 2002 LABORATORY REPORTS

SEVERN TRENT LABS (STL)

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SERVICES

Severn Trent Laboratories, Inc.

SAMPLE DATA SUMMARY PACKAGE

SDG NO: 89326

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STL Burlington
208 South Park Drive
Suite 1
Colchester, VT 05446

Tel: 802 655 1203
Fax: 802 655 1248
www.stl-inc.com

September 5, 2002

Mr. Todd Heino
Parsons Engineering Science Inc.
30 Dan Road
Canton, MA 02021

Re: Laboratory Project No. 98011
Case: 98011; SDG: 89326

Dear Mr. Heino:

Enclosed are the analytical results of samples received by Severn Trent Laboratories on August 17, 2002. Laboratory numbers have been assigned and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 08/17/02 ETR No: 89326		
498072	TR2091	08/15/02	Water
498073	TR2092	08/15/02	Water
498074	TR2093	08/15/02	Water
498075	TR2094	08/15/02	Water
498076	TR2099	08/15/02	Water
498077	TR2095	08/15/02	Water
498077MS	TR2095MS	08/15/02	Water
498077MD	TR2095MSD	08/15/02	Water
498078	TR2096	08/16/02	Water
498079	TR2097	08/16/02	Water
498080	TR2098	08/16/02	Water
498081	ARD2180	08/16/02	Water
498082	ARD2181	08/16/02	Water
498083	ARD2177	08/16/02	Water
498084	ARD2168	08/16/02	Water
498085	TR0037	08/16/02	Water
498086	TR0038	08/12/02	Water

Documentation that identifies the condition of the samples at the time of sample receipt and any issues that arose at the time of sample log-in is included in the Sample Handling section of this submittal. Please note that the laboratory received a sample identified on the chain-of-custody record as ARD2161. No corresponding container existed; however, a container identified as ARD2168 was received but not recorded on the chain-of-custody form. The sample date and time did match that provided on the chain-of-

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custody form for sample ARD2161. The client was contacted and instructed the laboratory to use the sample identification on the sample container.

Volatile Organic Compounds by EPA 8260B
Manual integrations were performed for analyte quantitation of samples in this delivery group. Documentation of these integrations is provided in the supportive documentation section of the data package.

The analysis of the samples identified as ARD2180 and ARD2181 was performed at a dilution in order to provide quantification of target analytes within the calibrated range of instrument response.

A trace amount (less than the reporting limit but greater than ½ the reporting limit) of naphthalene was detected in the method blank identified as VBLKY2. Naphthalene was not detected in any of the field samples associated with this delivery group.

The recoveries of the following analytes from both the initial and duplicate analysis of the laboratory control sample, LYCE were outside of their respective control ranges for this method: bromomethane (51%, 51%); carbon tetrachloride (120%, 120%); 1,1,1,2-tetrachloroethane (110%, 110%); and 1,1,2,2-tetrachloroethane (110%, 110%).

Volatile Organic Compounds by EPA 524.2
Manual integrations were performed for analyte quantitation of samples in this delivery group. Documentation of these integrations is provided in the supportive documentation section of the data package.

The analysis of several samples in this delivery group was performed at a dilution in order to provide quantification of target analytes within the calibrated range of instrument response.

The recoveries of the following compounds from both the initial and duplicate analysis of the laboratory fortified aliquot of sample TR2095 were outside of established laboratory control criteria: acetone (54%, 50%); carbon disulfide (145%, 136%); trichloroethene (200%, 200%); 1,1-dichloropropanone (50%, 54%); 2-nitropropanone (39%, 43%); and pentachloroethane (142%, 147%).

Acetone and carbon disulfide were also outside of the established control criteria during the analysis of one or more of the laboratory control samples associated with this delivery group. The result for carbon disulfide was consistently biased high and there is no indication of its presence in any of the field samples. The recovery of acetone from the laboratory control sample was just below the control range (68% versus 70%).

If there are any questions regarding this submittal, please contact Jeannine McCrumb at (802) 655-1203.

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This report shall not be reproduced, except in full, without the written approval of the laboratory. This report is sequentially numbered starting with page 0001 and ending with page 0410.

I certify that this package is in compliance with the NELAC requirements, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Sincerely,

Michael F. Wheeler, Ph.D.
Laboratory Director

MFW/jta/jmm
Enclosure

Severn Trent Laboratories, Inc.
208 South Park Drive, Suite 1, Colchester, VT 05446 Tel: (802) 655-1203

CHAIN OF CUSTOD

Report to:
DARSONS
0 Dam Road
Canton MA 02021
Todd Hanson
781 401 2227
781 401 2097

Invoice to:
Company:
Address: SAME
Contact:
Phone:
Fax:

ANALYSIS REQUESTED

Lab Use Only
Due Date:
Temp. of cool when received
1 2 3
Custody Seal Intact
Screened For Radioactiv

McAllister

Sampler's Signature: Ben McAllister

Project Name				No/Type of Containers				524.2	8260B									Lab/Sample ID (La
ne	Comp	Grab	Identifying Marks of Sample(s)	VOA	A/G 1 Lt.	250 ml	P/O											
00			TR2091	X					X									3-40ml
01			TR2092	X					X									3-40ml
40			TR2093	X					X									
15			TR2094	X					X									
15			TR2099	X					X									
45			TR2095	X					X									
45			TR2095 MS	X					X									
45			TR2095 MSD	X					X									3
00			TR2096	X					X									
00			TR2097	X					X									3-40ml

(Signature)	Date	Time	Received by: (Signature	Date	Time	Remarks
McAllister	8/16/02	1015	Angela Henry	8/17/02	1015	
(Signature)	Date	Time	Received by: (Signature	Date	Time	
(Signature)	Date	Time	Received by: (Signature	Date	Time	Client's delivery of samples constitutes acceptance of Severn Trent Labo terms and conditions contained in the Price Schedule.

WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other

STL cannot accept verbal c
Please Fax written chang

Severn Trent Laboratories, Inc.
208 South Park Drive, Suite 1, Colchester, VT 05446 Tel: (802) 655-1203

CHAIN OF CUSTODY

Report to:
ARCONS
Dam Road
Canton MA 02021
Todd Hanno
781-401-2209
781-401-2043

Invoice to:
Company:
Address: SAME
Contact:
Phone:
Fax:

Analysis Requested

Lab Use Only
Due Date:
Temp. of cooler when received: 1 | 2 | 3
Custody Seal Intact
Screened For Radioactiv

Sampler's Signature: Ben McAllister

Project Name:

No/Type of Containers

Date	Comp	Grab	Identifying Marks of Sample(s)	VOA	A/G 1 Lt.	250 ml	P/O	5244.2	8260B								Lab/Sample ID (Lab
			TR2098	X				X									3 40 ml
			ARD2180	X					X								3 40 ml
			ARD2181	X					X								
			ARD2171	X					X								
			ARD2161	X				X									
			TR0037	X				X									
			TR0038					X									3-40 ml
			Ben McAllister														

(Signature)	Date	Time	Received by: (Signature)	Date	Time
Ben McAllister	8/16/02	1515	Angie Henry	8/17/02	1015
(Signature)	Date	Time	Received by: (Signature)	Date	Time
Signature)	Date	Time	Received by: (Signature)	Date	Time

Remarks: All samples are 3-40 ml Preserved with HCl

Client's delivery of samples constitutes acceptance of Severn Trent Labor terms and conditions contained in the Price Schedule.

WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other

STL cannot accept verbal ch
Please Fax written chang

SEVERN
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Severn Trent Laboratories, Inc.

METHOD 8260B
VOLATILE ORGANIC ANALYSIS

SAMPLE DATA SUMMARY PACKAGE

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

ARD2177

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498083

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498083

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/22/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl Chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
76-13-1	Freon TF	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Methyl Iodide	1.0	U
75-15-0	Carbon Disulfide	1.0	U
107-05-1	Allyl Chloride	1.0	U
75-09-2	Methylene Chloride	1.0	U
107-13-1	Acrylonitrile	1.0	U
156-60-5	trans-1,2-Dichloroethene	0.30	J
540-59-0	1,2-Dichloroethene (total)	17	
1634-04-4	Methyl-t-Butyl Ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl Acetate	1.0	U
126-99-8	Chloroprene	1.0	U
156-59-2	cis-1,2-Dichloroethene	16	
78-93-3	2-Butanone	5.0	U
107-12-0	Propionitrile	4.0	U
126-98-7	Methacrylonitrile	1.0	U
74-97-5	Bromochloromethane	1.0	U
109-99-9	Tetrahydrofuran	14	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
78-83-1	Isobutyl Alcohol	50	U
71-43-2	Benzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

ARD2177

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498083

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498083

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/22/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethene	20	
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl Methacrylate	1.0	U
74-95-3	Dibromomethane	1.0	U
123-91-1	1,4-Dioxane	50	U
75-27-4	Bromodichloromethane	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
97-63-2	Ethyl Methacrylate	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylene (m,p)	1.0	U
1330-20-7	Xylene (total)	1.0	U
95-47-6	Xylene (o)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
1476-11-5	cis-1,4-Dichloro-2-butene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

ARD2177

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498083

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498083

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/22/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

ARD2180

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498081

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498081D

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/22/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 2.4

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	2.4	U
74-87-3	Chloromethane	2.4	U
75-01-4	Vinyl Chloride	2.4	U
74-83-9	Bromomethane	2.4	U
75-00-3	Chloroethane	2.4	U
75-69-4	Trichlorofluoromethane	2.4	U
107-02-8	Acrolein	12	U
76-13-1	Freon TF	2.4	U
75-35-4	1,1-Dichloroethene	2.4	U
67-64-1	Acetone	8.4	J
74-88-4	Methyl Iodide	2.4	U
75-15-0	Carbon Disulfide	2.4	U
107-05-1	Allyl Chloride	2.4	U
75-09-2	Methylene Chloride	1.7	J
107-13-1	Acrylonitrile	2.4	U
156-60-5	trans-1,2-Dichloroethene	2.4	U
540-59-0	1,2-Dichloroethene (total)	67	
1634-04-4	Methyl-t-Butyl Ether	2.4	U
75-34-3	1,1-Dichloroethane	0.60	J
108-05-4	Vinyl Acetate	2.4	U
126-99-8	Chloroprene	2.4	U
156-59-2	cis-1,2-Dichloroethene	66	
78-93-3	2-Butanone	12	U
107-12-0	Propionitrile	9.6	U
126-98-7	Methacrylonitrile	2.4	U
74-97-5	Bromochloromethane	2.4	U
109-99-9	Tetrahydrofuran	34	U
67-66-3	Chloroform	2.4	U
71-55-6	1,1,1-Trichloroethane	2.4	U
56-23-5	Carbon Tetrachloride	2.4	U
78-83-1	Isobutyl Alcohol	120	U
71-43-2	Benzene	2.4	U
107-06-2	1,2-Dichloroethane	2.4	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

ARD2180

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498081

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498081D

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/22/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 2.4

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethene	3.9	
78-87-5	1,2-Dichloropropane	2.4	U
80-62-6	Methyl Methacrylate	2.4	U
74-95-3	Dibromomethane	2.4	U
123-91-1	1,4-Dioxane	120	U
75-27-4	Bromodichloromethane	2.4	U
110-75-8	2-Chloroethyl Vinyl Ether	2.4	U
10061-01-5	cis-1,3-Dichloropropene	2.4	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	2.4	U
10061-02-6	trans-1,3-Dichloropropene	2.4	U
97-63-2	Ethyl Methacrylate	2.4	U
79-00-5	1,1,2-Trichloroethane	2.4	U
127-18-4	Tetrachloroethene	2.4	U
591-78-6	2-Hexanone	12	U
124-48-1	Dibromochloromethane	2.4	U
106-93-4	1,2-Dibromoethane	2.4	U
108-90-7	Chlorobenzene	2.4	U
630-20-6	1,1,1,2-Tetrachloroethane	2.4	U
100-41-4	Ethylbenzene	2.4	U
1330-20-7	Xylene (m,p)	2.4	U
1330-20-7	Xylene (total)	2.4	U
95-47-6	Xylene (o)	2.4	U
100-42-5	Styrene	2.4	U
75-25-2	Bromoform	2.4	U
98-82-8	Isopropylbenzene	2.4	U
1476-11-5	cis-1,4-Dichloro-2-butene	2.4	U
79-34-5	1,1,2,2-Tetrachloroethane	2.4	U
96-18-4	1,2,3-Trichloropropane	2.4	U
110-57-6	trans-1,4-Dichloro-2-butene	2.4	U
541-73-1	1,3-Dichlorobenzene	2.4	U
106-46-7	1,4-Dichlorobenzene	2.4	U
95-50-1	1,2-Dichlorobenzene	2.4	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

ARD2180

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498081

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498081D

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/22/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 2.4

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
96-12-8	1,2-Dibromo-3-Chloropropane	2.4	U
120-82-1	1,2,4-Trichlorobenzene	2.4	U
87-68-3	Hexachlorobutadiene	2.4	U
91-20-3	Naphthalene	2.4	U
594-20-7	2,2-Dichloropropane	2.4	U
563-58-6	1,1-Dichloropropene	2.4	U
142-28-9	1,3-Dichloropropane	2.4	U
108-86-1	Bromobenzene	2.4	U
103-65-1	n-Propylbenzene	2.4	U
95-49-8	2-Chlorotoluene	2.4	U
106-43-4	4-Chlorotoluene	2.4	U
108-67-8	1,3,5-Trimethylbenzene	2.4	U
98-06-6	tert-Butylbenzene	2.4	U
95-63-6	1,2,4-Trimethylbenzene	2.4	U
135-98-8	sec-Butylbenzene	2.4	U
99-87-6	4-Isopropyltoluene	2.4	U
104-51-8	n-Butylbenzene	2.4	U
87-61-6	1,2,3-Trichlorobenzene	2.4	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

ARD2181

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498082

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498082D

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/22/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 2.7

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	2.7	U
74-87-3	Chloromethane	2.7	U
75-01-4	Vinyl Chloride	2.7	U
74-83-9	Bromomethane	2.7	U
75-00-3	Chloroethane	2.7	U
75-69-4	Trichlorofluoromethane	2.7	U
107-02-8	Acrolein	14	U
76-13-1	Freon TF	2.7	U
75-35-4	1,1-Dichloroethene	2.7	U
67-64-1	Acetone	9.4	J
74-88-4	Methyl Iodide	2.7	U
75-15-0	Carbon Disulfide	2.7	U
107-05-1	Allyl Chloride	2.7	U
75-09-2	Methylene Chloride	1.9	J
107-13-1	Acrylonitrile	2.7	U
156-60-5	trans-1,2-Dichloroethene	2.7	U
540-59-0	1,2-Dichloroethene (total)	72	
1634-04-4	Methyl-t-Butyl Ether	2.7	U
75-34-3	1,1-Dichloroethane	2.7	U
108-05-4	Vinyl Acetate	2.7	U
126-99-8	Chloroprene	2.7	U
156-59-2	cis-1,2-Dichloroethene	71	
78-93-3	2-Butanone	14	U
107-12-0	Propionitrile	11	U
126-98-7	Methacrylonitrile	2.7	U
74-97-5	Bromochloromethane	2.7	U
109-99-9	Tetrahydrofuran	38	U
67-66-3	Chloroform	2.7	U
71-55-6	1,1,1-Trichloroethane	2.7	U
56-23-5	Carbon Tetrachloride	2.7	U
78-83-1	Isobutyl Alcohol	140	U
71-43-2	Benzene	2.7	U
107-06-2	1,2-Dichloroethane	2.7	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

ARD2181

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498082

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498082D

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/22/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 2.7

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethene	4.1	
78-87-5	1,2-Dichloropropane	2.7	U
80-62-6	Methyl Methacrylate	2.7	U
74-95-3	Dibromomethane	2.7	U
123-91-1	1,4-Dioxane	140	U
75-27-4	Bromodichloromethane	2.7	U
110-75-8	2-Chloroethyl Vinyl Ether	2.7	U
10061-01-5	cis-1,3-Dichloropropene	2.7	U
108-10-1	4-Methyl-2-pentanone	14	U
108-88-3	Toluene	2.7	U
10061-02-6	trans-1,3-Dichloropropene	2.7	U
97-63-2	Ethyl Methacrylate	2.7	U
79-00-5	1,1,2-Trichloroethane	2.7	U
127-18-4	Tetrachloroethene	2.7	U
591-78-6	2-Hexanone	14	U
124-48-1	Dibromochloromethane	2.7	U
106-93-4	1,2-Dibromoethane	2.7	U
108-90-7	Chlorobenzene	2.7	U
630-20-6	1,1,1,2-Tetrachloroethane	2.7	U
100-41-4	Ethylbenzene	2.7	U
1330-20-7	Xylene (m,p)	2.7	U
1330-20-7	Xylene (total)	2.7	U
95-47-6	Xylene (o)	2.7	U
100-42-5	Styrene	2.7	U
75-25-2	Bromoform	2.7	U
98-82-8	Isopropylbenzene	2.7	U
1476-11-5	cis-1,4-Dichloro-2-butene	2.7	U
79-34-5	1,1,2,2-Tetrachloroethane	2.7	U
96-18-4	1,2,3-Trichloropropane	2.7	U
110-57-6	trans-1,4-Dichloro-2-butene	2.7	U
541-73-1	1,3-Dichlorobenzene	2.7	U
106-46-7	1,4-Dichlorobenzene	2.7	U
95-50-1	1,2-Dichlorobenzene	2.7	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

ARD2181

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498082

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498082D

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/22/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 2.7

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
96-12-8	1,2-Dibromo-3-Chloropropane	2.7	U
120-82-1	1,2,4-Trichlorobenzene	2.7	U
87-68-3	Hexachlorobutadiene	2.7	U
91-20-3	Naphthalene	2.7	U
594-20-7	2,2-Dichloropropane	2.7	U
563-58-6	1,1-Dichloropropene	2.7	U
142-28-9	1,3-Dichloropropane	2.7	U
108-86-1	Bromobenzene	2.7	U
103-65-1	n-Propylbenzene	2.7	U
95-49-8	2-Chlorotoluene	2.7	U
106-43-4	4-Chlorotoluene	2.7	U
108-67-8	1,3,5-Trimethylbenzene	2.7	U
98-06-6	tert-Butylbenzene	2.7	U
95-63-6	1,2,4-Trimethylbenzene	2.7	U
135-98-8	sec-Butylbenzene	2.7	U
99-87-6	4-Isopropyltoluene	2.7	U
104-51-8	n-Butylbenzene	2.7	U
87-61-6	1,2,3-Trichlorobenzene	2.7	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LYCE LCS

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: LYCE LCS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LYC10EQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/22/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	9.3	
74-87-3	Chloromethane	7.1	
75-01-4	Vinyl Chloride	8.8	
74-83-9	Bromomethane	5.1	
75-00-3	Chloroethane	9.5	
75-69-4	Trichlorofluoromethane	8.9	
107-02-8	Acrolein	44	
76-13-1	Freon TF	9.8	
75-35-4	1,1-Dichloroethene	9.2	
67-64-1	Acetone	48	
74-88-4	Methyl Iodide	6.8	
75-15-0	Carbon Disulfide	9.7	
107-05-1	Allyl Chloride	9.3	
75-09-2	Methylene Chloride	9.6	
107-13-1	Acrylonitrile	9.8	
156-60-5	trans-1,2-Dichloroethene	9.6	
540-59-0	1,2-Dichloroethene (total)	21	
1634-04-4	Methyl-t-Butyl Ether	9.3	
75-34-3	1,1-Dichloroethane	9.4	
108-05-4	Vinyl Acetate	11	
126-99-8	Chloroprene	9.7	
156-59-2	cis-1,2-Dichloroethene	11	
78-93-3	2-Butanone	55	
107-12-0	Propionitrile	36	
126-98-7	Methacrylonitrile	9.6	
74-97-5	Bromochloromethane	10	
109-99-9	Tetrahydrofuran	140	
67-66-3	Chloroform	10	
71-55-6	1,1,1-Trichloroethane	10	
56-23-5	Carbon Tetrachloride	12	
78-83-1	Isobutyl Alcohol	500	
71-43-2	Benzene	10	
107-06-2	1,2-Dichloroethane	10	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LYCE LCS

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: LYCE LCS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LYC10EQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/22/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethene	9.8	
78-87-5	1,2-Dichloropropane	10	
80-62-6	Methyl Methacrylate	10	
74-95-3	Dibromomethane	10	
123-91-1	1,4-Dioxane	450	
75-27-4	Bromodichloromethane	10	
110-75-8	2-Chloroethyl Vinyl Ether	9.7	
10061-01-5	cis-1,3-Dichloropropene	10	
108-10-1	4-Methyl-2-pentanone	53	
108-88-3	Toluene	11	
10061-02-6	trans-1,3-Dichloropropene	11	
97-63-2	Ethyl Methacrylate	9.8	
79-00-5	1,1,2-Trichloroethane	11	
127-18-4	Tetrachloroethene	9.6	
591-78-6	2-Hexanone	55	
124-48-1	Dibromochloromethane	11	
106-93-4	1,2-Dibromoethane	11	
108-90-7	Chlorobenzene	11	
630-20-6	1,1,1,2-Tetrachloroethane	11	
100-41-4	Ethylbenzene	11	
1330-20-7	Xylene (m,p)	21	
1330-20-7	Xylene (total)	32	
95-47-6	Xylene (o)	10	
100-42-5	Styrene	11	
75-25-2	Bromoform	11	
98-82-8	Isopropylbenzene	11	
1476-11-5	cis-1,4-Dichloro-2-butene	10	
79-34-5	1,1,2,2-Tetrachloroethane	11	
96-18-4	1,2,3-Trichloropropane	10	
110-57-6	trans-1,4-Dichloro-2-butene	10	
541-73-1	1,3-Dichlorobenzene	10	
106-46-7	1,4-Dichlorobenzene	10	
95-50-1	1,2-Dichlorobenzene	10	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LYCE LCS

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: LYCE LCS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LYC10EQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/22/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
96-12-8	1,2-Dibromo-3-Chloropropane	10	
120-82-1	1,2,4-Trichlorobenzene	10	
87-68-3	Hexachlorobutadiene	9.9	
91-20-3	Naphthalene	10	B
594-20-7	2,2-Dichloropropane	10	
563-58-6	1,1-Dichloropropene	10	
142-28-9	1,3-Dichloropropane	11	
108-86-1	Bromobenzene	10	
103-65-1	n-Propylbenzene	11	
95-49-8	2-Chlorotoluene	10	
106-43-4	4-Chlorotoluene	10	
108-67-8	1,3,5-Trimethylbenzene	11	
98-06-6	tert-Butylbenzene	11	
95-63-6	1,2,4-Trimethylbenzene	10	
135-98-8	sec-Butylbenzene	11	
99-87-6	4-Isopropyltoluene	11	
104-51-8	n-Butylbenzene	11	
87-61-6	1,2,3-Trichlorobenzene	9.9	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LYCE LCSD

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: LYCE LCSD

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LYC10EQ2

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/22/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	11	
74-87-3	Chloromethane	9.4	
75-01-4	Vinyl Chloride	11	
74-83-9	Bromomethane	5.9	
75-00-3	Chloroethane	11	
75-69-4	Trichlorofluoromethane	9.4	
107-02-8	Acrolein	47	
76-13-1	Freon TF	9.7	
75-35-4	1,1-Dichloroethene	9.8	
67-64-1	Acetone	53	
74-88-4	Methyl Iodide	8.0	
75-15-0	Carbon Disulfide	11	
107-05-1	Allyl Chloride	9.9	
75-09-2	Methylene Chloride	10	
107-13-1	Acrylonitrile	10	
156-60-5	trans-1,2-Dichloroethene	9.9	
540-59-0	1,2-Dichloroethene (total)	21	
1634-04-4	Methyl-t-Butyl Ether	9.7	
75-34-3	1,1-Dichloroethane	10	
108-05-4	Vinyl Acetate	10	
126-99-8	Chloroprene	9.6	
156-59-2	cis-1,2-Dichloroethene	11	
78-93-3	2-Butanone	56	
107-12-0	Propionitrile	40	
126-98-7	Methacrylonitrile	10	
74-97-5	Bromochloromethane	10	
109-99-9	Tetrahydrofuran	150	
67-66-3	Chloroform	10	
71-55-6	1,1,1-Trichloroethane	9.9	
56-23-5	Carbon Tetrachloride	12	
78-83-1	Isobutyl Alcohol	520	
71-43-2	Benzene	10	
107-06-2	1,2-Dichloroethane	10	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LYCE LCSD

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: LYCE LCSD

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LYC10EQ2

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/22/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethene	9.8	
78-87-5	1,2-Dichloropropane	10	
80-62-6	Methyl Methacrylate	10	
74-95-3	Dibromomethane	10	
123-91-1	1,4-Dioxane	480	
75-27-4	Bromodichloromethane	10	
110-75-8	2-Chloroethyl Vinyl Ether	10	
10061-01-5	cis-1,3-Dichloropropene	10	
108-10-1	4-Methyl-2-pentanone	54	
108-88-3	Toluene	11	
10061-02-6	trans-1,3-Dichloropropene	10	
97-63-2	Ethyl Methacrylate	10	
79-00-5	1,1,2-Trichloroethane	10	
127-18-4	Tetrachloroethene	10	
591-78-6	2-Hexanone	55	
124-48-1	Dibromochloromethane	11	
106-93-4	1,2-Dibromoethane	10	
108-90-7	Chlorobenzene	10	
630-20-6	1,1,1,2-Tetrachloroethane	11	
100-41-4	Ethylbenzene	10	
1330-20-7	Xylene (m,p)	21	
1330-20-7	Xylene (total)	32	
95-47-6	Xylene (o)	10	
100-42-5	Styrene	11	
75-25-2	Bromoform	11	
98-82-8	Isopropylbenzene	10	
1476-11-5	cis-1,4-Dichloro-2-butene	11	
79-34-5	1,1,2,2-Tetrachloroethane	11	
96-18-4	1,2,3-Trichloropropane	10	
110-57-6	trans-1,4-Dichloro-2-butene	11	
541-73-1	1,3-Dichlorobenzene	10	
106-46-7	1,4-Dichlorobenzene	10	
95-50-1	1,2-Dichlorobenzene	10	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LYCE LCSD

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: LYCE LCSD

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LYC10EQ2

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/22/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
96-12-8	1,2-Dibromo-3-Chloropropane	10	
120-82-1	1,2,4-Trichlorobenzene	10	
87-68-3	Hexachlorobutadiene	10	
91-20-3	Naphthalene	10	B
594-20-7	2,2-Dichloropropane	9.6	
563-58-6	1,1-Dichloropropene	9.8	
142-28-9	1,3-Dichloropropane	10	
108-86-1	Bromobenzene	10	
103-65-1	n-Propylbenzene	10	
95-49-8	2-Chlorotoluene	10	
106-43-4	4-Chlorotoluene	10	
108-67-8	1,3,5-Trimethylbenzene	10	
98-06-6	tert-Butylbenzene	11	
95-63-6	1,2,4-Trimethylbenzene	10	
135-98-8	sec-Butylbenzene	11	
99-87-6	4-Isopropyltoluene	10	
104-51-8	n-Butylbenzene	11	
87-61-6	1,2,3-Trichlorobenzene	10	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VBLKY2

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: VBLKY2

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LYCB01E

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/22/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl Chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
76-13-1	Freon TF	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Methyl Iodide	1.0	U
75-15-0	Carbon Disulfide	1.0	U
107-05-1	Allyl Chloride	1.0	U
75-09-2	Methylene Chloride	1.0	U
107-13-1	Acrylonitrile	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
540-59-0	1,2-Dichloroethene (total)	1.0	U
1634-04-4	Methyl-t-Butyl Ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl Acetate	1.0	U
126-99-8	Chloroprene	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
78-93-3	2-Butanone	5.0	U
107-12-0	Propionitrile	4.0	U
126-98-7	Methacrylonitrile	1.0	U
74-97-5	Bromochloromethane	1.0	U
109-99-9	Tetrahydrofuran	14	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
78-83-1	Isobutyl Alcohol	50	U
71-43-2	Benzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VBLKY2

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: VBLKY2

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LYCB01E

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/22/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl Methacrylate	1.0	U
74-95-3	Dibromomethane	1.0	U
123-91-1	1,4-Dioxane	50	U
75-27-4	Bromodichloromethane	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
97-63-2	Ethyl Methacrylate	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylene (m,p)	1.0	U
1330-20-7	Xylene (total)	1.0	U
95-47-6	Xylene (o)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
1476-11-5	cis-1,4-Dichloro-2-butene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VBLKY2

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: VBLKY2

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LYCB01E

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/22/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	0.23	J
594-20-7	2,2-Dichloropropane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

	CLIENT SAMPLE NO.	SMC1 (TOL) #	SMC2 (DCE) #	SMC3 (BFB) #	OTHER (DCB) #	TOT OUT
01	LYCE LCS	105	96	102	103	0
02	LYCE LCSD	104	96	101	101	0
03	VBLKY2	105	101	105	102	0
04	ARD2180	106	99	108	104	0
05	ARD2181	105	102	107	104	0
06	ARD2177	102	99	108	106	0
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		QC LIMITS
SMC1 (TOL)	= Toluene-d8	(88-110)
SMC2 (DCE)	= 1,2-Dichloroethane-d4	(72-141)
SMC3 (BFB)	= Bromofluorobenzene	(72-122)
OTHER (DCB)	= 1,2-Dichlorobenzene-d4	(69-124)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix Spike - Sample No.: LYCE LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	10		9.3	93	78-116
Chloromethane	10		7.1	71	68-118
Vinyl Chloride	10		8.8	88	78-118
Bromomethane	10		5.1	51*	72-118
Chloroethane	10		9.5	95	65-113
Trichlorofluoromethane	10		8.9	89	67-111
Acrolein	50		44	88	60-140
Freon TF	10		9.8	98	60-140
1,1-Dichloroethene	10		9.2	92	75-113
Acetone	50		48	96	60-140
Methyl Iodide	10		6.8	68	60-140
Carbon Disulfide	10		9.7	97	60-140
Allyl Chloride	10		9.3	93	60-140
Methylene Chloride	10		9.6	96	80-110
Acrylonitrile	10		9.8	98	60-140
trans-1,2-Dichloroethen	10		9.6	96	77-109
1,2-Dichloroethene (tot	20		21	105	60-140
Methyl-t-Butyl Ether	10		9.3	93	60-140
1,1-Dichloroethane	10		9.4	94	81-111
Vinyl Acetate	10		11	110	60-140
Chloroprene	10		9.7	97	60-140
cis-1,2-Dichloroethene	10		11	110	81-121
2-Butanone	50		55	110	60-140
Propionitrile	40		36	90	60-140
Methacrylonitrile	10		9.6	96	60-140
Bromochloromethane	10		10	100	73-107
Tetrahydrofuran	140		140	100	60-140
Chloroform	10		10	100	74-106

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix Spike - Sample No.: LYCE LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
1,1,1-Trichloroethane	10		10	100	74-122
Carbon Tetrachloride	10		12	120*	62-106
Isobutyl Alcohol	500		500	100	60-140
Benzene	10		10	100	78-116
1,2-Dichloroethane	10		10	100	80-110
Trichloroethene	10		9.8	98	70-109
1,2-Dichloropropane	10		10	100	79-115
Methyl Methacrylate	10		10	100	60-140
Dibromomethane	10		10	100	83-117
1,4-Dioxane	500		450	90	60-140
Bromodichloromethane	10		10	100	78-112
2-Chloroethyl Vinyl Eth	10		9.7	97	60-140
cis-1,3-Dichloropropene	10		10	100	60-140
4-Methyl-2-pentanone	50		53	106	60-140
Toluene	10		11	110	78-126
trans-1,3-Dichloroprope	10		11	110	60-140
Ethyl Methacrylate	10		9.8	98	60-140
1,1,2-Trichloroethane	10		11	110	81-126
Tetrachloroethene	10		9.6	96	71-107
2-Hexanone	50		55	110	60-140
Dibromochloromethane	10		11	110	72-112
1,2-Dibromoethane	10		11	110	90-114
Chlorobenzene	10		11	110	81-115
1,1,1,2-Tetrachloroetha	10		11	110*	72-108
Ethylbenzene	10		11	110	74-124
Xylene (m,p)	20		21	105	78-116
Xylene (total)	30		32	107	60-140
Xylene (o)	10		10	100	81-125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix Spike - Sample No.: LYCE LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Styrene	10		11	110	80-124
Bromoform	10		11	110	82-120
Isopropylbenzene	10		11	110	78-124
cis-1,4-Dichloro-2-bute	10		10	100	60-140
1,1,2,2-Tetrachloroetha	10		11	110*	74-108
1,2,3-Trichloropropane	10		10	100	81-137
trans-1,4-Dichloro-2-bu	10		10	100	60-140
1,3-Dichlorobenzene	10		10	100	79-119
1,4-Dichlorobenzene	10		10	100	83-123
1,2-Dichlorobenzene	10		10	100	76-110
1,2-Dibromo-3-Chloropro	10		10	100	33-132
1,2,4-Trichlorobenzene	10		10	100	81-135
Hexachlorobutadiene	10		9.9	99	80-120
Naphthalene	10		10	100	78-130
2,2-Dichloropropane	10		10	100	42-130
1,1-Dichloropropene	10		10	100	72-124
1,3-Dichloropropane	10		11	110	79-113
Bromobenzene	10		10	100	84-116
n-Propylbenzene	10		11	110	83-117
2-Chlorotoluene	10		10	100	73-107
4-Chlorotoluene	10		10	100	74-124
1,3,5-Trimethylbenzene	10		11	110	72-112
tert-Butylbenzene	10		11	110	80-124
1,2,4-Trimethylbenzene	10		10	100	75-123
sec-Butylbenzene	10		11	110	77-123
4-Isopropyltoluene	10		11	110	79-119
n-Butylbenzene	10		11	110	77-123
1,2,3-Trichlorobenzene	10		9.9	99	81-137

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix Spike - Sample No.: LYCE LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	10	11	110	17	40	78-116
Chloromethane	10	9.4	94	28	40	68-118
Vinyl Chloride	10	11	110	22	40	78-118
Bromomethane	10	5.9	59*	14	40	72-118
Chloroethane	10	11	110	15	40	65-113
Trichlorofluoromethane	10	9.4	94	5	40	67-111
Acrolein	50	47	94	6	40	60-140
Freon TF	10	9.7	97	1	40	60-140
1,1-Dichloroethene	10	9.8	98	6	40	75-113
Acetone	50	53	106	10	40	60-140
Methyl Iodide	10	8.0	80	16	40	60-140
Carbon Disulfide	10	11	110	12	40	60-140
Allyl Chloride	10	9.9	99	6	40	60-140
Methylene Chloride	10	10	100	4	40	80-110
Acrylonitrile	10	10	100	2	40	60-140
trans-1,2-Dichloroethen	10	9.9	99	3	40	77-109
1,2-Dichloroethene (tot	20	21	105	0	40	60-140
Methyl-t-Butyl Ether	10	9.7	97	4	40	60-140
1,1-Dichloroethane	10	10	100	6	40	81-111
Vinyl Acetate	10	10	100	10	40	60-140
Chloroprene	10	9.6	96	1	40	60-140
cis-1,2-Dichloroethene	10	11	110	0	40	81-121
2-Butanone	50	56	112	2	40	60-140
Propionitrile	40	40	100	10	40	60-140
Methacrylonitrile	10	10	100	4	40	60-140
Bromochloromethane	10	10	100	0	40	73-107
Tetrahydrofuran	140	150	107	7	40	60-140
Chloroform	10	10	100	0	40	74-106

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix Spike - Sample No.: LYCE LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1,1-Trichloroethane	10	9.9	99	1	40	74-122
Carbon Tetrachloride	10	12	120*	0	40	62-106
Isobutyl Alcohol	500	520	104	4	40	60-140
Benzene	10	10	100	0	40	78-116
1,2-Dichloroethane	10	10	100	0	40	80-110
Trichloroethene	10	9.8	98	0	40	70-109
1,2-Dichloropropane	10	10	100	0	40	79-115
Methyl Methacrylate	10	10	100	0	40	60-140
Dibromomethane	10	10	100	0	40	83-117
1,4-Dioxane	500	480	96	6	40	60-140
Bromodichloromethane	10	10	100	0	40	78-112
2-Chloroethyl Vinyl Eth	10	10	100	3	40	60-140
cis-1,3-Dichloropropene	10	10	100	0	40	60-140
4-Methyl-2-pentanone	50	54	108	2	40	60-140
Toluene	10	11	110	0	40	78-126
trans-1,3-Dichloroprope	10	10	100	10	40	60-140
Ethyl Methacrylate	10	10	100	2	40	60-140
1,1,2-Trichloroethane	10	10	100	10	40	81-126
Tetrachloroethene	10	10	100	4	40	71-107
2-Hexanone	50	55	110	0	40	60-140
Dibromochloromethane	10	11	110	0	40	72-112
1,2-Dibromoethane	10	10	100	10	40	90-114
Chlorobenzene	10	10	100	10	40	81-115
1,1,1,2-Tetrachloroetha	10	11	110*	0	40	72-108
Ethylbenzene	10	10	100	10	40	74-124
Xylene (m,p)	20	21	105	0	40	78-116
Xylene (total)	30	32	107	0	40	60-140
Xylene (o)	10	10	100	0	40	81-125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix Spike - Sample No.: LYCE LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Styrene	10	11	110	0	40	80-124
Bromoform	10	11	110	0	40	82-120
Isopropylbenzene	10	10	100	10	40	78-124
cis-1,4-Dichloro-2-bute	10	11	110	10	40	60-140
1,1,2,2-Tetrachloroetha	10	11	110*	0	40	74-108
1,2,3-Trichloropropane	10	10	100	0	40	81-137
trans-1,4-Dichloro-2-bu	10	11	110	10	40	60-140
1,3-Dichlorobenzene	10	10	100	0	40	79-119
1,4-Dichlorobenzene	10	10	100	0	40	83-123
1,2-Dichlorobenzene	10	10	100	0	40	76-110
1,2-Dibromo-3-Chloropro	10	10	100	0	40	33-132
1,2,4-Trichlorobenzene	10	10	100	0	40	81-135
Hexachlorobutadiene	10	10	100	1	40	80-120
Naphthalene	10	10	100	0	40	78-130
2,2-Dichloropropane	10	9.6	96	4	40	42-130
1,1-Dichloropropene	10	9.8	98	2	40	72-124
1,3-Dichloropropane	10	10	100	10	40	79-113
Bromobenzene	10	10	100	0	40	84-116
n-Propylbenzene	10	10	100	10	40	83-117
2-Chlorotoluene	10	10	100	0	40	73-107
4-Chlorotoluene	10	10	100	0	40	74-124
1,3,5-Trimethylbenzene	10	10	100	10	40	72-112
tert-Butylbenzene	10	11	110	0	40	80-124
1,2,4-Trimethylbenzene	10	10	100	0	40	75-123
sec-Butylbenzene	10	11	110	0	40	77-123
4-Isopropyltoluene	10	10	100	10	40	79-119
n-Butylbenzene	10	11	110	0	40	77-123
1,2,3-Trichlorobenzene	10	10	100	1	40	81-137

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 84 outside limits
Spike Recovery: 8 out of 168 outside limits

COMMENTS: _____

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

VBLKY2

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Lab File ID: LYCB01E Lab Sample ID: VBLKY2

Date Analyzed: 08/22/02 Time Analyzed: 0313

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: L

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LYCE LCS	LYCE LCS	LYC10EQ	0216
02	LYCE LCSD	LYCE LCSD	LYC10EQ2	0245
03	ARD2180	498081	498081D	0520
04	ARD2181	498082	498082D	0549
05	ARD2177	498083	498083	0617
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COMMENTS:

FORM IV VOA

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Lab File ID: LYC02PV BFB Injection Date: 08/19/02

Instrument ID: L BFB Injection Time: 0740

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24.4
75	30.0 - 60.0% of mass 95	49.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.3 (0.5)1
174	50.0 - 120.0% of mass 95	67.4
175	5.0 - 9.0% of mass 174	4.8 (7.2)1
176	95.0 - 101.0% of mass 174	66.0 (97.9)1
177	5.0 - 9.0% of mass 176	4.4 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD001	VSTD001	LYC01V	08/19/02	0821
02	VSTD005	VSTD005	LYC05V	08/19/02	0929
03	VSTD010	VSTD010	LYC10V	08/19/02	0958
04	VSTD025	VSTD025	LYC25V	08/19/02	1026
05	VSTD050	VSTD050	LYC50V	08/19/02	1055
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FORM V VOA

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Lab File ID: LYC08PV BFB Injection Date: 08/22/02

Instrument ID: L BFB Injection Time: 0137

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	26.2
75	30.0 - 60.0% of mass 95	49.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.3 (0.4)1
174	50.0 - 120.0% of mass 95	66.5
175	5.0 - 9.0% of mass 174	4.6 (7.0)1
176	95.0 - 101.0% of mass 174	65.6 (98.6)1
177	5.0 - 9.0% of mass 176	4.5 (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:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	VSTD010	LYC10EV	08/22/02	0148
02	LYCE LCS	LYCE LCS	LYC10EQ	08/22/02	0216
03	LYCE LCSD	LYCE LCSD	LYC10EQ2	08/22/02	0245
04	VBLKY2	VBLKY2	LYCB01E	08/22/02	0313
05	ARD2180	498081	498081D	08/22/02	0520
06	ARD2181	498082	498082D	08/22/02	0549
07	ARD2177	498083	498083	08/22/02	0617
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FORM V VOA

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Instrument ID: L Calibration Date(s): 08/19/02 08/19/02

Heated Purge: (Y/N) N Calibration Time(s): 0821 1055

GC Column: CAP ID: 0.53 (mm)

LAB FILE ID: RRF1 =LYC01V RRF5 =LYC05V
RRF10 =LYC10V RRF25 =LYC25V RRF50 =LYC50V

COMPOUND	RRF1	RRF5	RRF10	RRF25	RRF50	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	0.542	0.581	0.598	0.660	0.741	0.624	12.4
Chloromethane *	0.330	0.324	0.315	0.400	0.533	0.380	24.1*<-
Vinyl Chloride	0.288	0.295	0.307	0.374	0.453	0.343	20.5
Bromomethane	0.350	0.298	0.267	0.263	0.287	0.293	11.8
Chloroethane	0.164	0.166	0.158	0.169	0.175	0.166	4.0
Trichlorofluoromethane	0.585	0.669	0.649	0.710	0.843	0.691	13.9
Acrolein	0.031	0.038	0.037	0.042	0.057	0.041	23.7
Freon TF	0.505	0.553	0.492	0.520	0.642	0.542	11.1
1,1-Dichloroethene	0.265	0.278	0.272	0.291	0.392	0.300	17.6
Acetone	0.058	0.057	0.062	0.071	0.089	0.067	19.7
Methyl Iodide	0.261	0.383	0.380	0.444	0.543	0.402	25.6
Carbon Disulfide	0.610	0.663	0.626	0.685	0.946	0.706	19.4
Allyl Chloride	0.353	0.403	0.371	0.411	0.548	0.417	18.4
Methylene Chloride	0.251	0.288	0.279	0.290	0.384	0.298	16.9
Acrylonitrile	0.079	0.065	0.065	0.068	0.089	0.073	14.3
trans-1,2-Dichloroethene	0.292	0.297	0.270	0.287	0.355	0.300	10.8
1,2-Dichloroethene (total)	0.290	0.304	0.281	0.301	0.351	0.305	8.9
Methyl-t-Butyl Ether	0.606	0.582	0.552	0.594	0.634	0.594	5.1
1,1-Dichloroethane *	0.578	0.620	0.592	0.634	0.730	0.631	9.5*
Vinyl Acetate	0.428	0.450	0.428	0.445	0.446	0.439	2.4
Chloroprene	0.425	0.504	0.464	0.469	0.551	0.483	9.9
cis-1,2-Dichloroethene	0.287	0.311	0.292	0.314	0.347	0.310	7.6
2-Butanone	0.017	0.019	0.017	0.021	0.020	0.019	8.9
Propionitrile	0.026	0.026	0.024	0.027	0.030	0.027	8.4
Methacrylonitrile	0.073	0.077	0.070	0.074	0.075	0.074	3.4
Bromochloromethane	0.237	0.241	0.236	0.253	0.285	0.250	8.1
Tetrahydrofuran	0.062	0.068	0.064	0.069	0.073	0.067	6.2
Chloroform	0.698	0.705	0.704	0.726	0.792	0.725	5.4
1,1,1-Trichloroethane	0.591	0.651	0.596	0.628	0.649	0.623	4.6
Carbon Tetrachloride	0.322	0.548	0.476	0.548	0.583	0.495	21.1
Isobutyl Alcohol	0.009	0.010	0.009	0.011	0.012	0.010	10.6
Benzene	0.890	0.843	0.827	0.858	0.950	0.874	5.6
1,2-Dichloroethane	0.523	0.504	0.520	0.534	0.545	0.525	2.9
Trichloroethene	0.466	0.430	0.448	0.449	0.480	0.455	4.2
1,2-Dichloropropane	0.387	0.394	0.397	0.417	0.452	0.409	6.4
Methyl Methacrylate	0.206	0.222	0.190	0.199	0.183	0.200	7.6
Dibromomethane	0.404	0.408	0.421	0.432	0.461	0.425	5.4

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Instrument ID: L Calibration Date(s): 08/19/02 08/19/02

Heated Purge: (Y/N) N Calibration Time(s): 0821 1055

GC Column: CAP ID: 0.53 (mm)

LAB FILE ID: RRF1 =LYC01V RRF5 =LYC05V
RRF10 =LYC10V RRF25 =LYC25V RRF50 =LYC50V

COMPOUND	RRF1	RRF5	RRF10	RRF25	RRF50	$\overline{RRF}$	% RSD	
1,4-Dioxane	0.002	0.003	0.002	0.003	0.004	0.003	17.9	<-
Bromodichloromethane	0.602	0.681	0.645	0.689	0.734	0.670	7.4	
2-Chloroethyl Vinyl Ether	0.229	0.218	0.217	0.226	0.228	0.224	2.5	
cis-1,3-Dichloropropene	0.478	0.548	0.534	0.561	0.616	0.547	9.1	
4-Methyl-2-pentanone	0.315	0.317	0.317	0.348	0.354	0.330	5.8	
Toluene	0.624	0.625	0.607	0.640	0.632	0.626	1.9	
trans-1,3-Dichloropropene	0.450	0.532	0.484	0.515	0.498	0.496	6.3	
Ethyl Methacrylate	0.431	0.422	0.445	0.490	0.525	0.463	9.4	
1,1,2-Trichloroethane	0.300	0.316	0.292	0.302	0.291	0.300	3.3	
Tetrachloroethene	0.627	0.586	0.580	0.653	0.671	0.623	6.5	
2-Hexanone	0.203	0.229	0.223	0.250	0.240	0.229	7.7	
Dibromochloromethane	0.526	0.653	0.596	0.666	0.667	0.622	9.8	
1,2-Dibromoethane	0.489	0.580	0.544	0.582	0.578	0.555	7.2	
Chlorobenzene *	0.894	0.901	0.875	0.940	0.938	0.910	3.2*	
1,1,1,2-Tetrachloroethane	0.378	0.476	0.424	0.460	0.459	0.439	8.9	
Ethylbenzene	1.338	1.354	1.361	1.444	1.468	1.393	4.2	
Xylene (m,p)	0.515	0.525	0.537	0.563	0.572	0.542	4.5	
Xylene (total)	0.503	0.496	0.514	0.551	0.558	0.524	5.4	
Xylene (o)	0.503	0.496	0.514	0.551	0.558	0.524	5.4	
Styrene	0.818	0.854	0.882	0.942	0.968	0.893	6.9	
Bromoform *	0.328	0.473	0.446	0.508	0.522	0.455	17.0*	<-
Isopropylbenzene	2.533	2.526	2.542	2.594	2.656	2.570	2.1	
cis-1,4-Dichloro-2-butene	0.142	0.192	0.208	0.240	0.252	0.207	21.1	
1,1,2,2-Tetrachloroethane *	0.890	1.008	0.977	1.017	1.041	0.987	5.9*	
1,2,3-Trichloropropane	0.277	0.294	0.277	0.286	0.288	0.284	2.6	
trans-1,4-Dichloro-2-butene	0.191	0.241	0.242	0.257	0.275	0.241	12.9	
1,3-Dichlorobenzene	1.432	1.404	1.448	1.491	1.521	1.459	3.2	
1,4-Dichlorobenzene	1.529	1.495	1.495	1.549	1.603	1.534	2.9	
1,2-Dichlorobenzene	1.280	1.297	1.303	1.352	1.382	1.323	3.2	
1,2-Dibromo-3-Chloropropane	0.221	0.221	0.236	0.247	0.274	0.240	9.2	
1,2,4-Trichlorobenzene	1.064	1.054	1.083	1.119	1.175	1.099	4.5	
Hexachlorobutadiene	0.768	0.730	0.717	0.759	0.784	0.752	3.7	
Naphthalene	1.682	1.867	1.861	2.012	2.167	1.918	9.5	
2,2-Dichloropropane	0.524	0.571	0.456	0.501	0.472	0.505	9.0	
1,1-Dichloropropene	0.485	0.503	0.478	0.509	0.542	0.503	4.9	
1,3-Dichloropropane	0.549	0.598	0.537	0.566	0.554	0.561	4.2	
Bromobenzene	0.824	0.835	0.838	0.865	0.885	0.849	3.0	

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Instrument ID: L Calibration Date(s): 08/19/02 08/19/02

Heated Purge: (Y/N) N Calibration Time(s): 0821 1055

GC Column: CAP ID: 0.53 (mm)

LAB FILE ID: RRF1 =LYC01V RRF5 =LYC05V
RRF10 =LYC10V RRF25 =LYC25V RRF50 =LYC50V

COMPOUND	RRF1	RRF5	RRF10	RRF25	RRF50	$\overline{RRF}$	% RSD
n-Propylbenzene	0.689	0.695	0.711	0.723	0.747	0.713	3.2
2-Chlorotoluene	0.678	0.652	0.666	0.682	0.697	0.675	2.5
4-Chlorotoluene	0.703	0.658	0.680	0.701	0.720	0.692	3.4
1,3,5-Trimethylbenzene	2.001	1.966	1.997	2.029	2.079	2.014	2.1
tert-Butylbenzene	2.540	2.612	2.627	2.647	2.728	2.631	2.6
1,2,4-Trimethylbenzene	2.036	1.977	2.005	2.048	2.097	2.033	2.2
sec-Butylbenzene	3.050	3.012	3.130	3.196	3.301	3.138	3.7
4-Isopropyltoluene	2.542	2.513	2.574	2.652	2.748	2.606	3.6
n-Butylbenzene	2.363	2.340	2.414	2.462	2.536	2.423	3.3
1,2,3-Trichlorobenzene	1.000	0.953	0.968	1.074	1.149	1.029	8.0
Toluene-d8	0.937	0.942	0.918	0.968	0.953	0.944	1.9
1,2-Dichloroethane-d4	0.395	0.410	0.393	0.403	0.421	0.404	2.8
Bromofluorobenzene	1.370	1.273	1.288	1.308	1.329	1.314	2.9
1,2-Dichlorobenzene-d4	0.873	0.862	0.861	0.890	0.912	0.880	2.5

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Instrument ID: L Calibration Date: 08/22/02 Time: 0148

Lab File ID: LYC10EV Init. Calib. Date(s): 08/19/02 08/19/02

Heated Purge: (Y/N) N Init. Calib. Times: 0821 1055

GC Column: CAP ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D	
Dichlorodifluoromethane	0.624	0.660	0.01	5.8	20.0	
Chloromethane	0.380	0.296	0.1	22.1	20.0	<-
Vinyl Chloride	0.343	0.331	0.01	3.5	20.0	
Bromomethane	0.293	0.157	0.01	46.4	20.0	<-
Chloroethane	0.166	0.182	0.01	9.6	20.0	
Trichlorofluoromethane	0.691	0.712	0.01	3.0	20.0	
Acrolein	0.041	0.038	0.01	7.3	20.0	
Freon TF	0.542	0.572	0.01	5.5	20.0	
1,1-Dichloroethene	0.300	0.285	0.01	5.0	20.0	
Acetone	0.067	0.056	0.01	16.4	20.0	
Methyl Iodide	0.402	0.280	0.01	30.3	20.0	<-
Carbon Disulfide	0.706	0.715	0.01	1.3	20.0	
Allyl Chloride	0.417	0.433	0.01	3.8	20.0	
Methylene Chloride	0.298	0.274	0.01	8.0	20.0	
Acrylonitrile	0.073	0.069	0.01	5.5	20.0	
trans-1,2-Dichloroethene	0.300	0.314	0.01	4.7	20.0	
1,2-Dichloroethene (total)	0.305	0.321	0.01	5.2	20.0	
Methyl-t-Butyl Ether	0.594	0.585	0.01	1.5	20.0	
1,1-Dichloroethane	0.631	0.635	0.1	0.6	20.0	
Vinyl Acetate	0.439	0.504	0.01	14.8	20.0	
Chloroprene	0.483	0.508	0.01	5.2	20.0	
cis-1,2-Dichloroethene	0.310	0.329	0.01	6.1	20.0	
2-Butanone	0.019	0.020	0.01	5.3	20.0	
Propionitrile	0.027	0.024	0.01	11.1	20.0	
Methacrylonitrile	0.074	0.076	0.01	2.7	20.0	
Bromochloromethane	0.250	0.240	0.01	4.0	20.0	
Tetrahydrofuran	0.067	0.068	0.01	1.5	20.0	
Chloroform	0.725	0.714	0.01	1.5	20.0	
1,1,1-Trichloroethane	0.623	0.654	0.01	5.0	20.0	
Carbon Tetrachloride	0.495	0.647	0.01	30.7	20.0	<-
Isobutyl Alcohol	0.010	0.010	0.01	0.0	20.0	
Benzene	0.874	0.883	0.01	1.0	20.0	
1,2-Dichloroethane	0.525	0.520	0.01	1.0	20.0	
Trichloroethene	0.455	0.421	0.01	7.5	20.0	
1,2-Dichloropropane	0.409	0.412	0.01	0.7	20.0	
Methyl Methacrylate	0.200	0.220	0.01	10.0	20.0	
Dibromomethane	0.425	0.418	0.01	1.6	20.0	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Instrument ID: L Calibration Date: 08/22/02 Time: 0148

Lab File ID: LYC10EV Init. Calib. Date(s): 08/19/02 08/19/02

Heated Purge: (Y/N) N Init. Calib. Times: 0821 1055

GC Column: CAP ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D	
1,4-Dioxane	0.003	0.002	0.01	33.3	20.0	<-
Bromodichloromethane	0.670	0.696	0.01	3.9	20.0	
2-Chloroethyl Vinyl Ether	0.224	0.211	0.01	5.8	20.0	
cis-1,3-Dichloropropene	0.547	0.564	0.01	3.1	20.0	
4-Methyl-2-pentanone	0.330	0.316	0.01	4.2	20.0	
Toluene	0.626	0.653	0.01	4.3	20.0	
trans-1,3-Dichloropropene	0.496	0.581	0.01	17.1	20.0	
Ethyl Methacrylate	0.463	0.420	0.01	9.3	20.0	
1,1,2-Trichloroethane	0.300	0.345	0.01	15.0	20.0	
Tetrachloroethene	0.623	0.552	0.01	11.4	20.0	
2-Hexanone	0.229	0.234	0.01	2.2	20.0	
Dibromochloromethane	0.622	0.735	0.01	18.2	20.0	
1,2-Dibromoethane	0.555	0.626	0.01	12.8	20.0	
Chlorobenzene	0.910	0.936	0.3	2.8	20.0	
1,1,1,2-Tetrachloroethane	0.439	0.513	0.01	16.8	20.0	
Ethylbenzene	1.393	1.424	0.01	2.2	20.0	
Xylene (m,p)	0.542	0.547	0.01	0.9	20.0	
Xylene (total)	0.524	0.536	0.01	2.3	20.0	
Xylene (o)	0.524	0.536	0.01	2.3	20.0	
Styrene	0.893	0.924	0.01	3.5	20.0	
Bromoform	0.455	0.522	0.1	14.7	20.0	
Isopropylbenzene	2.570	2.670	0.01	3.9	20.0	
cis-1,4-Dichloro-2-butene	0.207	0.228	0.01	10.1	20.0	
1,1,2,2-Tetrachloroethane	0.987	1.078	0.3	9.2	20.0	
1,2,3-Trichloropropane	0.284	0.295	0.01	3.9	20.0	
trans-1,4-Dichloro-2-butene	0.241	0.260	0.01	7.9	20.0	
1,3-Dichlorobenzene	1.459	1.464	0.01	0.3	20.0	
1,4-Dichlorobenzene	1.534	1.552	0.01	1.2	20.0	
1,2-Dichlorobenzene	1.323	1.354	0.01	2.3	20.0	
1,2-Dibromo-3-Chloropropane	0.240	0.237	0.01	1.2	20.0	
1,2,4-Trichlorobenzene	1.099	1.108	0.01	0.8	20.0	
Hexachlorobutadiene	0.752	0.734	0.01	2.4	20.0	
Naphthalene	1.918	1.884	0.01	1.8	20.0	
2,2-Dichloropropane	0.505	0.567	0.01	12.3	20.0	
1,1-Dichloropropene	0.503	0.527	0.01	4.8	20.0	
1,3-Dichloropropane	0.561	0.624	0.01	11.2	20.0	
Bromobenzene	0.849	0.862	0.01	1.5	20.0	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Instrument ID: L Calibration Date: 08/22/02 Time: 0148

Lab File ID: LYC10EV Init. Calib. Date(s): 08/19/02 08/19/02

Heated Purge: (Y/N) N Init. Calib. Times: 0821 1055

GC Column: CAP ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
n-Propylbenzene	0.713	0.722	0.01	1.3	20.0
2-Chlorotoluene	0.675	0.690	0.01	2.2	20.0
4-Chlorotoluene	0.692	0.705	0.01	1.9	20.0
1,3,5-Trimethylbenzene	2.014	2.056	0.01	2.1	20.0
tert-Butylbenzene	2.631	2.874	0.01	9.2	20.0
1,2,4-Trimethylbenzene	2.033	2.066	0.01	1.6	20.0
sec-Butylbenzene	3.138	3.239	0.01	3.2	20.0
4-Isopropyltoluene	2.606	2.661	0.01	2.1	20.0
n-Butylbenzene	2.423	2.525	0.01	4.2	20.0
1,2,3-Trichlorobenzene	1.029	0.991	0.01	3.7	20.0
Toluene-d8	0.944	0.988	0.01	4.7	20.0
1,2-Dichloroethane-d4	0.404	0.415	0.01	2.7	20.0
Bromofluorobenzene	1.314	1.350	0.01	2.7	20.0
1,2-Dichlorobenzene-d4	0.880	0.881	0.01	0.1	20.0

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Lab File ID (Standard): LYC10EV Date Analyzed: 08/22/02

Instrument ID: L Time Analyzed: 0148

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

		IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	444820	9.78	409741	15.60	242849	19.97
	UPPER LIMIT	889640	10.28	819482	16.10	485698	20.47
	LOWER LIMIT	222410	9.28	204870	15.10	121424	19.47
	CLIENT SAMPLE NO.						
01	LYCE LCS	425714	9.77	428401	15.60	256303	19.98
02	LYCE LCSD	408888	9.77	429119	15.60	256846	19.98
03	VBLKY2	437330	9.77	439005	15.60	242932	19.98
04	ARD2180	437773	9.78	404239	15.60	222083	19.97
05	ARD2181	407592	9.76	398938	15.60	217424	19.98
06	ARD2177	377475	9.77	380784	15.60	214500	19.98
07							
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22							

IS1 = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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SAMPLE DATA SUMMARY PACKAGE

FOR J24.2

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

ARD2168

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498084

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498084

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
60-29-7	Diethyl Ether	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
67-64-1	Acetone	5.0	U
74-88-4	Methyl Iodide	0.50	U
75-15-0	Carbon Disulfide	0.50	U
107-05-1	Allyl Chloride	0.50	U
75-09-2	Methylene Chloride	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.60	
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
107-12-0	Propionitrile	25	U
96-33-3	Methyl Acrylate	0.50	U
74-97-5	Bromochloromethane	0.50	U
126-98-7	Methacrylonitrile	0.50	U
109-99-9	Tetrahydrofuran	2.5	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
109-69-3	1-Chlorobutane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

ARD2168

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498084

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498084

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
80-62-6	Methyl Methacrylate	0.50	U
75-27-4	Bromodichloromethane	0.50	U
107-14-2	Chloroacetonitrile	25	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
513-88-2	1,1-Dichloropropanone	10	U
108-10-1	4-Methyl-2-Pentanone	2.5	U
79-46-9	2-Nitropropane	10	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
97-63-2	Ethyl Methacrylate	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
591-78-6	2-Hexanone	2.5	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
1330-20-7	Xylene (total)	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

ARD2168

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498084

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498084

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
103-65-1	n-Propylbenzene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
76-01-7	Pentachloroethane	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
98-95-3	Nitrobenzene	25	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR0037

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498085

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498085

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
60-29-7	Diethyl Ether	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
67-64-1	Acetone	4.2	J
74-88-4	Methyl Iodide	0.50	U
75-15-0	Carbon Disulfide	0.50	U
107-05-1	Allyl Chloride	0.50	U
75-09-2	Methylene Chloride	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
107-12-0	Propionitrile	25	U
96-33-3	Methyl Acrylate	0.50	U
74-97-5	Bromochloromethane	0.50	U
126-98-7	Methacrylonitrile	0.50	U
109-99-9	Tetrahydrofuran	2.5	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
109-69-3	1-Chlorobutane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR0037

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498085

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498085

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
80-62-6	Methyl Methacrylate	0.50	U
75-27-4	Bromodichloromethane	0.50	U
107-14-2	Chloroacetonitrile	25	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
513-88-2	1,1-Dichloropropanone	10	U
108-10-1	4-Methyl-2-Pentanone	2.5	U
79-46-9	2-Nitropropane	10	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
97-63-2	Ethyl Methacrylate	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
591-78-6	2-Hexanone	2.5	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
1330-20-7	Xylene (total)	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR0037

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498085

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498085

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
103-65-1	n-Propylbenzene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
76-01-7	Pentachloroethane	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
98-95-3	Nitrobenzene	25	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR0038

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498086

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498086

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
60-29-7	Diethyl Ether	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
67-64-1	Acetone	5.0	U
74-88-4	Methyl Iodide	0.50	U
75-15-0	Carbon Disulfide	0.50	U
107-05-1	Allyl Chloride	0.50	U
75-09-2	Methylene Chloride	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
107-12-0	Propionitrile	25	U
96-33-3	Methyl Acrylate	0.50	U
74-97-5	Bromochloromethane	0.50	U
126-98-7	Methacrylonitrile	0.50	U
109-99-9	Tetrahydrofuran	2.5	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
109-69-3	1-Chlorobutane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR0038

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498086

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498086

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
80-62-6	Methyl Methacrylate	0.50	U
75-27-4	Bromodichloromethane	0.50	U
107-14-2	Chloroacetonitrile	25	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
513-88-2	1,1-Dichloropropanone	10	U
108-10-1	4-Methyl-2-Pentanone	2.5	U
79-46-9	2-Nitropropane	10	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
97-63-2	Ethyl Methacrylate	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
591-78-6	2-Hexanone	2.5	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
1330-20-7	Xylene (total)	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR0038

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498086

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498086

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
103-65-1	n-Propylbenzene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
76-01-7	Pentachloroethane	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
98-95-3	Nitrobenzene	25	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2091

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498072

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498072D

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.3

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.65	U
74-87-3	Chloromethane	0.65	U
75-01-4	Vinyl Chloride	0.65	U
74-83-9	Bromomethane	0.65	U
75-00-3	Chloroethane	0.65	U
75-69-4	Trichlorofluoromethane	0.65	U
60-29-7	Diethyl Ether	0.65	U
75-35-4	1,1-Dichloroethene	0.65	U
67-64-1	Acetone	6.5	U
74-88-4	Methyl Iodide	0.65	U
75-15-0	Carbon Disulfide	0.65	U
107-05-1	Allyl Chloride	0.65	U
75-09-2	Methylene Chloride	0.65	U
107-13-1	Acrylonitrile	0.65	U
156-60-5	trans-1,2-Dichloroethene	0.65	U
1634-04-4	Methyl-t-Butyl Ether	0.65	U
75-34-3	1,1-Dichloroethane	0.65	U
594-20-7	2,2-Dichloropropane	0.65	U
156-59-2	cis-1,2-Dichloroethene	25	
78-93-3	2-Butanone	6.5	U
107-12-0	Propionitrile	32	U
96-33-3	Methyl Acrylate	0.65	U
74-97-5	Bromochloromethane	0.65	U
126-98-7	Methacrylonitrile	0.65	U
109-99-9	Tetrahydrofuran	3.2	U
67-66-3	Chloroform	0.65	U
71-55-6	1,1,1-Trichloroethane	0.65	U
109-69-3	1-Chlorobutane	0.65	U
56-23-5	Carbon Tetrachloride	0.65	U
563-58-6	1,1-Dichloropropene	0.65	U
71-43-2	Benzene	0.65	U
107-06-2	1,2-Dichloroethane	0.65	U
79-01-6	Trichloroethene	6.0	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2091

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498072

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498072D

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.3

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	0.65	U
78-87-5	1,2-Dichloropropane	0.65	U
80-62-6	Methyl Methacrylate	0.65	U
75-27-4	Bromodichloromethane	0.65	U
107-14-2	Chloroacetonitrile	32	U
10061-01-5	cis-1,3-Dichloropropene	0.65	U
513-88-2	1,1-Dichloropropanone	13	U
108-10-1	4-Methyl-2-Pentanone	3.2	U
79-46-9	2-Nitropropane	13	U
108-88-3	Toluene	0.65	U
10061-02-6	trans-1,3-Dichloropropene	0.65	U
97-63-2	Ethyl Methacrylate	0.65	U
79-00-5	1,1,2-Trichloroethane	0.65	U
127-18-4	Tetrachloroethene	0.65	U
142-28-9	1,3-Dichloropropane	0.65	U
591-78-6	2-Hexanone	3.2	U
124-48-1	Dibromochloromethane	0.65	U
106-93-4	1,2-Dibromoethane	0.65	U
108-90-7	Chlorobenzene	0.65	U
630-20-6	1,1,1,2-Tetrachloroethane	0.65	U
100-41-4	Ethylbenzene	0.65	U
1330-20-7	m- & p-Xylene	0.65	U
95-47-6	o-Xylene	0.65	U
100-42-5	Styrene	0.65	U
75-25-2	Bromoform	0.65	U
1330-20-7	Xylene (total)	0.65	U
98-82-8	Isopropylbenzene	0.65	U
108-86-1	Bromobenzene	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	0.65	U
96-18-4	1,2,3-Trichloropropane	0.65	U
110-57-6	trans-1,4-Dichloro-2-butene	0.65	U
95-49-8	2-Chlorotoluene	0.65	U
106-43-4	4-Chlorotoluene	0.65	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2091

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498072

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498072D

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.3

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
103-65-1	n-Propylbenzene	0.65	U
108-67-8	1,3,5-Trimethylbenzene	0.65	U
76-01-7	Pentachloroethane	0.65	U
98-06-6	tert-Butylbenzene	0.65	U
95-63-6	1,2,4-Trimethylbenzene	0.65	U
135-98-8	sec-Butylbenzene	0.65	U
541-73-1	1,3-Dichlorobenzene	0.65	U
99-87-6	p-Isopropyltoluene	0.65	U
106-46-7	1,4-Dichlorobenzene	0.65	U
95-50-1	1,2-Dichlorobenzene	0.65	U
104-51-8	n-Butylbenzene	0.65	U
67-72-1	Hexachloroethane	0.65	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.65	U
98-95-3	Nitrobenzene	32	U
120-82-1	1,2,4-Trichlorobenzene	0.65	U
87-68-3	Hexachlorobutadiene	0.65	U
91-20-3	Naphthalene	0.65	U
87-61-6	1,2,3-Trichlorobenzene	0.65	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2092

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498073

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498073

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
60-29-7	Diethyl Ether	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
67-64-1	Acetone	5.0	U
74-88-4	Methyl Iodide	0.50	U
75-15-0	Carbon Disulfide	0.50	U
107-05-1	Allyl Chloride	0.50	U
75-09-2	Methylene Chloride	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.55	
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	20	
78-93-3	2-Butanone	5.0	U
107-12-0	Propionitrile	25	U
96-33-3	Methyl Acrylate	0.50	U
74-97-5	Bromochloromethane	0.50	U
126-98-7	Methacrylonitrile	0.50	U
109-99-9	Tetrahydrofuran	2.5	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
109-69-3	1-Chlorobutane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.22	J
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	3.5	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2092

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498073

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498073

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
80-62-6	Methyl Methacrylate	0.50	U
75-27-4	Bromodichloromethane	0.50	U
107-14-2	Chloroacetonitrile	25	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
513-88-2	1,1-Dichloropropanone	10	U
108-10-1	4-Methyl-2-Pentanone	2.5	U
79-46-9	2-Nitropropane	10	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
97-63-2	Ethyl Methacrylate	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
591-78-6	2-Hexanone	2.5	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
1330-20-7	Xylene (total)	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2092

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498073

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498073

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
103-65-1	n-Propylbenzene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
76-01-7	Pentachloroethane	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
98-95-3	Nitrobenzene	25	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2093

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498074

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498074D

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 6.1

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	3.0	U
74-87-3	Chloromethane	3.0	U
75-01-4	Vinyl Chloride	3.0	U
74-83-9	Bromomethane	3.0	U
75-00-3	Chloroethane	3.0	U
75-69-4	Trichlorofluoromethane	3.0	U
60-29-7	Diethyl Ether	3.0	U
75-35-4	1,1-Dichloroethene	3.0	U
67-64-1	Acetone	30	U
74-88-4	Methyl Iodide	3.0	U
75-15-0	Carbon Disulfide	3.0	U
107-05-1	Allyl Chloride	3.0	U
75-09-2	Methylene Chloride	3.0	U
107-13-1	Acrylonitrile	3.0	U
156-60-5	trans-1,2-Dichloroethene	3.0	U
1634-04-4	Methyl-t-Butyl Ether	3.0	U
75-34-3	1,1-Dichloroethane	3.0	U
594-20-7	2,2-Dichloropropane	3.0	U
156-59-2	cis-1,2-Dichloroethene	95	
78-93-3	2-Butanone	30	U
107-12-0	Propionitrile	150	U
96-33-3	Methyl Acrylate	3.0	U
74-97-5	Bromochloromethane	3.0	U
126-98-7	Methacrylonitrile	3.0	U
109-99-9	Tetrahydrofuran	15	U
67-66-3	Chloroform	3.0	U
71-55-6	1,1,1-Trichloroethane	3.0	U
109-69-3	1-Chlorobutane	3.0	U
56-23-5	Carbon Tetrachloride	3.0	U
563-58-6	1,1-Dichloropropene	3.0	U
71-43-2	Benzene	3.0	U
107-06-2	1,2-Dichloroethane	3.0	U
79-01-6	Trichloroethene	3.7	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2093

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498074

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498074D

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 6.1

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	3.0	U
78-87-5	1,2-Dichloropropane	3.0	U
80-62-6	Methyl Methacrylate	3.0	U
75-27-4	Bromodichloromethane	3.0	U
107-14-2	Chloroacetonitrile	150	U
10061-01-5	cis-1,3-Dichloropropene	3.0	U
513-88-2	1,1-Dichloropropanone	61	U
108-10-1	4-Methyl-2-Pentanone	15	U
79-46-9	2-Nitropropane	61	U
108-88-3	Toluene	3.0	U
10061-02-6	trans-1,3-Dichloropropene	3.0	U
97-63-2	Ethyl Methacrylate	3.0	U
79-00-5	1,1,2-Trichloroethane	3.0	U
127-18-4	Tetrachloroethene	3.0	U
142-28-9	1,3-Dichloropropane	3.0	U
591-78-6	2-Hexanone	15	U
124-48-1	Dibromochloromethane	3.0	U
106-93-4	1,2-Dibromoethane	3.0	U
108-90-7	Chlorobenzene	3.0	U
630-20-6	1,1,1,2-Tetrachloroethane	3.0	U
100-41-4	Ethylbenzene	3.0	U
1330-20-7	m- & p-Xylene	3.0	U
95-47-6	o-Xylene	3.0	U
100-42-5	Styrene	3.0	U
75-25-2	Bromoform	3.0	U
1330-20-7	Xylene (total)	3.0	U
98-82-8	Isopropylbenzene	3.0	U
108-86-1	Bromobenzene	3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	3.0	U
96-18-4	1,2,3-Trichloropropane	3.0	U
110-57-6	trans-1,4-Dichloro-2-butene	3.0	U
95-49-8	2-Chlorotoluene	3.0	U
106-43-4	4-Chlorotoluene	3.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2093

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498074

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498074D

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 6.1

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
103-65-1	n-Propylbenzene	3.0	U
108-67-8	1,3,5-Trimethylbenzene	3.0	U
76-01-7	Pentachloroethane	3.0	U
98-06-6	tert-Butylbenzene	3.0	U
95-63-6	1,2,4-Trimethylbenzene	3.0	U
135-98-8	sec-Butylbenzene	3.0	U
541-73-1	1,3-Dichlorobenzene	3.0	U
99-87-6	p-Isopropyltoluene	3.0	U
106-46-7	1,4-Dichlorobenzene	3.0	U
95-50-1	1,2-Dichlorobenzene	3.0	U
104-51-8	n-Butylbenzene	3.0	U
67-72-1	Hexachloroethane	3.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	3.0	U
98-95-3	Nitrobenzene	150	U
120-82-1	1,2,4-Trichlorobenzene	3.0	U
87-68-3	Hexachlorobutadiene	3.0	U
91-20-3	Naphthalene	3.0	U
87-61-6	1,2,3-Trichlorobenzene	3.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2094

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498075

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498075

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
60-29-7	Diethyl Ether	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
67-64-1	Acetone	5.0	U
74-88-4	Methyl Iodide	0.50	U
75-15-0	Carbon Disulfide	0.50	U
107-05-1	Allyl Chloride	0.50	U
75-09-2	Methylene Chloride	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	19	
78-93-3	2-Butanone	5.0	U
107-12-0	Propionitrile	25	U
96-33-3	Methyl Acrylate	0.50	U
74-97-5	Bromochloromethane	0.50	U
126-98-7	Methacrylonitrile	0.50	U
109-99-9	Tetrahydrofuran	2.5	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
109-69-3	1-Chlorobutane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.43	J
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.40	J

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2094

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498075

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498075

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
80-62-6	Methyl Methacrylate	0.50	U
75-27-4	Bromodichloromethane	0.50	U
107-14-2	Chloroacetonitrile	25	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
513-88-2	1,1-Dichloropropanone	10	U
108-10-1	4-Methyl-2-Pentanone	2.5	U
79-46-9	2-Nitropropane	10	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
97-63-2	Ethyl Methacrylate	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
591-78-6	2-Hexanone	2.5	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
1330-20-7	Xylene (total)	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2094

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498075

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498075

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
103-65-1	n-Propylbenzene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
76-01-7	Pentachloroethane	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
98-95-3	Nitrobenzene	25	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2095

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498077

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498077D

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 27.5

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	14	U
74-87-3	Chloromethane	14	U
75-01-4	Vinyl Chloride	14	U
74-83-9	Bromomethane	14	U
75-00-3	Chloroethane	14	U
75-69-4	Trichlorofluoromethane	14	U
60-29-7	Diethyl Ether	14	U
75-35-4	1,1-Dichloroethene	14	U
67-64-1	Acetone	140	U
74-88-4	Methyl Iodide	14	U
75-15-0	Carbon Disulfide	14	U
107-05-1	Allyl Chloride	14	U
75-09-2	Methylene Chloride	14	U
107-13-1	Acrylonitrile	14	U
156-60-5	trans-1,2-Dichloroethene	14	U
1634-04-4	Methyl-t-Butyl Ether	14	U
75-34-3	1,1-Dichloroethane	14	U
594-20-7	2,2-Dichloropropane	14	U
156-59-2	cis-1,2-Dichloroethene	32	
78-93-3	2-Butanone	140	U
107-12-0	Propionitrile	690	U
96-33-3	Methyl Acrylate	14	U
74-97-5	Bromochloromethane	14	U
126-98-7	Methacrylonitrile	14	U
109-99-9	Tetrahydrofuran	69	U
67-66-3	Chloroform	14	U
71-55-6	1,1,1-Trichloroethane	14	U
109-69-3	1-Chlorobutane	14	U
56-23-5	Carbon Tetrachloride	14	U
563-58-6	1,1-Dichloropropene	14	U
71-43-2	Benzene	14	U
107-06-2	1,2-Dichloroethane	14	U
79-01-6	Trichloroethene	540	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2095

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498077

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498077D

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 27.5

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	14	U
78-87-5	1,2-Dichloropropane	14	U
80-62-6	Methyl Methacrylate	14	U
75-27-4	Bromodichloromethane	14	U
107-14-2	Chloroacetonitrile	690	U
10061-01-5	cis-1,3-Dichloropropene	14	U
513-88-2	1,1-Dichloropropanone	280	U
108-10-1	4-Methyl-2-Pentanone	69	U
79-46-9	2-Nitropropane	280	U
108-88-3	Toluene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
97-63-2	Ethyl Methacrylate	14	U
79-00-5	1,1,2-Trichloroethane	14	U
127-18-4	Tetrachloroethene	14	U
142-28-9	1,3-Dichloropropane	14	U
591-78-6	2-Hexanone	69	U
124-48-1	Dibromochloromethane	14	U
106-93-4	1,2-Dibromoethane	14	U
108-90-7	Chlorobenzene	14	U
630-20-6	1,1,1,2-Tetrachloroethane	14	U
100-41-4	Ethylbenzene	14	U
1330-20-7	m- & p-Xylene	14	U
95-47-6	o-Xylene	14	U
100-42-5	Styrene	14	U
75-25-2	Bromoform	14	U
1330-20-7	Xylene (total)	14	U
98-82-8	Isopropylbenzene	14	U
108-86-1	Bromobenzene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
96-18-4	1,2,3-Trichloropropane	14	U
110-57-6	trans-1,4-Dichloro-2-butene	14	U
95-49-8	2-Chlorotoluene	14	U
106-43-4	4-Chlorotoluene	14	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2095

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498077

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498077D

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 27.5

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
103-65-1	n-Propylbenzene	14	U
108-67-8	1,3,5-Trimethylbenzene	14	U
76-01-7	Pentachloroethane	14	U
98-06-6	tert-Butylbenzene	14	U
95-63-6	1,2,4-Trimethylbenzene	14	U
135-98-8	sec-Butylbenzene	14	U
541-73-1	1,3-Dichlorobenzene	14	U
99-87-6	p-Isopropyltoluene	14	U
106-46-7	1,4-Dichlorobenzene	14	U
95-50-1	1,2-Dichlorobenzene	14	U
104-51-8	n-Butylbenzene	14	U
67-72-1	Hexachloroethane	14	U
96-12-8	1,2-Dibromo-3-Chloropropane	14	U
98-95-3	Nitrobenzene	690	U
120-82-1	1,2,4-Trichlorobenzene	14	U
87-68-3	Hexachlorobutadiene	14	U
91-20-3	Naphthalene	14	U
87-61-6	1,2,3-Trichlorobenzene	14	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2095MS

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498077MS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498077M

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 27.5

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	54	
74-87-3	Chloromethane	49	
75-01-4	Vinyl Chloride	53	
74-83-9	Bromomethane	54	
75-00-3	Chloroethane	56	
75-69-4	Trichlorofluoromethane	51	
60-29-7	Diethyl Ether	63	
75-35-4	1,1-Dichloroethene	53	
67-64-1	Acetone	140	
74-88-4	Methyl Iodide	63	
75-15-0	Carbon Disulfide	75	
107-05-1	Allyl Chloride	55	
75-09-2	Methylene Chloride	54	
107-13-1	Acrylonitrile	66	
156-60-5	trans-1,2-Dichloroethene	53	
1634-04-4	Methyl-t-Butyl Ether	58	
75-34-3	1,1-Dichloroethane	50	
594-20-7	2,2-Dichloropropane	53	
156-59-2	cis-1,2-Dichloroethene	84	
78-93-3	2-Butanone	200	
107-12-0	Propionitrile	3000	
96-33-3	Methyl Acrylate	58	
74-97-5	Bromochloromethane	58	
126-98-7	Methacrylonitrile	62	
109-99-9	Tetrahydrofuran	330	
67-66-3	Chloroform	49	
71-55-6	1,1,1-Trichloroethane	54	
109-69-3	1-Chlorobutane	57	
56-23-5	Carbon Tetrachloride	51	
563-58-6	1,1-Dichloropropene	48	
71-43-2	Benzene	51	
107-06-2	1,2-Dichloroethane	58	
79-01-6	Trichloroethene	650	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2095MS

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498077MS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498077M

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 27.5

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	58	
78-87-5	1,2-Dichloropropane	50	
80-62-6	Methyl Methacrylate	58	
75-27-4	Bromodichloromethane	54	
107-14-2	Chloroacetonitrile	2900	
10061-01-5	cis-1,3-Dichloropropene	51	
513-88-2	1,1-Dichloropropanone	1500	
108-10-1	4-Methyl-2-Pentanone	280	
79-46-9	2-Nitropropane	1200	
108-88-3	Toluene	59	
10061-02-6	trans-1,3-Dichloropropene	51	
97-63-2	Ethyl Methacrylate	59	
79-00-5	1,1,2-Trichloroethane	58	
127-18-4	Tetrachloroethene	54	
142-28-9	1,3-Dichloropropane	60	
591-78-6	2-Hexanone	200	
124-48-1	Dibromochloromethane	47	
106-93-4	1,2-Dibromoethane	55	
108-90-7	Chlorobenzene	56	
630-20-6	1,1,1,2-Tetrachloroethane	54	
100-41-4	Ethylbenzene	54	
1330-20-7	m- & p-Xylene	110	
95-47-6	o-Xylene	56	
100-42-5	Styrene	54	
75-25-2	Bromoform	45	
1330-20-7	Xylene (total)	170	
98-82-8	Isopropylbenzene	56	
108-86-1	Bromobenzene	55	
79-34-5	1,1,2,2-Tetrachloroethane	58	
96-18-4	1,2,3-Trichloropropane	60	
110-57-6	trans-1,4-Dichloro-2-butene	50	
95-49-8	2-Chlorotoluene	57	
106-43-4	4-Chlorotoluene	56	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2095MS

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498077MS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498077M

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 27.5

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
103-65-1	n-Propylbenzene	57	
108-67-8	1,3,5-Trimethylbenzene	56	
76-01-7	Pentachloroethane	81	
98-06-6	tert-Butylbenzene	60	
95-63-6	1,2,4-Trimethylbenzene	55	
135-98-8	sec-Butylbenzene	56	
541-73-1	1,3-Dichlorobenzene	56	
99-87-6	p-Isopropyltoluene	58	
106-46-7	1,4-Dichlorobenzene	58	
95-50-1	1,2-Dichlorobenzene	58	
104-51-8	n-Butylbenzene	58	
67-72-1	Hexachloroethane	56	
96-12-8	1,2-Dibromo-3-Chloropropane	58	
98-95-3	Nitrobenzene	2100	
120-82-1	1,2,4-Trichlorobenzene	60	
87-68-3	Hexachlorobutadiene	59	
91-20-3	Naphthalene	62	
87-61-6	1,2,3-Trichlorobenzene	62	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2095MSD

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498077MD

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498077S

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 27.5

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	47	
74-87-3	Chloromethane	46	
75-01-4	Vinyl Chloride	54	
74-83-9	Bromomethane	53	
75-00-3	Chloroethane	54	
75-69-4	Trichlorofluoromethane	51	
60-29-7	Diethyl Ether	60	
75-35-4	1,1-Dichloroethene	50	
67-64-1	Acetone	150	
74-88-4	Methyl Iodide	62	
75-15-0	Carbon Disulfide	80	
107-05-1	Allyl Chloride	52	
75-09-2	Methylene Chloride	55	
107-13-1	Acrylonitrile	65	
156-60-5	trans-1,2-Dichloroethene	56	
1634-04-4	Methyl-t-Butyl Ether	57	
75-34-3	1,1-Dichloroethane	46	
594-20-7	2,2-Dichloropropane	50	
156-59-2	cis-1,2-Dichloroethene	87	
78-93-3	2-Butanone	180	
107-12-0	Propionitrile	2800	
96-33-3	Methyl Acrylate	54	
74-97-5	Bromochloromethane	56	
126-98-7	Methacrylonitrile	56	
109-99-9	Tetrahydrofuran	290	
67-66-3	Chloroform	48	
71-55-6	1,1,1-Trichloroethane	50	
109-69-3	1-Chlorobutane	48	
56-23-5	Carbon Tetrachloride	48	
563-58-6	1,1-Dichloropropene	51	
71-43-2	Benzene	49	
107-06-2	1,2-Dichloroethane	55	
79-01-6	Trichloroethene	650	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2095MSD

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498077MD

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498077S

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 27.5

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	56	
78-87-5	1,2-Dichloropropane	50	
80-62-6	Methyl Methacrylate	56	
75-27-4	Bromodichloromethane	52	
107-14-2	Chloroacetonitrile	2700	
10061-01-5	cis-1,3-Dichloropropene	51	
513-88-2	1,1-Dichloropropanone	1400	
108-10-1	4-Methyl-2-Pentanone	270	
79-46-9	2-Nitropropane	1100	
108-88-3	Toluene	56	
10061-02-6	trans-1,3-Dichloropropene	51	
97-63-2	Ethyl Methacrylate	57	
79-00-5	1,1,2-Trichloroethane	53	
127-18-4	Tetrachloroethene	51	
142-28-9	1,3-Dichloropropane	58	
591-78-6	2-Hexanone	180	
124-48-1	Dibromochloromethane	48	
106-93-4	1,2-Dibromoethane	56	
108-90-7	Chlorobenzene	55	
630-20-6	1,1,1,2-Tetrachloroethane	52	
100-41-4	Ethylbenzene	54	
1330-20-7	m- & p-Xylene	110	
95-47-6	o-Xylene	56	
100-42-5	Styrene	55	
75-25-2	Bromoform	48	
1330-20-7	Xylene (total)	170	
98-82-8	Isopropylbenzene	56	
108-86-1	Bromobenzene	56	
79-34-5	1,1,2,2-Tetrachloroethane	59	
96-18-4	1,2,3-Trichloropropane	61	
110-57-6	trans-1,4-Dichloro-2-butene	53	
95-49-8	2-Chlorotoluene	57	
106-43-4	4-Chlorotoluene	55	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2095MSD

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498077MD

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498077S

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 27.5

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
103-65-1	n-Propylbenzene	58	
108-67-8	1,3,5-Trimethylbenzene	56	
76-01-7	Pentachloroethane	78	
98-06-6	tert-Butylbenzene	58	
95-63-6	1,2,4-Trimethylbenzene	57	
135-98-8	sec-Butylbenzene	57	
541-73-1	1,3-Dichlorobenzene	58	
99-87-6	p-Isopropyltoluene	57	
106-46-7	1,4-Dichlorobenzene	59	
95-50-1	1,2-Dichlorobenzene	59	
104-51-8	n-Butylbenzene	58	
67-72-1	Hexachloroethane	55	
96-12-8	1,2-Dibromo-3-Chloropropane	54	
98-95-3	Nitrobenzene	2400	
120-82-1	1,2,4-Trichlorobenzene	61	
87-68-3	Hexachlorobutadiene	60	
91-20-3	Naphthalene	62	
87-61-6	1,2,3-Trichlorobenzene	63	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2096

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498078

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498078D

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 8.8

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	4.4	U
74-87-3	Chloromethane	4.4	U
75-01-4	Vinyl Chloride	4.4	U
74-83-9	Bromomethane	4.4	U
75-00-3	Chloroethane	4.4	U
75-69-4	Trichlorofluoromethane	4.4	U
60-29-7	Diethyl Ether	4.4	U
75-35-4	1,1-Dichloroethene	4.4	U
67-64-1	Acetone	44	U
74-88-4	Methyl Iodide	4.4	U
75-15-0	Carbon Disulfide	4.4	U
107-05-1	Allyl Chloride	4.4	U
75-09-2	Methylene Chloride	4.4	U
107-13-1	Acrylonitrile	4.4	U
156-60-5	trans-1,2-Dichloroethene	4.4	U
1634-04-4	Methyl-t-Butyl Ether	4.4	U
75-34-3	1,1-Dichloroethane	4.4	U
594-20-7	2,2-Dichloropropane	4.4	U
156-59-2	cis-1,2-Dichloroethene	170	
78-93-3	2-Butanone	44	U
107-12-0	Propionitrile	220	U
96-33-3	Methyl Acrylate	4.4	U
74-97-5	Bromochloromethane	4.4	U
126-98-7	Methacrylonitrile	4.4	U
109-99-9	Tetrahydrofuran	22	U
67-66-3	Chloroform	4.4	U
71-55-6	1,1,1-Trichloroethane	4.4	U
109-69-3	1-Chlorobutane	4.4	U
56-23-5	Carbon Tetrachloride	4.4	U
563-58-6	1,1-Dichloropropene	4.4	U
71-43-2	Benzene	4.4	U
107-06-2	1,2-Dichloroethane	4.4	U
79-01-6	Trichloroethene	140	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2096

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498078

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498078D

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 8.8

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	4.4	U
78-87-5	1,2-Dichloropropane	4.4	U
80-62-6	Methyl Methacrylate	4.4	U
75-27-4	Bromodichloromethane	4.4	U
107-14-2	Chloroacetonitrile	220	U
10061-01-5	cis-1,3-Dichloropropene	4.4	U
513-88-2	1,1-Dichloropropanone	88	U
108-10-1	4-Methyl-2-Pentanone	22	U
79-46-9	2-Nitropropane	88	U
108-88-3	Toluene	4.4	U
10061-02-6	trans-1,3-Dichloropropene	4.4	U
97-63-2	Ethyl Methacrylate	4.4	U
79-00-5	1,1,2-Trichloroethane	4.4	U
127-18-4	Tetrachloroethene	4.4	U
142-28-9	1,3-Dichloropropane	4.4	U
591-78-6	2-Hexanone	22	U
124-48-1	Dibromochloromethane	4.4	U
106-93-4	1,2-Dibromoethane	4.4	U
108-90-7	Chlorobenzene	4.4	U
630-20-6	1,1,1,2-Tetrachloroethane	4.4	U
100-41-4	Ethylbenzene	4.4	U
1330-20-7	m- & p-Xylene	4.4	U
95-47-6	o-Xylene	4.4	U
100-42-5	Styrene	4.4	U
75-25-2	Bromoform	4.4	U
1330-20-7	Xylene (total)	4.4	U
98-82-8	Isopropylbenzene	4.4	U
108-86-1	Bromobenzene	4.4	U
79-34-5	1,1,2,2-Tetrachloroethane	4.4	U
96-18-4	1,2,3-Trichloropropane	4.4	U
110-57-6	trans-1,4-Dichloro-2-butene	4.4	U
95-49-8	2-Chlorotoluene	4.4	U
106-43-4	4-Chlorotoluene	4.4	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2096

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498078

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498078D

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 8.8

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
103-65-1	n-Propylbenzene	4.4	U
108-67-8	1,3,5-Trimethylbenzene	4.4	U
76-01-7	Pentachloroethane	4.4	U
98-06-6	tert-Butylbenzene	4.4	U
95-63-6	1,2,4-Trimethylbenzene	4.4	U
135-98-8	sec-Butylbenzene	4.4	U
541-73-1	1,3-Dichlorobenzene	4.4	U
99-87-6	p-Isopropyltoluene	4.4	U
106-46-7	1,4-Dichlorobenzene	4.4	U
95-50-1	1,2-Dichlorobenzene	4.4	U
104-51-8	n-Butylbenzene	4.4	U
67-72-1	Hexachloroethane	4.4	U
96-12-8	1,2-Dibromo-3-Chloropropane	4.4	U
98-95-3	Nitrobenzene	220	U
120-82-1	1,2,4-Trichlorobenzene	4.4	U
87-68-3	Hexachlorobutadiene	4.4	U
91-20-3	Naphthalene	4.4	U
87-61-6	1,2,3-Trichlorobenzene	4.4	U

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ENGSC2 SAMPLE NO.

TR2097

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498079

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498079

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
60-29-7	Diethyl Ether	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
67-64-1	Acetone	2.0	J
74-88-4	Methyl Iodide	0.50	U
75-15-0	Carbon Disulfide	0.50	U
107-05-1	Allyl Chloride	0.63	
75-09-2	Methylene Chloride	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.80	
78-93-3	2-Butanone	5.0	U
107-12-0	Propionitrile	25	U
96-33-3	Methyl Acrylate	0.50	U
74-97-5	Bromochloromethane	0.50	U
126-98-7	Methacrylonitrile	0.50	U
109-99-9	Tetrahydrofuran	2.5	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
109-69-3	1-Chlorobutane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.65	
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2097

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498079

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498079

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
80-62-6	Methyl Methacrylate	0.50	U
75-27-4	Bromodichloromethane	0.50	U
107-14-2	Chloroacetonitrile	25	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
513-88-2	1,1-Dichloropropanone	10	U
108-10-1	4-Methyl-2-Pentanone	2.5	U
79-46-9	2-Nitropropane	10	U
108-88-3	Toluene	0.28	J
10061-02-6	trans-1,3-Dichloropropene	0.50	U
97-63-2	Ethyl Methacrylate	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
591-78-6	2-Hexanone	2.5	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
1330-20-7	Xylene (total)	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U

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ENGSC2 SAMPLE NO.

TR2097

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498079

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498079

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
103-65-1	n-Propylbenzene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
76-01-7	Pentachloroethane	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
98-95-3	Nitrobenzene	25	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2098

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498080

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498080

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
60-29-7	Diethyl Ether	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
67-64-1	Acetone	2.2	J
74-88-4	Methyl Iodide	0.50	U
75-15-0	Carbon Disulfide	0.50	U
107-05-1	Allyl Chloride	0.50	U
75-09-2	Methylene Chloride	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
107-12-0	Propionitrile	25	U
96-33-3	Methyl Acrylate	0.50	U
74-97-5	Bromochloromethane	0.50	U
126-98-7	Methacrylonitrile	0.50	U
109-99-9	Tetrahydrofuran	2.5	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
109-69-3	1-Chlorobutane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.29	J

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2098

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498080

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498080

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
80-62-6	Methyl Methacrylate	0.50	U
75-27-4	Bromodichloromethane	0.50	U
107-14-2	Chloroacetonitrile	25	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
513-88-2	1,1-Dichloropropanone	10	U
108-10-1	4-Methyl-2-Pentanone	2.5	U
79-46-9	2-Nitropropane	10	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
97-63-2	Ethyl Methacrylate	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
591-78-6	2-Hexanone	2.5	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
1330-20-7	Xylene (total)	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U

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ENGSC2 SAMPLE NO.

TR2098

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498080

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498080

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
103-65-1	n-Propylbenzene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
76-01-7	Pentachloroethane	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
98-95-3	Nitrobenzene	25	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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ENGSC2 SAMPLE NO.

TR2099

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498076

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498076

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
60-29-7	Diethyl Ether	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
67-64-1	Acetone	0.80	J
74-88-4	Methyl Iodide	0.50	U
75-15-0	Carbon Disulfide	0.50	U
107-05-1	Allyl Chloride	0.50	U
75-09-2	Methylene Chloride	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.53	
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	23	
78-93-3	2-Butanone	5.0	U
107-12-0	Propionitrile	25	U
96-33-3	Methyl Acrylate	0.50	U
74-97-5	Bromochloromethane	0.50	U
126-98-7	Methacrylonitrile	0.50	U
109-99-9	Tetrahydrofuran	2.5	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
109-69-3	1-Chlorobutane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.43	J
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.67	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2099

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498076

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498076

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
80-62-6	Methyl Methacrylate	0.50	U
75-27-4	Bromodichloromethane	0.50	U
107-14-2	Chloroacetonitrile	25	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
513-88-2	1,1-Dichloropropanone	10	U
108-10-1	4-Methyl-2-Pentanone	2.5	U
79-46-9	2-Nitropropane	10	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
97-63-2	Ethyl Methacrylate	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
591-78-6	2-Hexanone	2.5	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
1330-20-7	Xylene (total)	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ENGSC2 SAMPLE NO.

TR2099

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: 498076

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 498076

Level: (low/med) LOW Date Received: 08/17/02

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
103-65-1	n-Propylbenzene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
76-01-7	Pentachloroethane	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
98-95-3	Nitrobenzene	25	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MYFB LCS

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: MYFB LCS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: MYF01BQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.92	
74-87-3	Chloromethane	0.99	
75-01-4	Vinyl Chloride	0.94	
74-83-9	Bromomethane	0.96	
75-00-3	Chloroethane	1.1	
75-69-4	Trichlorofluoromethane	0.93	
60-29-7	Diethyl Ether	1.2	
75-35-4	1,1-Dichloroethene	1.0	
67-64-1	Acetone	3.4	J
74-88-4	Methyl Iodide	1.2	
75-15-0	Carbon Disulfide	1.8	
107-05-1	Allyl Chloride	0.96	
75-09-2	Methylene Chloride	1.1	
107-13-1	Acrylonitrile	1.2	
156-60-5	trans-1,2-Dichloroethene	1.0	
1634-04-4	Methyl-t-Butyl Ether	0.95	
75-34-3	1,1-Dichloroethane	0.98	
594-20-7	2,2-Dichloropropane	0.98	
156-59-2	cis-1,2-Dichloroethene	0.98	
78-93-3	2-Butanone	3.9	J
107-12-0	Propionitrile	47	
96-33-3	Methyl Acrylate	1.1	
74-97-5	Bromochloromethane	1.0	
126-98-7	Methacrylonitrile	1.2	
109-99-9	Tetrahydrofuran	5.3	
67-66-3	Chloroform	0.90	
71-55-6	1,1,1-Trichloroethane	0.97	
109-69-3	1-Chlorobutane	0.96	
56-23-5	Carbon Tetrachloride	0.85	
563-58-6	1,1-Dichloropropene	0.99	
71-43-2	Benzene	0.92	
107-06-2	1,2-Dichloroethane	1.0	
79-01-6	Trichloroethene	0.95	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MYFB LCS

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: MYFB LCS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: MYF01BQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	0.99	
78-87-5	1,2-Dichloropropane	1.0	
80-62-6	Methyl Methacrylate	1.4	
75-27-4	Bromodichloromethane	1.0	
107-14-2	Chloroacetonitrile	53	
10061-01-5	cis-1,3-Dichloropropene	1.0	
513-88-2	1,1-Dichloropropanone	23	
108-10-1	4-Methyl-2-Pentanone	4.6	
79-46-9	2-Nitropropane	20	
108-88-3	Toluene	1.1	
10061-02-6	trans-1,3-Dichloropropene	1.0	
97-63-2	Ethyl Methacrylate	0.98	
79-00-5	1,1,2-Trichloroethane	0.97	
127-18-4	Tetrachloroethene	0.98	
142-28-9	1,3-Dichloropropane	1.0	
591-78-6	2-Hexanone	3.7	
124-48-1	Dibromochloromethane	0.95	
106-93-4	1,2-Dibromoethane	0.97	
108-90-7	Chlorobenzene	1.0	
630-20-6	1,1,1,2-Tetrachloroethane	0.97	
100-41-4	Ethylbenzene	1.0	
1330-20-7	m- & p-Xylene	2.0	
95-47-6	o-Xylene	1.0	
100-42-5	Styrene	0.99	
75-25-2	Bromoform	0.92	
1330-20-7	Xylene (total)	3.1	
98-82-8	Isopropylbenzene	1.0	
108-86-1	Bromobenzene	0.99	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	
96-18-4	1,2,3-Trichloropropane	1.1	
110-57-6	trans-1,4-Dichloro-2-butene	1.1	
95-49-8	2-Chlorotoluene	1.0	
106-43-4	4-Chlorotoluene	1.1	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MYFB LCS

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: MYFB LCS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: MYF01BQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
103-65-1	n-Propylbenzene	1.0	
108-67-8	1,3,5-Trimethylbenzene	1.0	
76-01-7	Pentachloroethane	1.2	
98-06-6	tert-Butylbenzene	1.0	
95-63-6	1,2,4-Trimethylbenzene	1.0	
135-98-8	sec-Butylbenzene	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	
99-87-6	p-Isopropyltoluene	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	
104-51-8	n-Butylbenzene	1.1	
67-72-1	Hexachloroethane	0.96	
96-12-8	1,2-Dibromo-3-Chloropropane	1.2	
98-95-3	Nitrobenzene	52	
120-82-1	1,2,4-Trichlorobenzene	1.1	
87-68-3	Hexachlorobutadiene	1.1	
91-20-3	Naphthalene	1.1	
87-61-6	1,2,3-Trichlorobenzene	1.2	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VBLKZ1

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: VBLKZ1

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: MYFB01B

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
60-29-7	Diethyl Ether	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
67-64-1	Acetone	5.0	U
74-88-4	Methyl Iodide	0.50	U
75-15-0	Carbon Disulfide	0.50	U
107-05-1	Allyl Chloride	0.50	U
75-09-2	Methylene Chloride	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
107-12-0	Propionitrile	25	U
96-33-3	Methyl Acrylate	0.50	U
74-97-5	Bromochloromethane	0.50	U
126-98-7	Methacrylonitrile	0.50	U
109-99-9	Tetrahydrofuran	2.5	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
109-69-3	1-Chlorobutane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VBLKZ1

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: VBLKZ1

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: MYFB01B

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
80-62-6	Methyl Methacrylate	0.50	U
75-27-4	Bromodichloromethane	0.50	U
107-14-2	Chloroacetonitrile	25	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
513-88-2	1,1-Dichloropropanone	10	U
108-10-1	4-Methyl-2-Pentanone	2.5	U
79-46-9	2-Nitropropane	10	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
97-63-2	Ethyl Methacrylate	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
591-78-6	2-Hexanone	2.5	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
1330-20-7	Xylene (total)	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VBLKZ1

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix: (soil/water) WATER Lab Sample ID: VBLKZ1

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: MYFB01B

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/26/02

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
103-65-1	n-Propylbenzene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
76-01-7	Pentachloroethane	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
98-95-3	Nitrobenzene	25	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

	CLIENT SAMPLE NO.	SMC1 (DCE) #	SMC2 (BFB) #	SMC3 (DCB) #	OTHER (TOL) #	TOT OUT
01	MYFB LCS	95	98	103	99	0
02	VBLKZ1	92	97	96	97	0
03	TR2091	110	104	106	107	0
04	TR2092	96	99	103	98	0
05	TR2093	99	97	102	97	0
06	TR2094	97	102	106	98	0
07	TR2099	100	99	108	100	0
08	TR2095	92	92	94	95	0
09	TR2096	89	95	104	92	0
10	TR2097	106	99	106	101	0
11	TR2098	95	97	107	93	0
12	ARD2168	96	94	103	94	0
13	TR0037	103	95	100	95	0
14	TR0038	95	96	98	92	0
15	TR2095MS	95	93	106	101	0
16	TR2095MSD	93	101	107	101	0
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

		QC LIMITS
SMC1 (DCE)	= 1,2-Dichloroethane-d4	(78-133)
SMC2 (BFB)	= Bromofluorobenzene	(80-114)
SMC3 (DCB)	= 1,2-Dichlorobenzene-d4	(79-112)
OTHER (TOL)	= Toluene-d8	(79-111)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 3
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix Spike - ENGSC2 Sample No.: TR2095

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	55	0.0	54	98	70-130
Chloromethane	55	0.0	49	89	70-130
Vinyl Chloride	55	0.0	53	96	70-130
Bromomethane	55	0.0	54	98	70-130
Chloroethane	55	0.0	56	102	70-130
Trichlorofluoromethane	55	0.0	51	93	70-130
Diethyl Ether	55	0.0	63	114	70-130
1,1-Dichloroethene	55	0.0	53	96	70-130
Acetone	280	0.0	140	50*	70-130
Methyl Iodide	55	0.0	63	114	70-130
Carbon Disulfide	55	0.0	75	136*	70-130
Allyl Chloride	55	0.0	55	100	70-130
Methylene Chloride	55	0.0	54	98	70-130
Acrylonitrile	55	0.0	66	120	70-130
trans-1,2-Dichloroethen	55	0.0	53	96	70-130
Methyl-t-Butyl Ether	55	0.0	58	105	70-130
1,1-Dichloroethane	55	0.0	50	91	70-130
2,2-Dichloropropane	55	0.0	53	96	70-130
cis-1,2-Dichloroethene	55	32	84	94	70-130
2-Butanone	280	0.0	200	71	70-130
Propionitrile	2800	0.0	3000	107	70-130
Methyl Acrylate	55	0.0	58	105	70-130
Bromochloromethane	55	0.0	58	105	70-130
Methacrylonitrile	55	0.0	62	113	70-130
Tetrahydrofuran	280	0.0	330	118	70-130
Chloroform	55	0.0	49	89	70-130
1,1,1-Trichloroethane	55	0.0	54	98	70-130
1-Chlorobutane	55	0.0	57	104	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix Spike - ENGSC2 Sample No.: TR2095

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Carbon Tetrachloride	55	0.0	51	93	70-130
1,1-Dichloropropene	55	0.0	48	87	70-130
Benzene	55	0.0	51	93	70-130
1,2-Dichloroethane	55	0.0	58	105	70-130
Trichloroethene	55	540	650	200*	70-130
Dibromomethane	55	0.0	58	105	70-130
1,2-Dichloropropane	55	0.0	50	91	70-130
Methyl Methacrylate	55	0.0	58	105	70-130
Bromodichloromethane	55	0.0	54	98	70-130
Chloroacetonitrile	2800	0.0	2900	104	70-130
cis-1,3-Dichloropropene	55	0.0	51	93	70-130
1,1-Dichloropropanone	2800	0.0	1500	54*	70-130
4-Methyl-2-Pentanone	280	0.0	280	100	70-130
2-Nitropropane	2800	0.0	1200	43*	70-130
Toluene	55	0.0	59	107	70-130
trans-1,3-Dichloroprope	55	0.0	51	93	70-130
Ethyl Methacrylate	55	0.0	59	107	70-130
1,1,2-Trichloroethane	55	0.0	58	105	70-130
Tetrachloroethene	55	0.0	54	98	70-130
1,3-Dichloropropane	55	0.0	60	109	70-130
2-Hexanone	280	0.0	200	71	70-130
Dibromochloromethane	55	0.0	47	85	70-130
1,2-Dibromoethane	55	0.0	55	100	70-130
Chlorobenzene	55	0.0	56	102	70-130
1,1,1,2-Tetrachloroetha	55	0.0	54	98	70-130
Ethylbenzene	55	0.0	54	98	70-130
m- & p-Xylene	110	0.0	110	100	70-130
o-Xylene	55	0.0	56	102	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix Spike - ENGSC2 Sample No.: TR2095

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Styrene	55	0.0	54	98	70-130
Bromoform	55	0.0	45	82	70-130
Xylene (total)	160	0.0	170	106	70-130
Isopropylbenzene	55	0.0	56	102	70-130
Bromobenzene	55	0.0	55	100	70-130
1,1,2,2-Tetrachloroetha	55	0.0	58	105	70-130
1,2,3-Trichloropropane	55	0.0	60	109	70-130
trans-1,4-Dichloro-2-bu	55	0.0	50	91	70-130
2-Chlorotoluene	55	0.0	57	104	70-130
4-Chlorotoluene	55	0.0	56	102	70-130
n-Propylbenzene	55	0.0	57	104	70-130
1,3,5-Trimethylbenzene	55	0.0	56	102	70-130
Pentachloroethane	55	0.0	81	147*	70-130
tert-Butylbenzene	55	0.0	60	109	70-130
1,2,4-Trimethylbenzene	55	0.0	55	100	70-130
sec-Butylbenzene	55	0.0	56	102	70-130
1,3-Dichlorobenzene	55	0.0	56	102	70-130
p-Isopropyltoluene	55	0.0	58	105	70-130
1,4-Dichlorobenzene	55	0.0	58	105	70-130
1,2-Dichlorobenzene	55	0.0	58	105	70-130
n-Butylbenzene	55	0.0	58	105	70-130
Hexachloroethane	55	0.0	56	102	70-130
1,2-Dibromo-3-Chloropro	55	0.0	58	105	70-130
Nitrobenzene	2800	0.0	2100	75	70-130
1,2,4-Trichlorobenzene	55	0.0	60	109	70-130
Hexachlorobutadiene	55	0.0	59	107	70-130
Naphthalene	55	0.0	62	113	70-130
1,2,3-Trichlorobenzene	55	0.0	62	113	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix Spike - ENGSC2 Sample No.: TR2095

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	55	47	85	14	40	70-130
Chloromethane	55	46	84	6	40	70-130
Vinyl Chloride	55	54	98	2	40	70-130
Bromomethane	55	53	96	2	40	70-130
Chloroethane	55	54	98	4	40	70-130
Trichlorofluoromethane	55	51	93	0	40	70-130
Diethyl Ether	55	60	109	4	40	70-130
1,1-Dichloroethene	55	50	91	5	40	70-130
Acetone	280	150	54*	8	40	70-130
Methyl Iodide	55	62	113	1	40	70-130
Carbon Disulfide	55	80	145*	6	40	70-130
Allyl Chloride	55	52	94	6	40	70-130
Methylene Chloride	55	55	100	2	40	70-130
Acrylonitrile	55	65	118	2	40	70-130
trans-1,2-Dichloroethen	55	56	102	6	40	70-130
Methyl-t-Butyl Ether	55	57	104	1	40	70-130
1,1-Dichloroethane	55	46	84	8	40	70-130
2,2-Dichloropropane	55	50	91	5	40	70-130
cis-1,2-Dichloroethene	55	87	100	6	40	70-130
2-Butanone	280	180	64*	10	40	70-130
Propionitrile	2800	2800	100	7	40	70-130
Methyl Acrylate	55	54	98	7	40	70-130
Bromochloromethane	55	56	102	3	40	70-130
Methacrylonitrile	55	56	102	10	40	70-130
Tetrahydrofuran	280	290	104	13	40	70-130
Chloroform	55	48	87	2	40	70-130
1,1,1-Trichloroethane	55	50	91	7	40	70-130
1-Chlorobutane	55	48	87	18	40	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix Spike - ENGSC2 Sample No.: TR2095

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Carbon Tetrachloride	55	48	87	7	40	70-130
1,1-Dichloropropene	55	51	93	7	40	70-130
Benzene	55	49	89	4	40	70-130
1,2-Dichloroethane	55	55	100	5	40	70-130
Trichloroethene	55	650	200*	0	40	70-130
Dibromomethane	55	56	102	3	40	70-130
1,2-Dichloropropane	55	50	91	0	40	70-130
Methyl Methacrylate	55	56	102	3	40	70-130
Bromodichloromethane	55	52	94	4	40	70-130
Chloroacetonitrile	2800	2700	96	8	40	70-130
cis-1,3-Dichloropropene	55	51	93	0	40	70-130
1,1-Dichloropropanone	2800	1400	50*	8	40	70-130
4-Methyl-2-Pentanone	280	270	96	4	40	70-130
2-Nitropropane	2800	1100	39*	10	40	70-130
Toluene	55	56	102	5	40	70-130
trans-1,3-Dichloroprope	55	51	93	0	40	70-130
Ethyl Methacrylate	55	57	104	3	40	70-130
1,1,2-Trichloroethane	55	53	96	9	40	70-130
Tetrachloroethene	55	51	93	5	40	70-130
1,3-Dichloropropane	55	58	105	4	40	70-130
2-Hexanone	280	180	64*	10	40	70-130
Dibromochloromethane	55	48	87	2	40	70-130
1,2-Dibromoethane	55	56	102	2	40	70-130
Chlorobenzene	55	55	100	2	40	70-130
1,1,1,2-Tetrachloroetha	55	52	94	4	40	70-130
Ethylbenzene	55	54	98	0	40	70-130
m- & p-Xylene	110	110	100	0	40	70-130
o-Xylene	55	56	102	0	40	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix Spike - ENGSC2 Sample No.: TR2095

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Styrene	55	55	100	2	40	70-130
Bromoform	55	48	87	6	40	70-130
Xylene (total)	160	170	106	0	40	70-130
Isopropylbenzene	55	56	102	0	40	70-130
Bromobenzene	55	56	102	2	40	70-130
1,1,2,2-Tetrachloroetha	55	59	107	2	40	70-130
1,2,3-Trichloropropane	55	61	111	2	40	70-130
trans-1,4-Dichloro-2-bu	55	53	96	5	40	70-130
2-Chlorotoluene	55	57	104	0	40	70-130
4-Chlorotoluene	55	55	100	2	40	70-130
n-Propylbenzene	55	58	105	1	40	70-130
1,3,5-Trimethylbenzene	55	56	102	0	40	70-130
Pentachloroethane	55	78	142*	3	40	70-130
tert-Butylbenzene	55	58	105	4	40	70-130
1,2,4-Trimethylbenzene	55	57	104	4	40	70-130
sec-Butylbenzene	55	57	104	2	40	70-130
1,3-Dichlorobenzene	55	58	105	3	40	70-130
p-Isopropyltoluene	55	57	104	1	40	70-130
1,4-Dichlorobenzene	55	59	107	2	40	70-130
1,2-Dichlorobenzene	55	59	107	2	40	70-130
n-Butylbenzene	55	58	105	0	40	70-130
Hexachloroethane	55	55	100	2	40	70-130
1,2-Dibromo-3-Chloropro	55	54	98	7	40	70-130
Nitrobenzene	2800	2400	86	14	40	70-130
1,2,4-Trichlorobenzene	55	61	111	2	40	70-130
Hexachlorobutadiene	55	60	109	2	40	70-130
Naphthalene	55	62	113	0	40	70-130
1,2,3-Trichlorobenzene	55	63	114	1	40	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 84 outside limits
Spike Recovery: 14 out of 168 outside limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix Spike - Sample No.: MYFB LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	1.0		0.92	92	70-130
Chloromethane	1.0		0.99	99	70-130
Vinyl Chloride	1.0		0.94	94	70-130
Bromomethane	1.0		0.96	96	70-130
Chloroethane	1.0		1.1	110	70-130
Trichlorofluoromethane	1.0		0.93	93	70-130
Diethyl Ether	1.0		1.2	120	70-130
1,1-Dichloroethene	1.0		1.0	100	70-130
Acetone	5.0		3.4	68*	70-130
Methyl Iodide	1.0		1.2	120	70-130
Carbon Disulfide	1.0		1.8	180*	70-130
Allyl Chloride	1.0		0.96	96	70-130
Methylene Chloride	1.0		1.1	110	70-130
Acrylonitrile	1.0		1.2	120	70-130
trans-1,2-Dichloroethen	1.0		1.0	100	70-130
Methyl-t-Butyl Ether	1.0		0.95	95	70-130
1,1-Dichloroethane	1.0		0.98	98	70-130
2,2-Dichloropropane	1.0		0.98	98	70-130
cis-1,2-Dichloroethene	1.0		0.98	98	70-130
2-Butanone	5.0		3.9	78	70-130
Propionitrile	50		47	94	70-130
Methyl Acrylate	1.0		1.1	110	70-130
Bromochloromethane	1.0		1.0	100	70-130
Methacrylonitrile	1.0		1.2	120	70-130
Tetrahydrofuran	5.0		5.3	106	70-130
Chloroform	1.0		0.90	90	70-130
1,1,1-Trichloroethane	1.0		0.97	97	70-130
1-Chlorobutane	1.0		0.96	96	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix Spike - Sample No.: MYFB LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Carbon Tetrachloride	1.0		0.85	85	70-130
1,1-Dichloropropene	1.0		0.99	99	70-130
Benzene	1.0		0.92	92	70-130
1,2-Dichloroethane	1.0		1.0	100	70-130
Trichloroethene	1.0		0.95	95	70-130
Dibromomethane	1.0		0.99	99	70-130
1,2-Dichloropropane	1.0		1.0	100	70-130
Methyl Methacrylate	1.0		1.4	140*	70-130
Bromodichloromethane	1.0		1.0	100	70-130
Chloroacetonitrile	50		53	106	70-130
cis-1,3-Dichloropropene	1.0		1.0	100	70-130
1,1-Dichloropropanone	20		23	115	70-130
4-Methyl-2-Pentanone	5.0		4.6	92	70-130
2-Nitropropane	20		20	100	70-130
Toluene	1.0		1.1	110	70-130
trans-1,3-Dichloroprope	1.0		1.0	100	70-130
Ethyl Methacrylate	1.0		0.98	98	70-130
1,1,2-Trichloroethane	1.0		0.97	97	70-130
Tetrachloroethene	1.0		0.98	98	70-130
1,3-Dichloropropane	1.0		1.0	100	70-130
2-Hexanone	5.0		3.7	74	70-130
Dibromochloromethane	1.0		0.95	95	70-130
1,2-Dibromoethane	1.0		0.97	97	70-130
Chlorobenzene	1.0		1.0	100	70-130
1,1,1,2-Tetrachloroetha	1.0		0.97	97	70-130
Ethylbenzene	1.0		1.0	100	70-130
m- & p-Xylene	2.0		2.0	100	70-130
o-Xylene	1.0		1.0	100	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Matrix Spike - Sample No.: MYFB LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Styrene	1.0		0.99	99	70-130
Bromoform	1.0		0.92	92	70-130
Xylene (total)	3.0		3.1	103	70-130
Isopropylbenzene	1.0		1.0	100	70-130
Bromobenzene	1.0		0.99	99	70-130
1,1,2,2-Tetrachloroetha	1.0		1.0	100	70-130
1,2,3-Trichloropropane	1.0		1.1	110	70-130
trans-1,4-Dichloro-2-bu	1.0		1.1	110	70-130
2-Chlorotoluene	1.0		1.0	100	70-130
4-Chlorotoluene	1.0		1.1	110	70-130
n-Propylbenzene	1.0		1.0	100	70-130
1,3,5-Trimethylbenzene	1.0		1.0	100	70-130
Pentachloroethane	1.0		1.2	120	70-130
tert-Butylbenzene	1.0		1.0	100	70-130
1,2,4-Trimethylbenzene	1.0		1.0	100	70-130
sec-Butylbenzene	1.0		1.0	100	70-130
1,3-Dichlorobenzene	1.0		1.0	100	70-130
p-Isopropyltoluene	1.0		1.0	100	70-130
1,4-Dichlorobenzene	1.0		1.0	100	70-130
1,2-Dichlorobenzene	1.0		1.0	100	70-130
n-Butylbenzene	1.0		1.1	110	70-130
Hexachloroethane	1.0		0.96	96	70-130
1,2-Dibromo-3-Chloropro	1.0		1.2	120	70-130
Nitrobenzene	50		52	104	70-130
1,2,4-Trichlorobenzene	1.0		1.1	110	70-130
Hexachlorobutadiene	1.0		1.1	110	70-130
Naphthalene	1.0		1.1	110	70-130
1,2,3-Trichlorobenzene	1.0		1.2	120	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 3 out of 84 outside limits

COMMENTS: _____

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

VBLKZ1

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Lab File ID: MYFB01B Lab Sample ID: VBLKZ1

Date Analyzed: 08/26/02 Time Analyzed: 0246

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: M

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MYFB LCS	MYFB LCS	MYF01BQ	0218
02	TR2091	498072	498072D	0545
03	TR2092	498073	498073	0614
04	TR2093	498074	498074D	0642
05	TR2094	498075	498075	0711
06	TR2099	498076	498076	0739
07	TR2095	498077	498077D	0808
08	TR2096	498078	498078D	0836
09	TR2097	498079	498079	0902
10	TR2098	498080	498080	0931
11	ARD2168	498084	498084	0956
12	TR0037	498085	498085	1024
13	TR0038	498086	498086	1053
14	TR2095MS	498077MS	498077M	1121
15	TR2095MSD	498077MD	498077S	1150
16				
17				
18				
19				
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30				

COMMENTS:

FORM IV VOA

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Lab File ID: MYF01PV BFB Injection Date: 08/22/02

Instrument ID: M BFB Injection Time: 2355

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.3
75	30.0 - 60.0% of mass 95	47.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.2 (0.3)1
174	50.0 - 120.0% of mass 95	60.7
175	5.0 - 9.0% of mass 174	4.5 (7.3)1
176	95.0 - 101.0% of mass 174	60.5 (99.7)1
177	5.0 - 9.0% of mass 176	3.8 (6.3)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0005	VSTD0005	MYF005V	08/23/02	0113
02	VSTD002	VSTD002	MYF02V	08/23/02	0142
03	VSTD010	VSTD010	MYF10V	08/23/02	0211
04	VSTD020	VSTD020	MYF20V	08/23/02	0240
05	VSTD030	VSTD030	MYF30V	08/23/02	0308
06					
07					
08					
09					
10					
11					
12					
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14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V VOA

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Lab File ID: MYF03PV BFB Injection Date: 08/26/02

Instrument ID: M BFB Injection Time: 0130

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.4
75	30.0 - 60.0% of mass 95	48.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.2
173	Less than 2.0% of mass 174	0.1 (0.2)1
174	50.0 - 120.0% of mass 95	60.4
175	5.0 - 9.0% of mass 174	4.3 (7.1)1
176	95.0 - 101.0% of mass 174	60.5 (100.1)1
177	5.0 - 9.0% of mass 176	4.2 (6.9)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD002	VSTD002	MYF02BV	08/26/02	0150
02	MYFB LCS	MYFB LCS	MYF01BQ	08/26/02	0218
03	VBLKZ1	VBLKZ1	MYFB01B	08/26/02	0246
04	TR2091	498072	498072D	08/26/02	0545
05	TR2092	498073	498073	08/26/02	0614
06	TR2093	498074	498074D	08/26/02	0642
07	TR2094	498075	498075	08/26/02	0711
08	TR2099	498076	498076	08/26/02	0739
09	TR2095	498077	498077D	08/26/02	0808
10	TR2096	498078	498078D	08/26/02	0836
11	TR2097	498079	498079	08/26/02	0902
12	TR2098	498080	498080	08/26/02	0931
13	ARD2168	498084	498084	08/26/02	0956
14	TR0037	498085	498085	08/26/02	1024
15	TR0038	498086	498086	08/26/02	1053
16	TR2095MS	498077MS	498077M	08/26/02	1121
17	TR2095MSD	498077MD	498077S	08/26/02	1150
18					
19					
20					
21					
22					

FORM V VOA

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Instrument ID: M Calibration Date(s): 08/23/02 08/23/02

Heated Purge: (Y/N) N Calibration Time(s): 0113 0308

GC Column: CAP ID: 0.53 (mm)

LAB FILE ID: RRF0.5=MYF005V RRF2 =MYF02V
RRF10 =MYF10V RRF20 =MYF20V RRF30 =MYF30V

COMPOUND	RRF0.5	RRF2	RRF10	RRF20	RRF30	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	0.674	0.478	0.485	0.520	0.508	0.533	15.1
Chloromethane	0.369	0.219	0.225	0.254	0.254	0.264	23.0
Vinyl Chloride	0.313	0.247	0.239	0.264	0.258	0.264	11.0
Bromomethane	0.373	0.224	0.217	0.207	0.192	0.243	30.5
Chloroethane	0.238	0.144	0.160	0.176	0.159	0.175	20.9
Trichlorofluoromethane	0.632	0.523	0.558	0.600	0.587	0.580	7.2
Diethyl Ether	0.172	0.161	0.167	0.177	0.173	0.170	3.7
1,1-Dichloroethene	0.324	0.250	0.253	0.292	0.287	0.281	11.0
Acetone	0.089	0.071	0.114	0.136	0.138	0.110	26.8
Methyl Iodide	0.446	0.349	0.368	0.397	0.369	0.386	9.8
Carbon Disulfide	0.464	0.369	0.368	0.390	0.381	0.394	10.2
Allyl Chloride	0.484	0.324	0.326	0.346	0.334	0.363	18.8
Methylene Chloride	0.305	0.323	0.295	0.322	0.299	0.309	4.2
Acrylonitrile	0.084	0.044	0.054	0.053	0.051	0.057	27.2
trans-1,2-Dichloroethene	0.374	0.266	0.289	0.323	0.326	0.316	13.0
Methyl-t-Butyl Ether	0.745	0.613	0.641	0.708	0.688	0.679	7.8
1,1-Dichloroethane	0.661	0.540	0.637	0.674	0.630	0.628	8.4
2,2-Dichloropropane	0.561	0.474	0.461	0.498	0.481	0.495	7.9
cis-1,2-Dichloroethene	0.356	0.322	0.332	0.345	0.369	0.345	5.4
2-Butanone	0.027	0.027	0.041	0.048	0.049	0.038	27.7
Propionitrile	0.023	0.022	0.026	0.029	0.028	0.026	10.9
Methyl Acrylate	0.484	0.491	0.523	0.564	0.567	0.526	7.5
Bromochloromethane	0.218	0.210	0.226	0.241	0.225	0.224	5.2
Methacrylonitrile	0.106	0.092	0.081	0.088	0.087	0.091	10.4
Tetrahydrofuran	0.071	0.061	0.067	0.077	0.075	0.070	9.0
Chloroform	0.745	0.647	0.736	0.826	0.806	0.752	9.3
1,1,1-Trichloroethane	0.631	0.526	0.542	0.591	0.576	0.573	7.2
1-Chlorobutane	0.667	0.519	0.582	0.638	0.624	0.606	9.5
Carbon Tetrachloride	0.487	0.392	0.422	0.472	0.470	0.449	8.9
1,1-Dichloropropene	0.581	0.435	0.514	0.560	0.536	0.525	10.7
Benzene	0.924	0.887	0.968	1.073	0.993	0.969	7.3
1,2-Dichloroethane	0.439	0.401	0.434	0.467	0.457	0.440	5.8
Trichloroethene	0.489	0.389	0.431	0.494	0.467	0.454	9.7
Dibromomethane	0.418	0.412	0.407	0.445	0.430	0.422	3.6
1,2-Dichloropropane	0.497	0.404	0.404	0.434	0.427	0.433	8.8
Methyl Methacrylate	0.240	0.212	0.223	0.246	0.241	0.232	6.0
Bromodichloromethane	0.653	0.646	0.654	0.719	0.702	0.675	4.9

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Instrument ID: M Calibration Date(s): 08/23/02 08/23/02

Heated Purge: (Y/N) N Calibration Time(s): 0113 0308

GC Column: CAP ID: 0.53 (mm)

LAB FILE ID: RRF0.5=MYF005V RRF2 =MYF02V
RRF10 =MYF10V RRF20 =MYF20V RRF30 =MYF30V

COMPOUND	RRF0.5	RRF2	RRF10	RRF20	RRF30	$\overline{RRF}$	% RSD	
Chloroacetonitrile	0.013	0.012	0.014	0.015	0.014	0.014	8.7	
cis-1,3-Dichloropropene	0.671	0.598	0.640	0.679	0.659	0.649	5.0	
1,1-Dichloropropanone	0.006	0.007	0.007	0.008	0.008	0.007	9.2	<-
4-Methyl-2-Pentanone	0.140	0.119	0.134	0.156	0.153	0.140	10.5	
2-Nitropropane	0.057	0.054	0.058	0.064	0.062	0.059	7.2	
Toluene	0.623	0.614	0.626	0.692	0.655	0.642	4.9	
trans-1,3-Dichloropropene	0.551	0.510	0.527	0.591	0.566	0.549	5.8	
Ethyl Methacrylate	0.512	0.446	0.474	0.538	0.520	0.498	7.4	
1,1,2-Trichloroethane	0.424	0.322	0.322	0.358	0.348	0.355	11.8	
Tetrachloroethene	0.522	0.605	0.727	0.825	0.826	0.701	19.3	
1,3-Dichloropropane	0.562	0.574	0.592	0.655	0.632	0.603	6.6	
2-Hexanone	0.232	0.223	0.356	0.416	0.419	0.329	29.2	
Dibromochloromethane	0.750	0.727	0.728	0.800	0.816	0.764	5.4	
1,2-Dibromoethane	0.682	0.680	0.686	0.745	0.754	0.709	5.2	
Chlorobenzene	0.969	0.971	0.948	1.017	1.026	0.986	3.4	
1,1,1,2-Tetrachloroethane	0.577	0.491	0.486	0.524	0.535	0.523	7.1	
Ethylbenzene	1.528	1.575	1.577	1.672	1.675	1.605	4.1	
m- & p-Xylene	0.548	0.539	0.559	0.596	0.595	0.567	4.7	
o-Xylene	0.541	0.535	0.526	0.565	0.568	0.547	3.4	
Styrene	0.935	0.945	0.969	1.013	1.031	0.979	4.3	
Bromoform	0.521	0.528	0.569	0.628	0.648	0.579	9.9	
Xylene (total)	0.541	0.535	0.526	0.565	0.568	0.547	3.4	
Isopropylbenzene	1.527	1.558	1.576	1.703	1.700	1.613	5.1	
Bromobenzene	0.534	0.526	0.536	0.568	0.572	0.547	3.9	
1,1,2,2-Tetrachloroethane	0.814	0.754	0.729	0.774	0.790	0.772	4.2	
1,2,3-Trichloropropane	0.199	0.187	0.176	0.190	0.193	0.189	4.4	
trans-1,4-Dichloro-2-butene	0.169	0.134	0.125	0.140	0.136	0.141	12.0	
2-Chlorotoluene	0.385	0.366	0.361	0.384	0.387	0.377	3.2	
4-Chlorotoluene	0.380	0.389	0.365	0.385	0.398	0.383	3.2	
n-Propylbenzene	0.383	0.354	0.365	0.385	0.391	0.376	4.2	
1,3,5-Trimethylbenzene	1.243	1.128	1.184	1.233	1.240	1.206	4.1	
Pentachloroethane	0.301	0.277	0.226	0.224	0.187	0.243	18.8	
tert-Butylbenzene	0.315	0.304	0.294	0.312	0.310	0.307	2.7	
1,2,4-Trimethylbenzene	1.229	1.141	1.163	1.256	1.259	1.210	4.5	
sec-Butylbenzene	1.766	1.670	1.716	1.833	1.828	1.763	4.0	
1,3-Dichlorobenzene	0.827	0.797	0.831	0.885	0.880	0.844	4.4	
p-Isopropyltoluene	1.331	1.241	1.259	1.336	1.340	1.301	3.6	

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Instrument ID: M Calibration Date(s): 08/23/02 08/23/02

Heated Purge: (Y/N) N Calibration Time(s): 0113 0308

GC Column: CAP ID: 0.53 (mm)

LAB FILE ID: RRF0.5=MYF005V RRF2 =MYF02V
RRF10 =MYF10V RRF20 =MYF20V RRF30 =MYF30V

COMPOUND	RRF0.5	RRF2	RRF10	RRF20	RRF30	$\overline{RRF}$	% RSD
1,4-Dichlorobenzene	0.918	0.867	0.877	0.924	0.928	0.903	3.2
1,2-Dichlorobenzene	0.802	0.785	0.750	0.789	0.786	0.782	2.5
n-Butylbenzene	1.412	1.281	1.305	1.355	1.359	1.342	3.8
Hexachloroethane	0.407	0.343	0.375	0.411	0.404	0.388	7.4
1,2-Dibromo-3-Chloropropane	0.177	0.180	0.142	0.158	0.162	0.164	9.5
Nitrobenzene	0.012	0.013	0.016	0.019	0.018	0.016	19.6
1,2,4-Trichlorobenzene	0.530	0.560	0.571	0.614	0.620	0.579	6.5
Hexachlorobutadiene	0.393	0.400	0.404	0.427	0.431	0.411	4.1
Naphthalene	0.949	0.893	0.878	0.963	0.998	0.936	5.3
1,2,3-Trichlorobenzene	0.494	0.490	0.496	0.532	0.546	0.512	5.0
1,2-Dichloroethane-d4	0.435	0.332	0.338	0.373	0.360	0.368	11.2
Bromofluorobenzene	0.846	0.874	0.862	0.906	0.907	0.879	3.1
1,2-Dichlorobenzene-d4	0.530	0.511	0.511	0.541	0.543	0.527	3.0
Toluene-d8	0.910	0.889	0.958	1.052	0.995	0.961	6.8

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Instrument ID: M Calibration Date: 08/26/02 Time: 0150

Lab File ID: MYF02BV Init. Calib. Date(s): 08/23/02 08/23/02

Heated Purge: (Y/N) N Init. Calib. Times: 0113 0308

GC Column: CAP ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF2	MIN RRF	%D	MAX %D	
Dichlorodifluoromethane	0.533	0.622	0.01	16.7	30.0	
Chloromethane	0.264	0.285	0.01	8.0	30.0	
Vinyl Chloride	0.264	0.308	0.01	16.7	30.0	
Bromomethane	0.243	0.267	0.01	9.9	30.0	
Chloroethane	0.175	0.205	0.01	17.1	30.0	
Trichlorofluoromethane	0.580	0.633	0.01	9.1	30.0	
Diethyl Ether	0.170	0.173	0.01	1.8	30.0	
1,1-Dichloroethene	0.281	0.298	0.01	6.0	30.0	
Acetone	0.110	0.069	0.01	37.3	30.0	<-
Methyl Iodide	0.386	0.449	0.01	16.3	30.0	
Carbon Disulfide	0.394	0.434	0.01	10.2	30.0	
Allyl Chloride	0.363	0.384	0.01	5.8	30.0	
Methylene Chloride	0.309	0.313	0.01	1.3	30.0	
Acrylonitrile	0.057	0.066	0.01	15.8	30.0	
trans-1,2-Dichloroethene	0.316	0.334	0.01	5.7	30.0	
Methyl-t-Butyl Ether	0.679	0.655	0.01	3.5	30.0	
1,1-Dichloroethane	0.628	0.641	0.01	2.1	30.0	
2,2-Dichloropropane	0.495	0.557	0.01	12.5	30.0	
cis-1,2-Dichloroethene	0.345	0.348	0.01	0.9	30.0	
2-Butanone	0.038	0.026	0.01	31.6	30.0	<-
Propionitrile	0.026	0.024	0.01	7.7	30.0	
Methyl Acrylate	0.526	0.529	0.01	0.6	30.0	
Bromochloromethane	0.224	0.211	0.01	5.8	30.0	
Methacrylonitrile	0.091	0.080	0.01	12.1	30.0	
Tetrahydrofuran	0.070	0.066	0.01	5.7	30.0	
Chloroform	0.752	0.716	0.01	4.8	30.0	
1,1,1-Trichloroethane	0.573	0.602	0.01	5.1	30.0	
1-Chlorobutane	0.606	0.601	0.01	0.8	30.0	
Carbon Tetrachloride	0.449	0.507	0.01	12.9	30.0	
1,1-Dichloropropene	0.525	0.538	0.01	2.5	30.0	
Benzene	0.969	0.944	0.01	2.6	30.0	
1,2-Dichloroethane	0.440	0.397	0.01	9.8	30.0	
Trichloroethene	0.454	0.405	0.01	10.8	30.0	
Dibromomethane	0.422	0.390	0.01	7.6	30.0	
1,2-Dichloropropane	0.433	0.392	0.01	9.5	30.0	
Methyl Methacrylate	0.232	0.207	0.01	10.8	30.0	
Bromodichloromethane	0.675	0.676	0.01	0.1	30.0	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Instrument ID: M Calibration Date: 08/26/02 Time: 0150

Lab File ID: MYF02BV Init. Calib. Date(s): 08/23/02 08/23/02

Heated Purge: (Y/N) N Init. Calib. Times: 0113 0308

GC Column: CAP ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF2	MIN RRF	%D	MAX %D	
Chloroacetonitrile	0.014	0.015	0.01	7.1	30.0	
cis-1,3-Dichloropropene	0.649	0.652	0.01	0.5	30.0	
1,1-Dichloropropanone	0.007	0.008	0.01	14.3	30.0	<-
4-Methyl-2-Pentanone	0.140	0.118	0.01	15.7	30.0	
2-Nitropropane	0.059	0.055	0.01	6.8	30.0	
Toluene	0.642	0.570	0.01	11.2	30.0	
trans-1,3-Dichloropropene	0.549	0.514	0.01	6.4	30.0	
Ethyl Methacrylate	0.498	0.444	0.01	10.8	30.0	
1,1,2-Trichloroethane	0.355	0.309	0.01	13.0	30.0	
Tetrachloroethene	0.701	0.494	0.01	29.5	30.0	
1,3-Dichloropropane	0.603	0.569	0.01	5.6	30.0	
2-Hexanone	0.329	0.199	0.01	39.5	30.0	<-
Dibromochloromethane	0.764	0.730	0.01	4.4	30.0	
1,2-Dibromoethane	0.709	0.681	0.01	3.9	30.0	
Chlorobenzene	0.986	0.947	0.01	4.0	30.0	
1,1,1,2-Tetrachloroethane	0.523	0.509	0.01	2.7	30.0	
Ethylbenzene	1.605	1.554	0.01	3.2	30.0	
m- & p-Xylene	0.567	0.541	0.01	4.6	30.0	
o-Xylene	0.547	0.522	0.01	4.6	30.0	
Styrene	0.979	0.927	0.01	5.3	30.0	
Bromoform	0.579	0.502	0.01	13.3	30.0	
Xylene (total)	0.547	0.522	0.01	4.6	30.0	
Isopropylbenzene	1.613	1.557	0.01	3.5	30.0	
Bromobenzene	0.547	0.505	0.01	7.7	30.0	
1,1,2,2-Tetrachloroethane	0.772	0.756	0.01	2.1	30.0	
1,2,3-Trichloropropane	0.189	0.178	0.01	5.8	30.0	
trans-1,4-Dichloro-2-butene	0.141	0.112	0.01	20.6	30.0	
2-Chlorotoluene	0.377	0.362	0.01	4.0	30.0	
4-Chlorotoluene	0.383	0.366	0.01	4.4	30.0	
n-Propylbenzene	0.376	0.355	0.01	5.6	30.0	
1,3,5-Trimethylbenzene	1.206	1.116	0.01	7.5	30.0	
Pentachloroethane	0.243	0.291	0.01	19.8	30.0	
tert-Butylbenzene	0.307	0.302	0.01	1.6	30.0	
1,2,4-Trimethylbenzene	1.210	1.138	0.01	6.0	30.0	
sec-Butylbenzene	1.763	1.693	0.01	4.0	30.0	
1,3-Dichlorobenzene	0.844	0.791	0.01	6.3	30.0	
p-Isopropyltoluene	1.301	1.216	0.01	6.5	30.0	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Instrument ID: M Calibration Date: 08/26/02 Time: 0150

Lab File ID: MYF02BV Init. Calib. Date(s): 08/23/02 08/23/02

Heated Purge: (Y/N) N Init. Calib. Times: 0113 0308

GC Column: CAP ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF2	MIN RRF	%D	MAX %D
1,4-Dichlorobenzene	0.903	0.868	0.01	3.9	30.0
1,2-Dichlorobenzene	0.782	0.755	0.01	3.4	30.0
n-Butylbenzene	1.342	1.324	0.01	1.3	30.0
Hexachloroethane	0.388	0.394	0.01	1.5	30.0
1,2-Dibromo-3-Chloropropane	0.164	0.157	0.01	4.3	30.0
Nitrobenzene	0.016	0.014	0.01	12.5	30.0
1,2,4-Trichlorobenzene	0.579	0.538	0.01	7.1	30.0
Hexachlorobutadiene	0.411	0.378	0.01	8.0	30.0
Naphthalene	0.936	0.891	0.01	4.8	30.0
1,2,3-Trichlorobenzene	0.512	0.486	0.01	5.1	30.0
1,2-Dichloroethane-d4	0.368	0.324	0.01	12.0	30.0
Bromofluorobenzene	0.879	0.864	0.01	1.7	30.0
1,2-Dichlorobenzene-d4	0.527	0.516	0.01	2.1	30.0
Toluene-d8	0.961	0.869	0.01	9.6	30.0

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL BURLINGTON Contract: 98011

Lab Code: STLVT Case No.: 98011 SAS No.: SDG No.: 89326

Lab File ID (Standard): MYF02BV Date Analyzed: 08/26/02

Instrument ID: M Time Analyzed: 0150

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

		IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	219555	9.48	172586	15.22	99287	19.75
	UPPER LIMIT	285422	9.98	224362	15.72	129073	20.25
	LOWER LIMIT	153688	8.98	120810	14.72	69501	19.25
	CLIENT SAMPLE NO.						
01	MYFB LCS	190636	9.46	161820	15.21	96024	19.75
02	VBLKZ1	198111	9.48	167775	15.21	96232	19.74
03	TR2091	175719	9.48	158127	15.23	91183	19.75
04	TR2092	186095	9.48	156970	15.23	84681	19.75
05	TR2093	185073	9.48	160278	15.23	95581	19.75
06	TR2094	188033	9.48	158781	15.23	95146	19.74
07	TR2099	178945	9.48	150698	15.23	90722	19.74
08	TR2095	197678	9.49	167674	15.23	99896	19.76
09	TR2096	196383	9.48	162799	15.23	98378	19.75
10	TR2097	170949	9.45	152309	15.22	85843	19.75
11	TR2098	190576	9.48	161915	15.23	96111	19.76
12	ARD2168	175971	9.43	150483	15.22	91958	19.75
13	TR0037	184947	9.48	162917	15.23	96056	19.74
14	TR0038	191709	9.48	161328	15.23	97099	19.74
15	TR2095MS	167184	9.49	151349	15.23	93593	19.76
16	TR2095MSD	179460	9.48	156517	15.23	94609	19.76
17							
18							
19							
20							
21							
22							

IS1 = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = + 30% of internal standard area
AREA LOWER LIMIT = - 30% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII VOA

APPENDIX C

HISTORICAL GROUNDWATER ANALYTICAL DATA

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

						FACILITY	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LAND
						LOCATION ID	BN-S	FH-D	FH-S	MW-12A	MW-27
						MATRIX	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND W
						SAMPLE ID	ARD2038	ARD2036	ARD2037	ARD2047	ARD2030
						DEPTH TO TOP OF SAMPLE	0	0	0	11	10
						DEPTH TO BOTTOM OF SAMPLE	0	0	0	11	10
						SAMPLE DATE	19-Oct-99	19-Oct-99	19-Oct-99	21-Oct-99	19-Oct-99
E							SA	SA	SA	SA	SA
D			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDI
ROUND			OF	CLASS GA	ABOVE	OF	OF	1	1	1	1	1
TER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N
E ORGANICS												
hloroethane	UG/L	1	2%	5	0	1	55	10 U	10 U	10 U	73 U	10
etrachloroethane	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	73 U	10
hloroethane	UG/L	0	0%		0	0	55	10 U	10 U	10 U	73 U	10
proethane	UG/L	9	2%	5	1	1	55	10 U	10 U	10 U	73 U	10
proethene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	73 U	10
proethane	UG/L	4	4%	5	0	2	55	10 U	10 U	10 U	73 U	10
proethene (total)	UG/L	1100	27%	5	14	15	55	10 U	10 U	10 U	**940**	10
propropane	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	73 U	10
	UG/L	2	4%		0	2	55	10 UJ	10 UJ	10 UJ	73 UJ	10
	UG/L	0	0%	0.7	0	0	55	10 U	10 U	10 U	73 U	10
hloromethane	UG/L	0	0%		0	0	55	10 U	10 U	10 U	73 U	10
m	UG/L	0	0%		0	0	55	10 U	10 U	10 U	73 U	10
isulfide	UG/L	0	0%		0	0	55	10 U	10 U	10 U	73 U	10
etrachloride	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	73 U	10
nzene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	73 U	10
romomethane	UG/L	0	0%		0	0	55	10 U	10 U	10 U	73 U	10
ane	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	73 U	10
m	UG/L	74	2%	7	1	1	55	10 U	10 U	10 U	73 U	10
ichloropropene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	73 U	10
zene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	73 U	10
omide	UG/L	0	0%		0	0	55	10 U	10 U	10 U	73 U	10
tyl ketone	UG/L	0	0%		0	0	55	10 UJ	10 UJ	10 UJ	73 U	10
loride	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	73 U	10
nyl ketone	UG/L	0	0%	50	0	0	55	10 UJ	10 UJ	10 UJ	73 U	10
obutyl ketone	UG/L	0	0%		0	0	55	10 UJ	10 UJ	10 UJ	73 U	10
e chloride	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	73 U	10
	UG/L	0	0%		0	0	55	10 U	10 U	10 U	73 U	10
roethene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	73 U	10
	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	73 U	10
enes	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	73 U	10
-Dichloropropene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	73 U	10
ethene	UG/L	9100	27%	5	10	15	55	10 U	10 U	10 U	**840**	10
ride	UG/L	180	5%	2	2	3	55	10 U	10 U	10 U	**11** J	10
n	UG/L	2600	65%		0	34	52				56.2 J	1130
	UG/L	3	2%		0	1	52				2.7 U	2.7
	UG/L	7	23%	25	0	12	52				1.9 U	1.9
	UG/L	176	98%	1000	0	51	52				32.8 J	47.5
	UG/L	0.66	10%		0	5	52				0.2 U	0.2

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDF
							LOCATION ID	BN-S	FH-D	FH-S	MW-12A	MW-27
							MATRIX	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND W
							SAMPLE ID	ARD2038	ARD2036	ARD2037	ARD2047	ARD2030
							DEPTH TO TOP OF SAMPLE	0	0	0	11	10
							DEPTH TO BOTTOM OF SAMPLE	0	0	0	11	10
							SAMPLE DATE	19-Oct-99	19-Oct-99	19-Oct-99	21-Oct-99	19-Oct-99
								SA	SA	SA	SA	SA
ROUND			FREQUENCY OF	NYSDEC CLASS GA	NUMBER ABOVE	NUMBER OF	NUMBER OF	ASH REMEDIAL DESIGN 1	ASH REMEDIAL DESIGN 1	ASH REMEDIAL DESIGN 1	ASH REMEDIAL DESIGN 1	ASH REMEDIA 1
TER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N
	UG/L	0	0%	10	0	0	52				0.3 U	0.3 U
	UG/L	268000	98%		0	51	52				268000	83200
	UG/L	5.6	15%	50	0	8	52				0.9 U	0.9 U
	UG/L	8.4	4%		0	2	52				2.5 U	2 U
	UG/L	6.1	10%	200	0	5	52				1.7 U	1.7 U
	UG/L	0	0%	100	0	0	52				5 U	5 U
	UG/L	11600	67%	300	14	35	52				155 J	1130
	UG/L	5.4	10%	25	0	5	52				1.2 U	1.1 J
n	UG/L	47100	98%		0	51	52				38400	10800
e	UG/L	3140	83%	300	7	43	52				528	102
	UG/L	0.2	12%	2	0	6	52				0.1 U	0.1 U
	UG/L	5.6	12%		0	6	52				1.7 U	1.7 U
	UG/L	18400	98%		0	51	52				6100	2640 J
	UG/L	2.6	2%	10	0	1	52				2.4 U	2.4 U
	UG/L	0	0%	50	0	0	52				1.6 U	1.6 U
	UG/L	142000	98%	20000	27	51	52				74000	28600
	UG/L	10.8	19%		0	10	52				2.9 U	2.7 U
	UG/L	4.5	6%		0	3	52				1.5 U	1.5 U
	UG/L	134	81%	300	0	42	52				6.5 J	5.2 J

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LAND
							LOCATION ID	MW-28	MW-29	MW-30	MW-31	MW-32
							MATRIX	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND
							SAMPLE ID	ARD2044	ARD2056	ARD2028	ARD2003	ARD2029
							DEPTH TO TOP OF SAMPLE	9	11	9.5	9.8	10
							DEPTH TO BOTTOM OF SAMPLE	9	11	9.5	9.8	10
							SAMPLE DATE	21-Oct-99	22-Oct-99	19-Oct-99	08-Oct-99	19-Oct-99
E								SA	SA	SA	SA	SA
D			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMED
ROUND			OF	CLASS GA	ABOVE	OF	OF	1	1	1	1	1
ETER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N
LE ORGANICS												
chloroethane	UG/L	1	2%	5	0	1	55	10 U	1 J	10 U	10 UJ	10
etrachloroethane	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 UJ	10
chloroethane	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 UJ	10
oroethane	UG/L	9	2%	5	1	1	55	10 U	10 U	10 U	10 UJ	10
oroethene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 UJ	10
oroethane	UG/L	4	4%	5	0	2	55	10 U	10 U	10 U	10 UJ	10
oroethene (total)	UG/L	1100	27%	5	14	15	55	**19**	**110**	10 U	10 UJ	10
oropropane	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 UJ	10
	UG/L	2	4%		0	2	55	10 UJ	10 UJ	10 UJ	10 UJ	2
	UG/L	0	0%	0.7	0	0	55	10 U	10 U	10 U	10 UJ	10
chloromethane	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 UJ	10
rm	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 UJ	10
isulfide	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 UJ	10
etrachloride	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 UJ	10
nzene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 UJ	10
romomethane	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 UJ	10
hane	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 UJ	10
rm	UG/L	74	2%	7	1	1	55	10 U	10 U	10 U	10 UJ	10
ichloropropene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 UJ	10
zene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 UJ	10
romide	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 UJ	10
tyl ketone	UG/L	0	0%		0	0	55	10 U	10 U	10 UJ	10 UJ	10
loride	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 UJ	10
hyl ketone	UG/L	0	0%	50	0	0	55	10 U	10 U	10 UJ	10 UJ	10
obutyl ketone	UG/L	0	0%		0	0	55	10 U	10 U	10 UJ	10 UJ	10
e chloride	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 UJ	10
	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 UJ	10
roethene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 UJ	10
	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 UJ	10
enes	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 UJ	10
3-Dichloropropene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 UJ	10
ethene	UG/L	9100	27%	5	10	15	55	**21**	3 J	2 J	10 UJ	10
oride	UG/L	180	5%	2	2	3	55	10 U	10 U	10 U	10 UJ	10
n	UG/L	2600	65%		0	34	52	21.1 J	173 J	106 J	38.4 J	826
	UG/L	3	2%		0	1	52	2.7 U	2.7 U	2.7 U	4.9 UJ	2.7
	UG/L	7	23%	25	0	12	52	1.9 U	1.9 U	1.9 U	3.7 UJ	1.9
	UG/L	176	98%	1000	0	51	52	43.8 J	67.9 J	46.8 J	42.6 J	45.4
	UG/L	0.66	10%		0	5	52	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LAND
							LOCATION ID	MW-28	MW-29	MW-30	MW-31	MW-32
							MATRIX	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND
							SAMPLE ID	ARD2044	ARD2056	ARD2028	ARD2003	ARD2029
							DEPTH TO TOP OF SAMPLE	9	11	9.5	9.8	10
							DEPTH TO BOTTOM OF SAMPLE	9	11	9.5	9.8	10
							SAMPLE DATE	21-Oct-99	22-Oct-99	19-Oct-99	08-Oct-99	19-Oct-99
E								SA	SA	SA	SA	SA
D			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMED
ROUND			OF	CLASS GA	ABOVE	OF	OF	1	1	1	1	1
TER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N
n	UG/L	0	0%	10	0	0	52	0.3 U	0.3 U	0.3 U	0.7 UJ	0.3
	UG/L	268000	98%		0	51	52	112000	164000	112000	91500 J	108000
m	UG/L	5.6	15%	50	0	8	52	0.9 U	0.9 U	0.9 U	0.9 UJ	0.9
	UG/L	8.4	4%		0	2	52	2.5 U	2.5 U	2 U	2.5 UJ	2
	UG/L	6.1	10%	200	0	5	52	1.7 U	1.7 U	1.7 U	1.9 UJ	1.7
	UG/L	0	0%	100	0	0	52	5 U	5 U	5 U	5 UJ	5
	UG/L	11600	67%	300	14	35	52	28.8 J	442 J	109	14.7 UJ	1490
	UG/L	5.4	10%	25	0	5	52	1 U	1 U	1 U	1.2 UJ	1
um	UG/L	47100	98%		0	51	52	12100	18900	15600	11600 J	14000
se	UG/L	3140	83%	300	7	43	52	1.3 J	2.6 J	1.4 J	17.1 J	805
	UG/L	0.2	12%	2	0	6	52	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1
	UG/L	5.6	12%		0	6	52	1.7 U	1.7 U	1.7 U	2.6 UJ	1.8
n	UG/L	18400	98%		0	51	52	1220 J	1680 J	2760 J	1860 J	3390
	UG/L	2.6	2%	10	0	1	52	2.4 U	2.4 U	2.4 U	2.8 UJ	2.4
	UG/L	0	0%	50	0	0	52	1.6 U	1.6 U	1.6 U	1.6 UJ	1.6
	UG/L	142000	98%	20000	27	51	52	8770	22900	16300	15800 J	21100
	UG/L	10.8	19%		0	10	52	4.4 J	2.9 U	2.7 U	2.9 UJ	2.7
n	UG/L	4.5	6%		0	3	52	1.5 U	1.5 U	1.5 U	3.2 UJ	1.5
	UG/L	134	81%	300	0	42	52	2.1 J	2.5 J	3 J	2 J	5.1

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	A
							LOCATION ID	MW-33	MW-34	MW-35D	MW-36	M
							MATRIX	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	G
							SAMPLE ID	ARD2020	ARD2021	ARD2043	ARD2041	A
							DEPTH TO TOP OF SAMPLE	9.79	12.5	44	10	
							DEPTH TO BOTTOM OF SAMPLE	9.79	12.5	44	10	
							SAMPLE DATE	12-Oct-99	12-Oct-99	20-Oct-99	20-Oct-99	2
DE								SA	SA	SA	DU	S.
ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	AS
E ROUND			OF	CLASS GA	ABOVE	OF	OF	1	1	1	1	
METER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N
TILE ORGANICS												
richloroethane	UG/L	1	2%	5	0	1	55	10 U	10 U	10 U	10 U	
-Tetrachloroethane	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U	
richloroethane	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 U	
hloroethane	UG/L	9	2%	5	1	1	55	10 U	10 U	10 U	10 U	
hloroethene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U	
hloroethane	UG/L	4	4%	5	0	2	55	10 U	10 U	10 U	10 U	
hloroethene (total)	UG/L	1100	27%	5	14	15	55	10 U	10 U	10 U	10 U	
hloropropane	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U	
e	UG/L	2	4%		0	2	55	10 U	10 U	10 UJ	10 UJ	
ne	UG/L	0	0%	0.7	0	0	55	10 U	10 U	10 U	10 U	
dichloromethane	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 U	
orm	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 U	
disulfide	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 U	
tetrachloride	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U	
benzene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U	
dibromomethane	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 U	
ethane	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U	
orm	UG/L	74	2%	7	1	1	55	10 U	10 U	10 U	10 U	
-Dichloropropene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U	
enzene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U	
bromide	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 U	
butyl ketone	UG/L	0	0%		0	0	55	10 U	10 U	10 UJ	10 UJ	
chloride	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U	
ethyl ketone	UG/L	0	0%	50	0	0	55	10 U	10 U	10 UJ	10 UJ	
isobutyl ketone	UG/L	0	0%		0	0	55	10 U	10 U	10 UJ	10 UJ	
ene chloride	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U	
e	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 U	
loroethene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U	
e	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U	
ylenes	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U	
,3-Dichloropropene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U	
oethene	UG/L	9100	27%	5	10	15	55	10 U	10 U	10 U	10 U	
loride	UG/L	180	5%	2	2	3	55	10 U	10 U	10 U	10 U	
S												
um	UG/L	2600	65%		0	34	52	89.3 J	82 J	42 J	14.3 U	
ny	UG/L	3	2%		0	1	52	2.7 U	2.7 U	2.7 U	2.7 U	
	UG/L	7	23%	25	0	12	52	1.9 U	1.9 U	3.6 J	2.2 J	
	UG/L	176	98%	1000	0	51	52	36.1 J	82.6 J	102 J	68.4 J	
m	UG/L	0.66	10%		0	5	52	0.2 U	0.2 U	0.2 U	0.2 U	

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	A
							LOCATION ID	MW-33	MW-34	MW-35D	MW-36	M
							MATRIX	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	G
							SAMPLE ID	ARD2020	ARD2021	ARD2043	ARD2041	A
							DEPTH TO TOP OF SAMPLE	9.79	12.5	44	10	
							DEPTH TO BOTTOM OF SAMPLE	9.79	12.5	44	10	
							SAMPLE DATE	12-Oct-99	12-Oct-99	20-Oct-99	20-Oct-99	2
DE								SA	SA	SA	DU	S
ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	A
LE ROUND			OF	CLASS GA	ABOVE	OF	OF	1	1	1	1	
METER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N
um	UG/L	0	0%	10	0	0	52	0.3 U	0.3 U	0.3 U	0.3 U	
n	UG/L	268000	98%		0	51	52	106000	49900	19400	114000	
ium	UG/L	5.6	15%	50	0	8	52	0.9 U	0.9 U	0.9 U	0.9 U	
	UG/L	8.4	4%		0	2	52	2 U	2 U	2.5 U	2.5 U	
r	UG/L	6.1	10%	200	0	5	52	1.7 U	1.7 U	1.7 U	1.7 U	
e	UG/L	0	0%	100	0	0	52	5 U	5 U	5 U	5 U	
	UG/L	11600	67%	300	14	35	52	81.7 J	142	66.9 J	25.4 U	
	UG/L	5.4	10%	25	0	5	52	1 U	1 U	1 U	1 U	
sium	UG/L	47100	98%		0	51	52	11200	11200	6010	16700	
nese	UG/L	3140	83%	300	7	43	52	6.3 J	54.4	37.6	23.1	
y	UG/L	0.2	12%	2	0	6	52	0.1 U	0.1 U	0.1 U	0.2 J	
	UG/L	5.6	12%		0	6	52	1.7 U	1.7 U	1.7 U	1.7 U	
ium	UG/L	18400	98%		0	51	52	1710 J	2450 J	1820 J	1830 J	
m	UG/L	2.6	2%	10	0	1	52	2.4 U	2.4 U	2.4 U	2.4 U	
	UG/L	0	0%	50	0	0	52	1.6 U	1.6 U	1.6 U	1.6 U	
n	UG/L	142000	98%	20000	27	51	52	16000	63100	95900	32600	
m	UG/L	10.8	19%		0	10	52	2.7 U	2.7 U	2.9 U	2.9 U	
um	UG/L	4.5	6%		0	3	52	1.5 U	1.5 U	1.5 U	1.5 U	
	UG/L	134	81%	300	0	42	52	1.6 U	2.5 J	3.7 J	3.7 J	

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	FILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
							LOCATION ID		MW-37	MW-38D	MW-39	MW-40
							MATRIX	ATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
							SAMPLE ID		ARD2017	ARD2015	ARD2007	ARD2008
							DEPTH TO TOP OF SAMPLE		11	20	9.5	12
							DEPTH TO BOTTOM OF SAMPLE		11	20	9.5	12
							SAMPLE DATE		11-Oct-99	11-Oct-99	09-Oct-99	09-Oct-99
ODE									SA	SA	SA	SA
Y ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	AL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DI
LE ROUND			OF	CLASS GA	ABOVE	OF	OF		1	1	1	1
METER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES		N	N	N	N
TILE ORGANICS												
Trichloroethane	UG/L	1	2%	5	0	1	55 U		10 U	10 U	10 U	10 U
2-Tetrachloroethane	UG/L	0	0%	5	0	0	55 U		10 U	10 U	10 U	10 U
Trichloroethane	UG/L	0	0%		0	0	55 U		10 U	10 U	10 U	10 U
chloroethane	UG/L	9	2%	5	1	1	55 U		10 U	10 U	10 U	10 U
chloroethene	UG/L	0	0%	5	0	0	55 U		10 U	10 U	10 U	10 U
chloroethane	UG/L	4	4%	5	0	2	55 U		10 U	10 U	10 U	10 U
chloroethene (total)	UG/L	1100	27%	5	14	15	55 U		10 U	10 U	10 U	10 U
chloropropane	UG/L	0	0%	5	0	0	55 U		10 U	10 U	10 U	10 U
ne	UG/L	2	4%		0	2	55 UJ		10 U	10 U	10 U	10 U
ene	UG/L	0	0%	0.7	0	0	55 U		10 U	10 U	10 U	10 U
odichloromethane	UG/L	0	0%		0	0	55 U		10 U	10 U	10 U	10 U
oform	UG/L	0	0%		0	0	55 U		10 U	10 U	10 U	10 U
n disulfide	UG/L	0	0%		0	0	55 U		10 U	10 U	10 U	10 U
n tetrachloride	UG/L	0	0%	5	0	0	55 U		10 U	10 U	10 U	10 U
obenzene	UG/L	0	0%	5	0	0	55 U		10 U	10 U	10 U	10 U
odibromomethane	UG/L	0	0%		0	0	55 U		10 U	10 U	10 U	10 U
oethane	UG/L	0	0%	5	0	0	55 U		10 U	10 U	10 U	10 U
oform	UG/L	74	2%	7	1	1	55 U		10 U	10 U	10 U	10 U
3-Dichloropropene	UG/L	0	0%	5	0	0	55 U		10 U	10 U	10 U	10 U
oenzene	UG/L	0	0%	5	0	0	55 U		10 U	10 U	10 U	10 U
l bromide	UG/L	0	0%		0	0	55 U		10 U	10 U	10 U	10 U
l butyl ketone	UG/L	0	0%		0	0	55 UJ		10 U	10 U	10 U	10 U
l chloride	UG/L	0	0%	5	0	0	55 U		10 U	10 U	10 U	10 U
l ethyl ketone	UG/L	0	0%	50	0	0	55 UJ		10 U	10 U	10 U	10 U
l isobutyl ketone	UG/L	0	0%		0	0	55 UJ		10 U	10 U	10 U	10 U
lene chloride	UG/L	0	0%	5	0	0	55 U		10 U	10 U	10 U	10 U
ne	UG/L	0	0%		0	0	55 U		10 U	10 U	10 U	10 U
chloroethene	UG/L	0	0%	5	0	0	55 U		10 U	10 U	10 U	10 U
ne	UG/L	0	0%	5	0	0	55 U		10 U	10 U	10 U	10 U
Xylenes	UG/L	0	0%	5	0	0	55 U		10 U	10 U	10 U	10 U
-1,3-Dichloropropene	UG/L	0	0%	5	0	0	55 U		10 U	10 U	10 U	10 U
oroethene	UG/L	9100	27%	5	10	15	55 U		10 U	10 U	10 U	10 U
chloride	UG/L	180	5%	2	2	3	55 U		10 U	10 U	10 U	10 U
LS												
num	UG/L	2600	65%		0	34	52 J		69.6 J	16.3 U	16.3 U	71.2 J
ony	UG/L	3	2%		0	1	52 U		4.9 U	4.9 U	4.9 U	4.9 U
ic	UG/L	7	23%	25	0	12	52 J		3.7 U	4.5 J	3.7 U	3.7 U
n	UG/L	176	98%	1000	0	51	52 J		58.3 J	164 J	39.2 J	69.8 J
um	UG/L	0.66	10%		0	5	52 U		0.2 U	0.2 U	0.2 U	0.2 U

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	FILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
							LOCATION ID		MW-37	MW-38D	MW-39	MW-40
							MATRIX	ATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
							SAMPLE ID		ARD2017	ARD2015	ARD2007	ARD2008
							DEPTH TO TOP OF SAMPLE		11	20	9.5	12
							DEPTH TO BOTTOM OF SAMPLE		11	20	9.5	12
							SAMPLE DATE		11-Oct-99	11-Oct-99	09-Oct-99	09-Oct-99
ODE									SA	SA	SA	SA
Y ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	AL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL D
PLE ROUND			OF	CLASS GA	ABOVE	OF	OF		1	1	1	1
AMETER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES		N	N	N	N
nium	UG/L	0	0%	10	0	0	52	U	0.7 U	0.7 U	0.7 U	0.7 U
um	UG/L	268000	98%		0	51	52		97600	91200	92300	99200
mium	UG/L	5.6	15%	50	0	8	52	J	0.9 U	0.9 U	0.9 U	0.9 U
lt	UG/L	8.4	4%		0	2	52	U	2.5 U	2.5 U	2.5 U	2.5 U
er	UG/L	6.1	10%	200	0	5	52	U	1.9 U	1.9 U	1.9 U	1.9 U
ide	UG/L	0	0%	100	0	0	52	U	5 U	5 U	5 U	5 U
	UG/L	11600	67%	300	14	35	52	U	61.4 J	172	14.7 U	14.7 U
	UG/L	5.4	10%	25	0	5	52	U	1.2 U	1.2 U	1.2 U	1.2 U
esium	UG/L	47100	98%		0	51	52		13400	16500	11800	10600
anese	UG/L	3140	83%	300	7	43	52		12 J	143	0.9 U	0.9 U
ury	UG/L	0.2	12%	2	0	6	52	UJ	0.1 U	0.1 U	0.1 U	0.1 U
l	UG/L	5.6	12%		0	6	52	U	2.6 U	2.6 U	4.6 J	2.6 U
sium	UG/L	18400	98%		0	51	52	J	1120 J	7100	2430 J	1720 J
ium	UG/L	2.6	2%	10	0	1	52	U	2.8 U	2.8 U	2.8 U	2.8 U
	UG/L	0	0%	50	0	0	52	U	1.6 U	1.6 U	1.6 U	1.6 U
m	UG/L	142000	98%	20000	27	51	52		9360	5580	8040	13600
um	UG/L	10.8	19%		0	10	52	U	2.9 U	2.9 U	2.9 UJ	2.9 U
dium	UG/L	4.5	6%		0	3	52	U	3.2 U	3.2 U	3.2 U	3.2 U
	UG/L	134	81%	300	0	42	52	J	7.7 J	18.6 J	9.5 J	5 J

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH
							LOCATION ID	MW-41D	MW-42D	MW-43	MW-44A	MW-
							MATRIX	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GRO
							SAMPLE ID	ARD2001	ARD2053	ARD2049	ARD2050	ARD
							DEPTH TO TOP OF SAMPLE	32	38	7	12	
							DEPTH TO BOTTOM OF SAMPLE	32	38	7	12	
							SAMPLE DATE	08-Oct-99	22-Oct-99	22-Oct-99	22-Oct-99	2
ODE								SA	SA	SA	SA	SA
Y ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH
LE ROUND			OF	CLASS GA	ABOVE	OF	OF	1	1	1	1	
METER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N
TILE ORGANICS												
Trichloroethane	UG/L	1	2%	5	0	1	55	10 UJ	10 U	10 U	55 U	
2-Tetrachloroethane	UG/L	0	0%	5	0	0	55	10 UJ	10 U	10 U	55 U	
Trichloroethane	UG/L	0	0%		0	0	55	10 UJ	10 U	10 U	55 U	
chloroethane	UG/L	9	2%	5	1	1	55	10 UJ	10 U	10 U	9 J	
chloroethene	UG/L	0	0%	5	0	0	55	10 UJ	10 U	10 U	55 U	
chloroethane	UG/L	4	4%	5	0	2	55	10 UJ	10 U	10 U	55 U	
chloroethene (total)	UG/L	1100	27%	5	14	15	55	10 UJ	10 U	10 U	690	
chloropropane	UG/L	0	0%	5	0	0	55	10 UJ	10 U	10 U	55 U	
ne	UG/L	2	4%		0	2	55	10 UJ	10 UJ	10 UJ	55 UJ	
ne	UG/L	0	0%	0.7	0	0	55	10 UJ	10 U	10 U	55 U	
dichloromethane	UG/L	0	0%		0	0	55	10 UJ	10 U	10 U	55 U	
form	UG/L	0	0%		0	0	55	10 UJ	10 U	10 U	55 U	
n disulfide	UG/L	0	0%		0	0	55	10 UJ	10 U	10 U	55 U	
n tetrachloride	UG/L	0	0%	5	0	0	55	10 UJ	10 U	10 U	55 U	
benzene	UG/L	0	0%	5	0	0	55	10 UJ	10 U	10 U	55 U	
dibromomethane	UG/L	0	0%		0	0	55	10 UJ	10 U	10 U	55 U	
ethane	UG/L	0	0%	5	0	0	55	10 UJ	10 U	10 U	55 U	
form	UG/L	74	2%	7	1	1	55	10 UJ	10 U	10 U	55 U	
3-Dichloropropene	UG/L	0	0%	5	0	0	55	10 UJ	10 U	10 U	55 U	
benzene	UG/L	0	0%	5	0	0	55	10 UJ	10 U	10 U	55 U	
bromide	UG/L	0	0%		0	0	55	10 UJ	10 U	10 U	55 U	
butyl ketone	UG/L	0	0%		0	0	55	10 UJ	10 U	10 U	55 U	
chloride	UG/L	0	0%	5	0	0	55	10 UJ	10 U	10 U	55 U	
ethyl ketone	UG/L	0	0%	50	0	0	55	10 UJ	10 U	10 U	55 U	
isobutyl ketone	UG/L	0	0%		0	0	55	10 UJ	10 U	10 U	55 U	
lene chloride	UG/L	0	0%	5	0	0	55	10 UJ	10 U	10 U	55 U	
e	UG/L	0	0%		0	0	55	10 UJ	10 U	10 U	55 U	
hloroethene	UG/L	0	0%	5	0	0	55	10 UJ	10 U	10 U	55 U	
ne	UG/L	0	0%	5	0	0	55	10 UJ	10 U	10 U	55 U	
Xylenes	UG/L	0	0%	5	0	0	55	10 UJ	10 U	10 U	55 U	
1,3-Dichloropropene	UG/L	0	0%	5	0	0	55	10 UJ	10 U	10 U	55 U	
roethene	UG/L	9100	27%	5	10	15	55	10 UJ	10 U	10 U	26 J	
hloride	UG/L	180	5%	2	2	3	55	10 UJ	10 U	10 U	180	
LS												
num	UG/L	2600	65%		0	34	52	16.3 UJ	14.3 U	40.2 J	14.3 U	
ony	UG/L	3	2%		0	1	52	4.9 UJ	3 J	2.7 U	2.7 U	
c	UG/L	7	23%	25	0	12	52	3.7 UJ	1.9 U	1.9 U	1.9 U	
n	UG/L	176	98%	1000	0	51	52	66.3 J	79.1 J	48.3 J	52.9 J	
um	UG/L	0.66	10%		0	5	52	0.2 UJ	0.2 U	0.2 U	0.2 U	

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH
							LOCATION ID	MW-41D	MW-42D	MW-43	MW-44A	MW-
							MATRIX	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GRO
							SAMPLE ID	ARD2001	ARD2053	ARD2049	ARD2050	ARD
							DEPTH TO TOP OF SAMPLE	32	38	7	12	
							DEPTH TO BOTTOM OF SAMPLE	32	38	7	12	
							SAMPLE DATE	08-Oct-99	22-Oct-99	22-Oct-99	22-Oct-99	2
ODE								SA	SA	SA	SA	SA
Y ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH
LE ROUND			OF	CLASS GA	ABOVE	OF	OF	1	1	1	1	
METER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N
ium	UG/L	0	0%	10	0	0	52	0.7 UJ	0.3 U	0.3 U	0.3 U	
m	UG/L	268000	98%		0	51	52	86700 J	62600	112000	236000	
nium	UG/L	5.6	15%	50	0	8	52	0.9 UJ	0.9 U	0.9 U	1.3 J	
t	UG/L	8.4	4%		0	2	52	2.5 UJ	2.5 U	2.5 U	2.5 U	
er	UG/L	6.1	10%	200	0	5	52	1.9 UJ	1.7 U	2 J	1.7 U	
de	UG/L	0	0%	100	0	0	52	5 UJ	5 U	5 U	5 U	
	UG/L	11600	67%	300	14	35	52	14.7 UJ	58.6 J	57.2 J	82.6 J	
	UG/L	5.4	10%	25	0	5	52	1.2 UJ	1 U	1 U	1 U	
esium	UG/L	47100	98%		0	51	52	31100 J	28600	9700	43400	
anese	UG/L	3140	83%	300	7	43	52	252 J	88	0.4 U	1250	
ry	UG/L	0.2	12%	2	0	6	52	0.1 UJ	0.1 U	0.1 U	0.1 U	
	UG/L	5.6	12%		0	6	52	2.6 UJ	1.7 U	1.7 U	1.7 U	
sium	UG/L	18400	98%		0	51	52	3520 J	3230 J	1140 J	18400	
um	UG/L	2.6	2%	10	0	1	52	2.8 UJ	2.4 U	2.4 U	2.4 U	
	UG/L	0	0%	50	0	0	52	1.6 UJ	1.6 U	1.6 U	1.6 U	
m	UG/L	142000	98%	20000	27	51	52	35500 J	14300	13200	78100	
um	UG/L	10.8	19%		0	10	52	2.9 UJ	2.9 U	4.6 J	8.3 J	
lium	UG/L	4.5	6%		0	3	52	3.2 UJ	1.5 U	1.5 U	1.5 U	
	UG/L	134	81%	300	0	42	52	4.8 J	2.5 J	2.6 J	5.3 J	

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

						FACILITY	L	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFI
						LOCATION ID		MW-46	MW-47	MW-48	MW-49D
						MATRIX	TER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WA
						SAMPLE ID		ARD2009	ARD2032	ARD2012	ARD2011
						DEPTH TO TOP OF SAMPLE		10.5	9.5	10	26
						DEPTH TO BOTTOM OF SAMPLE		10.5	9.5	10	26
						SAMPLE DATE		10-Oct-99	19-Oct-99	10-Oct-99	10-Oct-99
ODE								SA	SA	SA	SA
Y ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	L DESIGN ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL
PLE ROUND			OF	CLASS GA	ABOVE	OF	OF	1	1	1	1
METER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N
TILE ORGANICS											
Trichloroethane	UG/L	1	2%	5	0	1	55 U	10 U	10 U	10 U	10 U
2-Tetrachloroethane	UG/L	0	0%	5	0	0	55 U	10 U	10 U	10 U	10 U
Trichloroethane	UG/L	0	0%		0	0	55 U	10 U	10 U	10 U	10 U
ichloroethane	UG/L	9	2%	5	1	1	55 U	10 U	10 U	10 U	10 U
ichloroethene	UG/L	0	0%	5	0	0	55 U	10 U	10 U	10 U	10 U
ichloroethane	UG/L	4	4%	5	0	2	55 U	10 U	10 U	10 U	10 U
ichloroethene (total)	UG/L	1100	27%	5	14	15	55 U	73	10 U	10 U	14
ichloropropane	UG/L	0	0%	5	0	0	55 U	10 U	10 U	10 U	10 U
ne	UG/L	2	4%		0	2	55 UJ	10 U	10 UJ	10 U	10 U
ene	UG/L	0	0%	0.7	0	0	55 U	10 U	10 U	10 U	10 U
odichloromethane	UG/L	0	0%		0	0	55 U	10 U	10 U	10 U	10 U
oform	UG/L	0	0%		0	0	55 U	10 U	10 U	10 U	10 U
n disulfide	UG/L	0	0%		0	0	55 U	10 U	10 U	10 U	10 U
n tetrachloride	UG/L	0	0%	5	0	0	55 U	10 U	10 U	10 U	10 U
obenzene	UG/L	0	0%	5	0	0	55 U	10 U	10 U	10 U	10 U
odibromomethane	UG/L	0	0%		0	0	55 U	10 U	10 U	10 U	10 U
oethane	UG/L	0	0%	5	0	0	55 U	10 U	10 U	10 U	10 U
oform	UG/L	74	2%	7	1	1	55 U	10 U	10 U	10 U	10 U
3-Dichloropropene	UG/L	0	0%	5	0	0	55 U	10 U	10 U	10 U	10 U
benzene	UG/L	0	0%	5	0	0	55 U	10 U	10 U	10 U	10 U
l bromide	UG/L	0	0%		0	0	55 U	10 U	10 U	10 U	10 U
l butyl ketone	UG/L	0	0%		0	0	55 U	10 U	10 UJ	10 U	10 U
l chloride	UG/L	0	0%	5	0	0	55 U	10 U	10 U	10 U	10 U
l ethyl ketone	UG/L	0	0%	50	0	0	55 U	10 U	10 UJ	10 U	10 U
l isobutyl ketone	UG/L	0	0%		0	0	55 U	10 U	10 UJ	10 U	10 U
lene chloride	UG/L	0	0%	5	0	0	55 U	10 U	10 U	10 U	10 U
ne	UG/L	0	0%		0	0	55 U	10 U	10 U	10 U	10 U
chloroethene	UG/L	0	0%	5	0	0	55 U	10 U	10 U	10 U	10 U
ne	UG/L	0	0%	5	0	0	55 U	10 U	10 U	10 U	10 U
Xylenes	UG/L	0	0%	5	0	0	55 U	10 U	10 U	10 U	10 U
-1,3-Dichloropropene	UG/L	0	0%	5	0	0	55 U	10 U	10 U	10 U	10 U
oroethene	UG/L	9100	27%	5	10	15	55 U	57	10 U	10 U	4 J
chloride	UG/L	180	5%	2	2	3	55 U	1 J	10 U	10 U	10 U
ALS											
num	UG/L	2600	65%		0	34	52 J	124 J	25.1 J	16.3 U	16.3 U
ony	UG/L	3	2%		0	1	52 U	4.9 UJ	2.7 U	4.9 UJ	4.9 UJ
ic	UG/L	7	23%	25	0	12	52 U	3.7 U	1.9 U	3.7 U	3.7 U
n	UG/L	176	98%	1000	0	51	52 J	71.4 J	48.3 J	45.2 J	115 J
ium	UG/L	0.66	10%		0	5	52 U	0.23 J	0.2 U	0.2 U	0.2 U

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	L	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFIL
							LOCATION ID		MW-46	MW-47	MW-48	MW-49D
							MATRIX	TER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WA
							SAMPLE ID		ARD2009	ARD2032	ARD2012	ARD2011
							DEPTH TO TOP OF SAMPLE		10.5	9.5	10	26
							DEPTH TO BOTTOM OF SAMPLE		10.5	9.5	10	26
							SAMPLE DATE		10-Oct-99	19-Oct-99	10-Oct-99	10-Oct-99
ODE									SA	SA	SA	SA
Y ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	L DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL D
LE ROUND			OF	CLASS GA	ABOVE	OF	OF		1	1	1	1
METER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES		N	N	N	N
um	UG/L	0	0%	10	0	0	52 U		0.7 U	0.3 U	0.7 U	0.7 U
m	UG/L	268000	98%		0	51	52		129000	110000	104000	100000
ium	UG/L	5.6	15%	50	0	8	52 U		0.9 U	0.9 U	0.9 U	0.9 U
	UG/L	8.4	4%		0	2	52 U		2.5 U	2 U	2.5 U	2.5 U
r	UG/L	6.1	10%	200	0	5	52 U		1.9 U	1.7 U	1.9 U	1.9 U
de	UG/L	0	0%	100	0	0	52 U		5 U	5 U	5 U	5 U
	UG/L	11600	67%	300	14	35	52 U		1330 J	14.7 U	14.7 U	250 J
	UG/L	5.4	10%	25	0	5	52 U		1.2 U	1 U	1.2 U	1.2 U
esium	UG/L	47100	98%		0	51	52		17800	12000	12500	23200
nese	UG/L	3140	83%	300	7	43	52 J		570	0.9 U	1.2 J	125
y	UG/L	0.2	12%	2	0	6	52 U		0.1 U	0.1 U	0.1 U	0.1 U
	UG/L	5.6	12%		0	6	52 U		2.6 U	1.7 U	2.6 U	2.6 U
ium	UG/L	18400	98%		0	51	52 J		2690 J	992 J	1870 J	1820 J
um	UG/L	2.6	2%	10	0	1	52 U		2.8 U	2.4 U	2.8 U	2.8 U
	UG/L	0	0%	50	0	0	52 U		1.6 U	1.6 U	1.6 U	1.6 U
n	UG/L	142000	98%	20000	27	51	52		10100	9240	8490	8220
m	UG/L	10.8	19%		0	10	52 U		2.9 U	2.7 U	2.9 U	2.9 U
ium	UG/L	4.5	6%		0	3	52 U		3.2 U	1.5 U	3.2 U	3.2 U
	UG/L	134	81%	300	0	42	52 J		1.8 U	1.6 J	1.8 U	1.8 U

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
							LOCATION ID	MW-50D	MW-51D	MW-52D	MW-53
							MATRIX	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
							SAMPLE ID	ARD2010	ARD2033	ARD2034	ARD2055
							DEPTH TO TOP OF SAMPLE	50	28	50	11.5
							DEPTH TO BOTTOM OF SAMPLE	50	28	50	11.5
							SAMPLE DATE	10-Oct-99	19-Oct-99	19-Oct-99	22-Oct-99
E								SA	SA	SA	SA
D			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN
ROUND			OF	CLASS GA	ABOVE	OF	OF	1	1	1	1
TER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N
E ORGANICS											
hloroethane	UG/L	1	2%	5	0	1	55	10 U	10 U	10 U	10 U
etrachloroethane	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U
hloroethane	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 U
roethane	UG/L	9	2%	5	1	1	55	10 U	10 U	10 U	10 U
roethene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U
roethane	UG/L	4	4%	5	0	2	55	10 U	10 U	10 U	10 U
roethene (total)	UG/L	1100	27%	5	14	15	55	10 U	10 U	10 U	15
propropane	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U
	UG/L	2	4%		0	2	55	10 U	10 UJ	2 J	10 UJ
	UG/L	0	0%	0.7	0	0	55	10 U	10 U	10 U	10 U
hloromethane	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 U
m	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 U
sulfide	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 U
trachloride	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U
nzene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U
romomethane	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 U
ane	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U
m	UG/L	74	2%	7	1	1	55	10 U	10 U	10 U	10 U
ichloropropene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U
zene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U
omide	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 U
tyl ketone	UG/L	0	0%		0	0	55	10 U	10 UJ	10 UJ	10 U
loride	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U
nyl ketone	UG/L	0	0%	50	0	0	55	10 U	10 UJ	10 UJ	10 U
obutyl ketone	UG/L	0	0%		0	0	55	10 U	10 UJ	10 UJ	10 U
e chloride	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U
	UG/L	0	0%		0	0	55	10 U	10 U	10 U	10 U
roethene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U
	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U
nes	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U
-Dichloropropene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 U	10 U
thene	UG/L	9100	27%	5	10	15	55	10 U	10 U	10 U	2 J
ride	UG/L	180	5%	2	2	3	55	10 U	10 U	10 U	10 U
	UG/L	2600	65%		0	34	52	22.7 J	20.2 J	2350	14.3 U
	UG/L	3	2%		0	1	52	4.9 UJ	2.7 U	2.7 U	2.7 U
	UG/L	7	23%	25	0	12	52	3.7 U	1.9 U	1.9 U	3.9 J
	UG/L	176	98%	1000	0	51	52	107 J	125 J	64.7 J	71 J
	UG/L	0.66	10%		0	5	52	0.46 J	0.2 U	0.2 U	0.2 U

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
							LOCATION ID	MW-50D	MW-51D	MW-52D	MW-53
							MATRIX	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
							SAMPLE ID	ARD2010	ARD2033	ARD2034	ARD2055
							DEPTH TO TOP OF SAMPLE	50	28	50	11.5
							DEPTH TO BOTTOM OF SAMPLE	50	28	50	11.5
							SAMPLE DATE	10-Oct-99	19-Oct-99	19-Oct-99	22-Oct-99
								SA	SA	SA	SA
ROUND			FREQUENCY OF	NYSDEC CLASS GA	NUMBER ABOVE	NUMBER OF	NUMBER OF	ASH REMEDIAL DESIGN 1	ASH REMEDIAL DESIGN 1	ASH REMEDIAL DESIGN 1	ASH REMEDIAL DESIGN 1
ER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N
	UG/L	0	0%	10	0	0	52	0.7 U	0.3 U	0.3 U	0.3 U
	UG/L	268000	98%		0	51	52	49700	85400	5920	165000
	UG/L	5.6	15%	50	0	8	52	0.9 U	0.9 U	0.9 U	0.9 U
	UG/L	8.4	4%		0	2	52	2.5 U	2 U	2 U	2.5 U
	UG/L	6.1	10%	200	0	5	52	1.9 U	1.7 U	1.9 J	1.7 U
	UG/L	0	0%	100	0	0	52	5 U	5 U	5 U	5 U
	UG/L	11600	67%	300	14	35	52	**348** J	56.2 J	**2310**	25.4 U
	UG/L	5.4	10%	25	0	5	52	1.2 U	1 U	2.6 J	1 U
n	UG/L	47100	98%		0	51	52	22400	13500	2180 J	20100
e	UG/L	3140	83%	300	7	43	52	87.4	42.5	39.3	0.4 U
	UG/L	0.2	12%	2	0	6	52	0.1 U	0.1 U	0.1 U	0.1 U
	UG/L	5.6	12%		0	6	52	2.6 U	1.7 U	2.7 J	1.7 U
	UG/L	18400	98%		0	51	52	2270 J	1350 J	1570 J	1690 J
	UG/L	2.6	2%	10	0	1	52	2.8 U	2.6 J	2.4 U	2.4 U
	UG/L	0	0%	50	0	0	52	1.6 U	1.6 U	1.6 U	1.6 U
	UG/L	142000	98%	20000	27	51	52	**20900**	**26300**	**102000**	**24100**
	UG/L	10.8	19%		0	10	52	2.9 U	2.7 U	2.7 U	2.9 U
	UG/L	4.5	6%		0	3	52	3.2 U	1.5 U	3.3 J	1.5 U
	UG/L	134	81%	300	0	42	52	1.8 U	2.9 J	6.9 J	2.5 J

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	FILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
							LOCATION ID		MW-55D	MW-56	MW-57D	MW-58D
							MATRIX	ATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
							SAMPLE ID		ARD2022	ARD2035	ARD2039	ARD2042
							DEPTH TO TOP OF SAMPLE		50	6	25	48
							DEPTH TO BOTTOM OF SAMPLE		50	6	25	48
							SAMPLE DATE		13-Oct-99	20-Oct-99	20-Oct-99	20-Oct-99
									SA	SA	SA	SA
			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	AL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN
ROUND			OF	CLASS GA	ABOVE	OF	OF		1	1	1	1
TER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES		N	N	N	N
E ORGANICS												
hloroethane	UG/L	1	2%	5	0	1	55	U	10 U	10 U	10 U	10 U
trachloroethane	UG/L	0	0%	5	0	0	55	U	10 U	10 U	10 U	10 U
hloroethane	UG/L	0	0%		0	0	55	U	10 U	10 U	10 U	10 U
roethane	UG/L	9	2%	5	1	1	55	U	10 U	10 U	10 U	10 U
roethene	UG/L	0	0%	5	0	0	55	U	10 U	10 U	10 U	10 U
roethane	UG/L	4	4%	5	0	2	55	U	10 U	10 U	10 U	10 U
roethene (total)	UG/L	1100	27%	5	14	15	55	J	10 U	10 U	10 U	10 U
ropropane	UG/L	0	0%	5	0	0	55	U	10 U	10 U	10 U	10 U
	UG/L	2	4%		0	2	55	U	10 U	10 UJ	10 UJ	10 UJ
	UG/L	0	0%	0.7	0	0	55	U	10 U	10 U	10 U	10 U
hloromethane	UG/L	0	0%		0	0	55	U	10 U	10 U	10 U	10 U
n	UG/L	0	0%		0	0	55	U	10 U	10 U	10 U	10 U
sulfide	UG/L	0	0%		0	0	55	U	10 U	10 U	10 U	10 U
trachloride	UG/L	0	0%	5	0	0	55	U	10 U	10 U	10 U	10 U
zene	UG/L	0	0%	5	0	0	55	U	10 U	10 U	10 U	10 U
romomethane	UG/L	0	0%		0	0	55	U	10 U	10 U	10 U	10 U
ane	UG/L	0	0%	5	0	0	55	U	10 U	10 U	10 U	10 U
n	UG/L	74	2%	7	1	1	55	U	10 U	10 U	10 U	10 U
chloropropene	UG/L	0	0%	5	0	0	55	U	10 U	10 U	10 U	10 U
ene	UG/L	0	0%	5	0	0	55	U	10 U	10 U	10 U	10 U
mide	UG/L	0	0%		0	0	55	U	10 U	10 U	10 U	10 U
yl ketone	UG/L	0	0%		0	0	55	U	10 U	10 UJ	10 UJ	10 UJ
oride	UG/L	0	0%	5	0	0	55	U	10 U	10 U	10 U	10 U
yl ketone	UG/L	0	0%	50	0	0	55	U	10 U	10 UJ	10 UJ	10 UJ
butyl ketone	UG/L	0	0%		0	0	55	U	10 U	10 UJ	10 UJ	10 UJ
chloride	UG/L	0	0%	5	0	0	55	U	10 U	10 U	10 U	10 U
	UG/L	0	0%		0	0	55	U	10 U	10 U	10 U	10 U
oethene	UG/L	0	0%	5	0	0	55	U	10 U	10 U	10 U	10 U
	UG/L	0	0%	5	0	0	55	U	10 U	10 U	10 U	10 U
nes	UG/L	0	0%	5	0	0	55	U	10 U	10 U	10 U	10 U
Dichloropropene	UG/L	0	0%	5	0	0	55	U	10 U	10 U	10 U	10 U
thene	UG/L	9100	27%	5	10	15	55	U	10 U	10 U	10 U	10 U
ide	UG/L	180	5%	2	2	3	55	U	10 U	10 U	10 U	10 U
	UG/L	2600	65%		0	34	52	U	1160	160 J	688	2400
	UG/L	3	2%		0	1	52	U	2.7 U	2.7 U	2.7 U	2.7 U
	UG/L	7	23%	25	0	12	52	U	1.9 U	1.9 U	1.9 U	1.9 U
	UG/L	176	98%	1000	0	51	52	J	61.9 J	44.5 J	62.1 J	69.1 J
	UG/L	0.66	10%		0	5	52	U	0.2 U	0.2 U	0.2 U	0.2 U

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	FILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
							LOCATION ID		MW-55D	MW-56	MW-57D	MW-58D
							MATRIX	ATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
							SAMPLE ID		ARD2022	ARD2035	ARD2039	ARD2042
							DEPTH TO TOP OF SAMPLE		50	6	25	48
							DEPTH TO BOTTOM OF SAMPLE		50	6	25	48
							SAMPLE DATE		13-Oct-99	20-Oct-99	20-Oct-99	20-Oct-99
E									SA	SA	SA	SA
D			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	AL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIG
ROUND			OF	CLASS GA	ABOVE	OF	OF		1	1	1	1
TER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES		N	N	N	N
	UG/L	0	0%	10	0	0	52	U	0.3 U	0.3 U	0.3 U	0.3 U
	UG/L	268000	98%		0	51	52		2440 J	104000	3130 J	4110 J
n	UG/L	5.6	15%	50	0	8	52	U	0.9 U	0.9 U	1.9 J	4.5 J
	UG/L	8.4	4%		0	2	52	U	2 U	2.5 U	2.5 U	2.5 U
	UG/L	6.1	10%	200	0	5	52	U	1.7 U	1.7 U	1.7 U	2.2 J
	UG/L	0	0%	100	0	0	52	U	5 U	5 U	5 U	5 U
	UG/L	11600	67%	300	14	35	52	J	**1050**	149 J	**853** J	**3200** J
	UG/L	5.4	10%	25	0	5	52	U	1.5 J	1 U	1 U	1.9 J
m	UG/L	47100	98%		0	51	52		781 J	12500	842 J	1350 J
se	UG/L	3140	83%	300	7	43	52		16.9	12.3 J	3.2 J	35.3
	UG/L	0.2	12%	2	0	6	52	U	0.1 U	0.1 U	0.1 U	0.1 U
	UG/L	5.6	12%		0	6	52	U	1.7 U	1.7 U	1.7 U	3.4 J
n	UG/L	18400	98%		0	51	52	J	1120 J	1630 J	1150 J	1740 J
	UG/L	2.6	2%	10	0	1	52	U	2.4 U	2.4 U	2.4 U	2.4 U
	UG/L	0	0%	50	0	0	52	U	1.6 U	1.6 U	1.6 U	1.6 U
	UG/L	142000	98%	20000	27	51	52		**118000**	18800	**133000**	**142000**
	UG/L	10.8	19%		0	10	52	U	2.7 J	2.9 U	2.9 U	2.9 U
	UG/L	4.5	6%		0	3	52	U	1.5 U	1.5 U	1.5 U	4.1 J
	UG/L	134	81%	300	0	42	52	J	15.7 J	3.7 J	7.1 J	8.9 J

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

						FACILITY	FILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFI
						LOCATION ID		MW-60	PT-10	PT-11	PT-15
						MATRIX	ATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WA
						SAMPLE ID		ARD2004	ARD2002	ARD2006	ARD2031
						DEPTH TO TOP OF SAMPLE		8.5	40	18	18.5
						DEPTH TO BOTTOM OF SAMPLE		8.5	40	18	18.5
						SAMPLE DATE		09-Oct-99	08-Oct-99	10-Oct-99	20-Oct-99
CODE								SA	SA	SA	SA
DY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	AL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL
PLE ROUND			OF	CLASS GA	ABOVE	OF	OF		1	1	1	1
AMETER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES		N	N	N	N
ATILE ORGANICS												
-Trichloroethane	UG/L	1	2%	5	0	1	55 U		10 U	10 UJ	10 U	10 U
,2-Tetrachloroethane	UG/L	0	0%	5	0	0	55 U		10 U	10 UJ	10 U	10 U
-Trichloroethane	UG/L	0	0%		0	0	55 U		10 U	10 UJ	10 U	10 U
Dichloroethane	UG/L	9	2%	5	1	1	55 U		10 U	10 UJ	10 U	10 U
Dichloroethene	UG/L	0	0%	5	0	0	55 U		10 U	10 UJ	10 U	10 U
Dichloroethane	UG/L	4	4%	5	0	2	55 U		10 U	10 UJ	10 U	10 U
Dichloroethene (total)	UG/L	1100	27%	5	14	15	55 U		10 U	10 UJ	10 U	10 U
Dichloropropane	UG/L	0	0%	5	0	0	55 U		10 U	10 UJ	10 U	10 U
one	UG/L	2	4%		0	2	55 U		10 U	10 UJ	10 U	10 U
ene	UG/L	0	0%	0.7	0	0	55 U		10 U	10 UJ	10 U	10 U
nodichloromethane	UG/L	0	0%		0	0	55 U		10 U	10 UJ	10 U	10 U
noform	UG/L	0	0%		0	0	55 U		10 U	10 UJ	10 U	10 U
on disulfide	UG/L	0	0%		0	0	55 U		10 U	10 UJ	10 U	10 U
on tetrachloride	UG/L	0	0%	5	0	0	55 U		10 U	10 UJ	10 U	10 U
robenzene	UG/L	0	0%	5	0	0	55 U		10 U	10 UJ	10 U	10 U
rodibromomethane	UG/L	0	0%		0	0	55 U		10 U	10 UJ	10 U	10 U
roethane	UG/L	0	0%	5	0	0	55 U		10 U	10 UJ	10 U	10 U
roform	UG/L	74	2%	7	1	1	55 U		10 U	10 UJ	10 U	10 U
,3-Dichloropropene	UG/L	0	0%	5	0	0	55 U		10 U	10 UJ	10 U	10 U
benzene	UG/L	0	0%	5	0	0	55 U		10 U	10 UJ	10 U	10 U
yl bromide	UG/L	0	0%		0	0	55 U		10 U	10 UJ	10 U	10 U
yl butyl ketone	UG/L	0	0%		0	0	55 U		10 U	10 UJ	10 U	10 U
yl chloride	UG/L	0	0%	5	0	0	55 U		10 U	10 UJ	10 U	10 U
yl ethyl ketone	UG/L	0	0%	50	0	0	55 U		10 U	10 UJ	10 U	10 U
yl isobutyl ketone	UG/L	0	0%		0	0	55 U		10 U	10 UJ	10 U	10 U
ylene chloride	UG/L	0	0%	5	0	0	55 U		10 U	10 UJ	10 U	10 U
ene	UG/L	0	0%		0	0	55 U		10 U	10 UJ	10 U	10 U
chloroethene	UG/L	0	0%	5	0	0	55 U		10 U	10 UJ	10 U	10 U
ene	UG/L	0	0%	5	0	0	55 U		10 U	10 UJ	10 U	10 U
Xylenes	UG/L	0	0%	5	0	0	55 U		10 U	10 UJ	10 U	10 U
s-1,3-Dichloropropene	UG/L	0	0%	5	0	0	55 U		10 U	10 UJ	10 U	10 U
loroethene	UG/L	9100	27%	5	10	15	55 U		10 U	10 UJ	10 U	10 U
chloride	UG/L	180	5%	2	2	3	55 U		10 U	10 UJ	10 U	10 U
ALS												
inum	UG/L	2600	65%		0	34	52 J		16.3 U	16.3 UJ	340	2600
nony	UG/L	3	2%		0	1	52 U		4.9 U	4.9 UJ	2.7 U	2.7 U
nic	UG/L	7	23%	25	0	12	52 U		3.7 U	4.7 J	1.9 U	3 J
m	UG/L	176	98%	1000	0	51	52 J		46.6 J	176 J	86.6 J	119 J
llium	UG/L	0.66	10%		0	5	52 U		0.66 J	0.2 UJ	0.2 U	0.2 U

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

						FACILITY	FILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFIL
						LOCATION ID		MW-60	PT-10	PT-11	PT-15
						MATRIX	ATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WA
						SAMPLE ID		ARD2004	ARD2002	ARD2006	ARD2031
						DEPTH TO TOP OF SAMPLE		8.5	40	18	18.5
						DEPTH TO BOTTOM OF SAMPLE		8.5	40	18	18.5
						SAMPLE DATE		09-Oct-99	08-Oct-99	10-Oct-99	20-Oct-99
ODE								SA	SA	SA	SA
Y ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	AL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL D
PLE ROUND			OF	CLASS GA	ABOVE	OF	OF		1	1	1	1
METER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES		N	N	N	N
ium	UG/L	0	0%	10	0	0	52	U	0.7 U	0.7 UJ	0.3 U	0.3 U
um	UG/L	268000	98%		0	51	52		114000	81200 J	92000	92000
nium	UG/L	5.6	15%	50	0	8	52	U	0.9 U	0.9 UJ	0.9 U	5.6 J
t	UG/L	8.4	4%		0	2	52	U	2.5 U	2.5 UJ	2 U	8.4 J
er	UG/L	6.1	10%	200	0	5	52	U	1.9 U	1.9 UJ	1.7 U	6.1 J
de	UG/L	0	0%	100	0	0	52	U	5 U	5 UJ	5 U	5 U
	UG/L	11600	67%	300	14	35	52	U	14.7 U	21.8 J	457	4410 J
	UG/L	5.4	10%	25	0	5	52	U	1.2 U	1.2 UJ	1 U	5.4
esium	UG/L	47100	98%		0	51	52		16400	33300 J	31900	22100
anese	UG/L	3140	83%	300	7	43	52	U	1.8 J	105 J	38.1	259
ry	UG/L	0.2	12%	2	0	6	52	U	0.1 U	0.1 UJ	0.1 U	0.1 U
l	UG/L	5.6	12%		0	6	52	U	2.6 U	2.6 UJ	1.7 U	5.6 J
sium	UG/L	18400	98%		0	51	52	J	2320 J	2560 J	3160 J	3460 J
ium	UG/L	2.6	2%	10	0	1	52	U	2.8 U	2.8 UJ	2.4 U	2.8 U
	UG/L	0	0%	50	0	0	52	U	1.6 U	1.6 UJ	1.6 U	1.6 U
m	UG/L	142000	98%	20000	27	51	52		19900	33500 J	19700	27600
um	UG/L	10.8	19%		0	10	52	UJ	2.9 UJ	2.9 UJ	2.7 UJ	3.3 J
dium	UG/L	4.5	6%		0	3	52	U	3.2 U	3.2 UJ	1.5 U	4.5 J
	UG/L	134	81%	300	0	42	52	J	1.8 U	1.8 UJ	9.5 J	34.1

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	AS
							LOCATION ID	PT-16	PT-16	PT-17	PT-18	PT
							MATRIX	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GR
							SAMPLE ID	ARD2014	ARD2013	ARD2027	ARD2048	AR
							DEPTH TO TOP OF SAMPLE	10	10	10.5	11.1	
							DEPTH TO BOTTOM OF SAMPLE	10	10	10.5	11.1	
							SAMPLE DATE	11-Oct-99	11-Oct-99	18-Oct-99	21-Oct-99	1
CODE								DU	SA	SA	SA	SA
DY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	AS
IPLE ROUND			OF	CLASS GA	ABOVE	OF	OF	1	1	1	1	
AMETER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N
ATILE ORGANICS												
-Trichloroethane	UG/L	1	2%	5	0	1	55	10 U	10 U	10 UJ	540 U	
2,2-Tetrachloroethane	UG/L	0	0%	5	0	0	55	10 U	10 U	10 UJ	540 U	
2-Trichloroethane	UG/L	0	0%		0	0	55	10 U	10 U	10 UJ	540 U	
Dichloroethane	UG/L	9	2%	5	1	1	55	10 U	10 U	10 UJ	540 U	
Dichloroethene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 UJ	540 U	
Dichloroethane	UG/L	4	4%	5	0	2	55	10 U	10 U	10 UJ	540 U	
Dichloroethene (total)	UG/L	1100	27%	5	14	15	55	10 U	10 U	**16** J	**1100**	
Dichloropropane	UG/L	0	0%	5	0	0	55	10 U	10 U	10 UJ	540 U	
one	UG/L	2	4%		0	2	55	10 U	10 U	10 UJ	540 UJ	
zene	UG/L	0	0%	0.7	0	0	55	10 U	10 U	10 UJ	540 U	
nodichloromethane	UG/L	0	0%		0	0	55	10 U	10 U	10 UJ	540 U	
noform	UG/L	0	0%		0	0	55	10 U	10 U	10 UJ	540 U	
on disulfide	UG/L	0	0%		0	0	55	10 U	10 U	10 UJ	540 U	
on tetrachloride	UG/L	0	0%	5	0	0	55	10 U	10 U	10 UJ	540 U	
robenzene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 UJ	540 U	
rodibromomethane	UG/L	0	0%		0	0	55	10 U	10 U	10 UJ	540 U	
roethane	UG/L	0	0%	5	0	0	55	10 U	10 U	10 UJ	540 U	
roform	UG/L	74	2%	7	1	1	55	10 U	10 U	10 UJ	**74** J	
1,3-Dichloropropene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 UJ	540 U	
l benzene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 UJ	540 U	
yl bromide	UG/L	0	0%		0	0	55	10 U	10 U	10 UJ	540 U	
yl butyl ketone	UG/L	0	0%		0	0	55	10 U	10 U	10 UJ	540 U	
yl chloride	UG/L	0	0%	5	0	0	55	10 U	10 U	10 UJ	540 U	
yl ethyl ketone	UG/L	0	0%	50	0	0	55	10 U	10 U	10 UJ	540 U	
yl isobutyl ketone	UG/L	0	0%		0	0	55	10 U	10 U	10 UJ	540 U	
ylene chloride	UG/L	0	0%	5	0	0	55	10 U	10 U	10 UJ	540 U	
ene	UG/L	0	0%		0	0	55	10 U	10 U	10 UJ	540 U	
achloroethene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 UJ	540 U	
ene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 UJ	540 U	
l Xylenes	UG/L	0	0%	5	0	0	55	10 U	10 U	10 UJ	540 U	
s-1,3-Dichloropropene	UG/L	0	0%	5	0	0	55	10 U	10 U	10 UJ	540 U	
hloroethene	UG/L	9100	27%	5	10	15	55	10 U	10 U	**110** J	**9100**	
l chloride	UG/L	180	5%	2	2	3	55	10 U	10 U	10 UJ	540 U	
ALS												
hinum	UG/L	2600	65%		0	34	52	16.3 U	16.3 U	198 J	51.6 J	
mony	UG/L	3	2%		0	1	52	4.9 U	4.9 UJ	2.7 UJ	2.7 U	
nic	UG/L	7	23%	25	0	12	52	4.4 J	3.7 U	1.9 UJ	3.7 J	
um	UG/L	176	98%	1000	0	51	52	40.6 J	44.5 J	50.5 J	50.3 J	
llium	UG/L	0.66	10%		0	5	52	0.57 J	0.2 U	0.2 UJ	0.2 U	

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH
							LOCATION ID	PT-16	PT-16	PT-17	PT-18	PT-
							MATRIX	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GR
							SAMPLE ID	ARD2014	ARD2013	ARD2027	ARD2048	ARD
							DEPTH TO TOP OF SAMPLE	10	10	10.5	11.1	
							DEPTH TO BOTTOM OF SAMPLE	10	10	10.5	11.1	
							SAMPLE DATE	11-Oct-99	11-Oct-99	18-Oct-99	21-Oct-99	11-
ODE								DU	SA	SA	SA	SA
Y ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH
LE ROUND			OF	CLASS GA	ABOVE	OF	OF	1	1	1	1	
METER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N
ium	UG/L	0	0%	10	0	0	52	0.7 U	0.7 U	0.3 UJ	0.3 U	
m	UG/L	268000	98%		0	51	52	95500	100000	105000 J	224000	2
nium	UG/L	5.6	15%	50	0	8	52	0.9 U	0.9 U	0.9 UJ	0.93 J	
	UG/L	8.4	4%		0	2	52	2.5 U	2.5 U	2 UJ	2.5 U	
er	UG/L	6.1	10%	200	0	5	52	1.9 U	1.9 U	1.7 UJ	1.7 U	
de	UG/L	0	0%	100	0	0	52	5 U	5 U	5 UJ	5 U	
	UG/L	11600	67%	300	14	35	52	14.7 U	14.7 U	243 J	199 J	
	UG/L	5.4	10%	25	0	5	52	1.2 U	1.2 U	1 UJ	1.2 U	
esium	UG/L	47100	98%		0	51	52	11500	12400	10200 J	27900	
nese	UG/L	3140	83%	300	7	43	52	7.3 J	3.7 J	12.2 J	471	
ry	UG/L	0.2	12%	2	0	6	52	0.1 U	0.15 J	0.1 UJ	0.16 J	
	UG/L	5.6	12%		0	6	52	2.6 U	2.6 U	1.7 UJ	1.8 J	
sium	UG/L	18400	98%		0	51	52	1050 J	1160 J	1230 J	4470 J	
um	UG/L	2.6	2%	10	0	1	52	2.8 U	2.8 U	2.4 UJ	2.4 U	
	UG/L	0	0%	50	0	0	52	1.6 U	1.6 U	1.6 UJ	1.6 U	
n	UG/L	142000	98%	20000	27	51	52	7140	7780	20000 J	58600	
m	UG/L	10.8	19%		0	10	52	2.9 U	2.9 U	2.7 UJ	4.2 J	
ium	UG/L	4.5	6%		0	3	52	3.2 U	3.2 U	1.5 UJ	1.5 U	
	UG/L	134	81%	300	0	42	52	1.8 U	2.9 J	2.3 J	134	

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

						FACILITY	FILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDF
						LOCATION ID		PT-20	PT-20	PT-21A	PT-22
						MATRIX	ATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND W
						SAMPLE ID		ARD2026	ARD2025	ARD2046	ARD2045
						DEPTH TO TOP OF SAMPLE		10	10	17.5	11.3
						DEPTH TO BOTTOM OF SAMPLE		10	10	17.5	11.3
						SAMPLE DATE		18-Oct-99	18-Oct-99	21-Oct-99	21-Oct-99
ODE								DU	SA	SA	SA
Y ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	AL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIA
LE ROUND			OF	CLASS GA	ABOVE	OF	OF		1	1	1	1
METER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES		N	N	N	N
TILE ORGANICS												
Trichloroethane	UG/L	1	2%	5	0	1	55 U		10 UJ	10 UJ	10 U	10 U
2-Tetrachloroethane	UG/L	0	0%	5	0	0	55 U		10 UJ	10 UJ	10 U	10 U
Trichloroethane	UG/L	0	0%		0	0	55 U		10 UJ	10 UJ	10 U	10 U
chloroethane	UG/L	9	2%	5	1	1	55 U		10 UJ	10 UJ	10 U	10 U
chloroethene	UG/L	0	0%	5	0	0	55 U		10 UJ	10 UJ	10 U	10 U
chloroethane	UG/L	4	4%	5	0	2	55 U		10 UJ	10 UJ	2 J	4 J
chloroethene (total)	UG/L	1100	27%	5	14	15	55 U		28 J	29 J	16	88
chloropropane	UG/L	0	0%	5	0	0	55 U		10 UJ	10 UJ	10 U	10 U
ne	UG/L	2	4%		0	2	55 U		10 UJ	10 UJ	10 UJ	10 U
ne	UG/L	0	0%	0.7	0	0	55 U		10 UJ	10 UJ	10 U	10 U
dichloromethane	UG/L	0	0%		0	0	55 U		10 UJ	10 UJ	10 U	10 U
form	UG/L	0	0%		0	0	55 U		10 UJ	10 UJ	10 U	10 U
n disulfide	UG/L	0	0%		0	0	55 U		10 UJ	10 UJ	10 U	10 U
n tetrachloride	UG/L	0	0%	5	0	0	55 U		10 UJ	10 UJ	10 U	10 U
benzene	UG/L	0	0%	5	0	0	55 U		10 UJ	10 UJ	10 U	10 U
dibromomethane	UG/L	0	0%		0	0	55 U		10 UJ	10 UJ	10 U	10 U
ethane	UG/L	0	0%	5	0	0	55 U		10 UJ	10 UJ	10 U	10 U
form	UG/L	74	2%	7	1	1	55 U		10 UJ	10 UJ	10 U	10 U
3-Dichloropropene	UG/L	0	0%	5	0	0	55 U		10 UJ	10 UJ	10 U	10 U
enzene	UG/L	0	0%	5	0	0	55 U		10 UJ	10 UJ	10 U	10 U
bromide	UG/L	0	0%		0	0	55 U		10 UJ	10 UJ	10 U	10 U
butyl ketone	UG/L	0	0%		0	0	55 U		10 UJ	10 UJ	10 U	10 U
chloride	UG/L	0	0%	5	0	0	55 U		10 UJ	10 UJ	10 U	10 U
ethyl ketone	UG/L	0	0%	50	0	0	55 U		10 UJ	10 UJ	10 U	10 U
isobutyl ketone	UG/L	0	0%		0	0	55 U		10 UJ	10 UJ	10 U	10 U
ene chloride	UG/L	0	0%	5	0	0	55 U		10 UJ	10 UJ	10 U	10 U
e	UG/L	0	0%		0	0	55 U		10 UJ	10 UJ	10 U	10 U
hloroethene	UG/L	0	0%	5	0	0	55 U		10 UJ	10 UJ	10 U	10 U
e	UG/L	0	0%	5	0	0	55 U		10 UJ	10 UJ	10 U	10 U
Xylenes	UG/L	0	0%	5	0	0	55 U		10 UJ	10 UJ	10 U	10 U
1,3-Dichloropropene	UG/L	0	0%	5	0	0	55 U		10 UJ	10 UJ	10 U	10 U
roethene	UG/L	9100	27%	5	10	15	55 U		36 J	36 J	6 J	74
hloride	UG/L	180	5%	2	2	3	55 U		10 UJ	10 UJ	10 U	10 U
LS												
um	UG/L	2600	65%		0	34	52 J		14.3 UJ	14.3 UJ	14.3 U	30.3 J
ny	UG/L	3	2%		0	1	52 U		2.7 UJ	2.7 UJ	2.7 U	2.7 U
c	UG/L	7	23%	25	0	12	52 J		1.9 UJ	1.9 UJ	2.2 J	1.9 U
n	UG/L	176	98%	1000	0	51	52 J		81.1 J	5.6 UJ	56.9 J	77.5 J
um	UG/L	0.66	10%		0	5	52 J		0.2 UJ	0.2 UJ	0.2 U	0.2 U

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

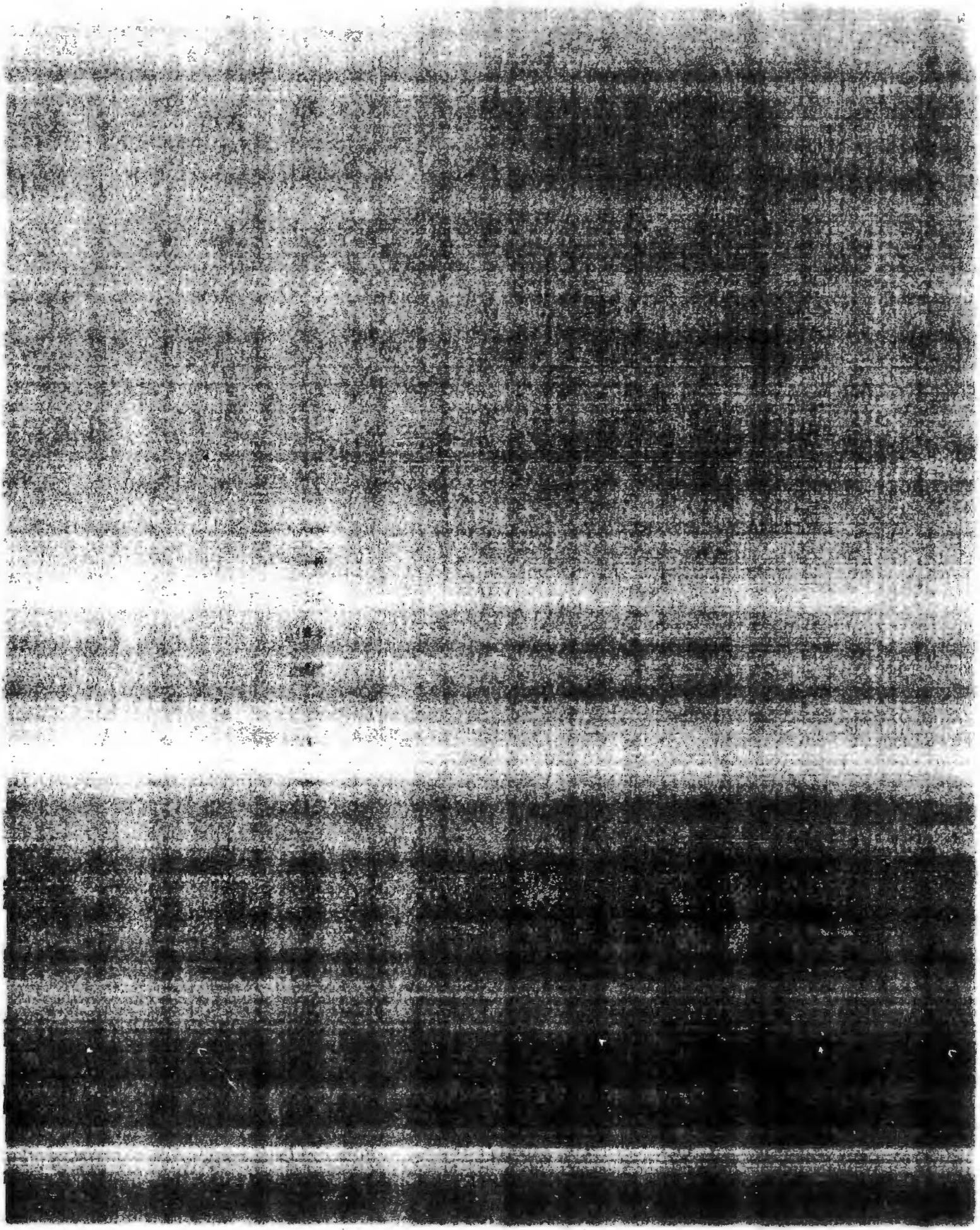
						FACILITY	FILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDF
						LOCATION ID		PT-20	PT-20	PT-21A	PT-22
						MATRIX	ATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND W
						SAMPLE ID		ARD2026	ARD2025	ARD2046	ARD2045
						DEPTH TO TOP OF SAMPLE		10	10	17.5	11.3
						DEPTH TO BOTTOM OF SAMPLE		10	10	17.5	11.3
						SAMPLE DATE		18-Oct-99	18-Oct-99	21-Oct-99	21-Oct-99
ODE								DU	SA	SA	SA
Y ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	AL DESIGN ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIA
PLE ROUND			OF	CLASS GA	ABOVE	OF	OF	1	1	1	1
METER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N
ium	UG/L	0	0%	10	0	0	52 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U
m	UG/L	268000	98%		0	51	52	159000 J	124 UJ	191000	236000
nium	UG/L	5.6	15%	50	0	8	52 J	0.9 UJ	0.9 UJ	0.9 U	0.9 U
t	UG/L	8.4	4%		0	2	52 J	2 UJ	2 UJ	2.5 U	2.5 U
er	UG/L	6.1	10%	200	0	5	52 J	1.7 UJ	1.7 UJ	1.7 U	1.7 U
de	UG/L	0	0%	100	0	0	52 U	5 UJ	5 UJ	5 U	5 U
	UG/L	11600	67%	300	14	35	52	14.7 UJ	14.7 UJ	556 J	58.4 J
	UG/L	5.4	10%	25	0	5	52 U	1 UJ	1 UJ	1 U	1 U
esium	UG/L	47100	98%		0	51	52	16200 J	134 UJ	36200	28500
anese	UG/L	3140	83%	300	7	43	52	3.3 J	0.9 UJ	503	37.1
ry	UG/L	0.2	12%	2	0	6	52 J	0.12 J	0.1 UJ	0.1 U	0.1 U
l	UG/L	5.6	12%		0	6	52 U	1.7 UJ	1.7 UJ	1.7 U	1.7 U
sium	UG/L	18400	98%		0	51	52	2050 J	261 UJ	8560	1990 J
ium	UG/L	2.6	2%	10	0	1	52 U	2.4 UJ	2.4 UJ	2.4 U	2.4 U
	UG/L	0	0%	50	0	0	52 U	1.6 UJ	1.6 UJ	1.6 U	1.6 U
m	UG/L	142000	98%	20000	27	51	52	24800 J	875 UJ	41300	59400
um	UG/L	10.8	19%		0	10	52	2.7 UJ	2.7 UJ	5.1 J	3.9 J
dium	UG/L	4.5	6%		0	3	52 U	1.5 UJ	1.5 UJ	1.5 U	1.5 U
	UG/L	134	81%	300	0	42	52 J	2.4 J	1.6 UJ	4.2 J	5.3 J

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
							LOCATION ID	PT-23	PT-24	PT-25	PT-26
							MATRIX	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
							SAMPLE ID	ARD2016	ARD2000	ARD2019	ARD2057
							DEPTH TO TOP OF SAMPLE	12	10.4	11.5	13.5
							DEPTH TO BOTTOM OF SAMPLE	12	10.4	11.5	13.5
							SAMPLE DATE	11-Oct-99	07-Oct-99	12-Oct-99	27-Oct-99
QC CODE								SA	SA	SA	SA
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN
SAMPLE ROUND			OF	CLASS GA	ABOVE	OF	OF	1	1	1	1
PARAMETER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N
VOLATILE ORGANICS											
1,1,1-Trichloroethane	UG/L	1	2%	5	0	1	55	10 U	10 UJ	10 U	10 U
1,1,2,2-Tetrachloroethane	UG/L	0	0%	5	0	0	55	10 U	10 UJ	10 U	10 U
1,1,2-Trichloroethane	UG/L	0	0%		0	0	55	10 U	10 UJ	10 U	10 U
1,1-Dichloroethane	UG/L	9	2%	5	1	1	55	10 U	10 UJ	10 U	10 U
1,1-Dichloroethene	UG/L	0	0%	5	0	0	55	10 U	10 UJ	10 U	10 U
1,2-Dichloroethane	UG/L	4	4%	5	0	2	55	10 U	10 UJ	10 U	10 U
1,2-Dichloroethene (total)	UG/L	1100	27%	5	14	15	55	10 U	86 J	10 U	10 U
1,2-Dichloropropane	UG/L	0	0%	5	0	0	55	10 U	10 UJ	10 U	10 U
Acetone	UG/L	2	4%		0	2	55	10 U	10 UJ	10 U	10 UJ
Benzene	UG/L	0	0%	0.7	0	0	55	10 U	10 UJ	10 U	10 U
Bromodichloromethane	UG/L	0	0%		0	0	55	10 U	10 UJ	10 U	10 U
Bromoform	UG/L	0	0%		0	0	55	10 U	10 UJ	10 U	10 U
Carbon disulfide	UG/L	0	0%		0	0	55	10 U	10 UJ	10 U	10 U
Carbon tetrachloride	UG/L	0	0%	5	0	0	55	10 U	10 UJ	10 U	10 U
Chlorobenzene	UG/L	0	0%	5	0	0	55	10 U	10 UJ	10 U	10 U
Chlorodibromomethane	UG/L	0	0%		0	0	55	10 U	10 UJ	10 U	10 U
Chloroethane	UG/L	0	0%	5	0	0	55	10 U	10 UJ	10 U	10 U
Chloroform	UG/L	74	2%	7	1	1	55	10 U	10 UJ	10 U	10 U
Cis-1,3-Dichloropropene	UG/L	0	0%	5	0	0	55	10 U	10 UJ	10 U	10 U
Ethyl benzene	UG/L	0	0%	5	0	0	55	10 U	10 UJ	10 U	10 U
Methyl bromide	UG/L	0	0%		0	0	55	10 U	10 UJ	10 U	10 U
Methyl butyl ketone	UG/L	0	0%		0	0	55	10 U	10 UJ	10 U	10 U
Methyl chloride	UG/L	0	0%	5	0	0	55	10 U	10 UJ	10 U	10 U
Methyl ethyl ketone	UG/L	0	0%	50	0	0	55	10 U	10 UJ	10 U	10 UJ
Methyl isobutyl ketone	UG/L	0	0%		0	0	55	10 U	10 UJ	10 U	10 U
Methylene chloride	UG/L	0	0%	5	0	0	55	10 U	10 UJ	10 U	10 U
Styrene	UG/L	0	0%		0	0	55	10 U	10 UJ	10 U	10 U
Tetrachloroethene	UG/L	0	0%	5	0	0	55	10 U	10 UJ	10 U	10 U
Toluene	UG/L	0	0%	5	0	0	55	10 U	10 UJ	10 U	10 U
Total Xylenes	UG/L	0	0%	5	0	0	55	10 U	10 UJ	10 U	10 U
Trans-1,3-Dichloropropene	UG/L	0	0%	5	0	0	55	10 U	10 UJ	10 U	10 U
Trichloroethene	UG/L	9100	27%	5	10	15	55	10 U	4 J	10 U	10 U
Vinyl chloride	UG/L	180	5%	2	2	3	55	10 U	10 UJ	10 U	10 U
METALS											
Aluminum	UG/L	2600	65%		0	34	52	357	16.3 UJ	41.9 J	96.2 J
Antimony	UG/L	3	2%		0	1	52	4.9 U	4.9 UJ	2.7 U	2.7 U
Arsenic	UG/L	7	23%	25	0	12	52	3.9 J	3.7 UJ	1.9 U	1.9 U
Barium	UG/L	176	98%	1000	0	51	52	52.9 J	41.3 J	29.2 J	58.2 J
Beryllium	UG/L	0.66	10%		0	5	52	0.2 U	0.2 UJ	0.2 U	0.2 U

APPENDIX C1
GROUND WATER CHEMICAL RESULTS - 4Q 1999
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
							LOCATION ID	PT-23	PT-24	PT-25	PT-26
							MATRIX	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
							SAMPLE ID	ARD2016	ARD2000	ARD2019	ARD2057
							DEPTH TO TOP OF SAMPLE	12	10.4	11.5	13.5
							DEPTH TO BOTTOM OF SAMPLE	12	10.4	11.5	13.5
							SAMPLE DATE	11-Oct-99	07-Oct-99	12-Oct-99	27-Oct-99
QC CODE								SA	SA	SA	SA
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIG
SAMPLE ROUND			OF	CLASS GA	ABOVE	OF	OF	1	1	1	1
PARAMETER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N
Cadmium	UG/L	0	0%	10	0	0	52	0.7 U	0.7 UJ	0.3 U	0.3 U
Calcium	UG/L	268000	98%		0	51	52	104000	101000 J	77200	36900
Chromium	UG/L	5.6	15%	50	0	8	52	0.9 U	0.9 UJ	0.9 U	1.2 J
Cobalt	UG/L	8.4	4%		0	2	52	2.5 U	2.5 UJ	2 U	2.5 U
Copper	UG/L	6.1	10%	200	0	5	52	1.9 U	1.9 UJ	1.7 U	1.7 U
Cyanide	UG/L	0	0%	100	0	0	52	5 U	5 UJ	5 U	5 U
Iron	UG/L	11600	67%	300	14	35	52	413	14.7 UJ	27.8 J	191 J
Lead	UG/L	5.4	10%	25	0	5	52	1.2 U	1.2 UJ	1 U	1 U
Magnesium	UG/L	47100	98%		0	51	52	12700	11400 J	8130	14000
Manganese	UG/L	3140	83%	300	7	43	52	146	0.9 UJ	0.9 U	82.2
Mercury	UG/L	0.2	12%	2	0	6	52	0.1 U	0.1 UJ	0.15 J	0.1 U
Nickel	UG/L	5.6	12%		0	6	52	2.6 U	2.6 UJ	1.7 U	1.7 U
Potassium	UG/L	18400	98%		0	51	52	2220 J	1510 J	1050 J	2680 J
Selenium	UG/L	2.6	2%	10	0	1	52	2.8 U	2.8 UJ	2.4 U	2.4 U
Silver	UG/L	0	0%	50	0	0	52	1.6 U	1.6 UJ	1.6 U	1.6 U
Sodium	UG/L	142000	98%	20000	27	51	52	10600	10200 J	10800	91100
Thallium	UG/L	10.8	19%		0	10	52	2.9 U	2.9 UJ	2.7 U	5.5 J
Vanadium	UG/L	4.5	6%		0	3	52	3.2 U	3.2 UJ	1.5 U	1.5 U
Zinc	UG/L	134	81%	300	0	42	52	5.9 J	1.8 UJ	1.9 J	2.8 J



APPENDIX C2
GROUND WATER CHEMICAL RESULTS - 1Q 2000
GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

						FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH L
						LOCATION ID		BN-S	FH-D	FH-S	MW-12A	MW-27	MW-26
						MATRIX		GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROU
						SAMPLE ID		ARD2141	ARD2140	ARD2139	ARD2152	ARD2132	ARD21
						DEPTH TO TOP OF SAMPLE		0	0	0	12	10	
						DEPTH TO BOTTOM OF SAMPLE		0	0	0	12	10	
						SAMPLE DATE		1/19/2000	1/19/2000	1/19/2000	1/21/2000	1/10/2000	1/20/2
						QC CODE		SA	SA	SA	SA	SA	SA
			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH R
ROUND			OF	CLASS GA	ABOVE	OF	OF	2	2	2	2	2	
ER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N	N
E ORGANICS													
loroethane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	58 U	1 U	
trachloroethane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	58 U	1 U	
loroethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	58 U	1 U	
roethane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	58 U	1 U	
roethene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	58 U	1 U	
lorobenzene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	58 U	1 U	
o-3-chloropropane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	58 U	1 U	
oethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	58 U	1 U	
robenzene	UG/L	0	0%	4.7	0	0	54	1 U	1 U	1 U	58 U	1 U	
roethane	UG/L	3	2%	5	0	1	54	1 U	1 U	1 U	58 U	1 U	
ropropane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	58 U	1 U	
robenzene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	58 U	1 U	
robenzene	UG/L	0	0%	4.7	0	0	54	1 U	1 U	1 U	58 U	1 U	
	UG/L	1	4%		0	2	54	5 UJ	1 J	5 UJ	290 R	5 UJ	
	UG/L	0	0%	0.7	0	0	54	1 U	1 U	1 U	58 U	1 U	
romethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	58 U	1 U	
loromethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	58 U	1 U	
n	UG/L	0	0%		0	0	54	1 U	1 U	1 U	58 U	1 U	
ulfide	UG/L	0	0%		0	0	54	1 U	1 U	1 U	58 U	1 U	
rachloride	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	58 U	1 U	
zene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	58 U	1 U	
omomethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	58 U	1 U	
ne	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	58 U	1 U	
n	UG/L	0	0%	7	0	0	54	1 U	1 U	1 U	58 U	1 U	
chloroethene	UG/L	980	28%	5	14	15	54	1 U	1 U	1 U	980	1 U	
chloropropene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	58 U	1 U	
ene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	58 U	1 U	
mide	UG/L	0	0%		0	0	54	1 U	1 U	1 U	58 U	1 U	
yl ketone	UG/L	0	0%		0	0	54	5 U	5 U	5 U	290 UJ	5 U	
oride	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	58 U	1 U	
yl ketone	UG/L	0	0%	50	0	0	54	5 U	5 U	5 U	290 U	5 UJ	
butyl ketone	UG/L	0	0%		0	0	54	5 U	5 U	5 U	290 U	5 U	
chloride	UG/L	0	0%	5	0	0	54	2 U	2 U	2 U	120 U	2 U	
	UG/L	0	0%		0	0	54	1 U	1 U	1 U	58 U	1 U	
oethene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	58 U	1 U	
	UG/L	2	6%	5	0	3	54	1 U	1 U	1 U	58 U	1 U	
nes	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	58 U	1 U	
Dichloroethene	UG/L	2	4%	5	0	2	54	1 U	1 U	1 U	58 U	1 U	
Dichloropropene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	58 U	1 U	
hene	UG/L	760	28%	5	8	15	54	1 U	1 U	1 U	760	1 U	
ide	UG/L	25	2%	2	1	1	54	1 U	1 U	1 U	58 U	1 U	
	UG/L	7700	49%		0	25	51				34.4 UJ	443 J	

APPENDIX C2
GROUND WATER CHEMICAL RESULTS - 1Q 2000
GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

							FACILITY	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH L
							LOCATION ID	BN-S	FH-D	FH-S	MW-12A	MW-27	MW-2
							MATRIX	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROU
							SAMPLE ID	ARD2141	ARD2140	ARD2139	ARD2152	ARD2132	ARD21
							DEPTH TO TOP OF SAMPLE	0	0	0	12	10	
							DEPTH TO BOTTOM OF SAMPLE	0	0	0	12	10	
							SAMPLE DATE	1/19/2000	1/19/2000	1/19/2000	1/21/2000	1/10/2000	1/20/2
							QC CODE	SA	SA	SA	SA	SA	SA
			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH R
ROUND			OF	CLASS GA	ABOVE	OF	OF	2	2	2	2	2	
TER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N	N
	UG/L	4.5	12%		0	6	51				5.4 U	2.2 U	
	UG/L	5	22%	25	0	11	51				2.4 U	2.5 U	
	UG/L	173	100%	1000	0	51	51				24.2 J	40.6 J	4
	UG/L	0.26	14%		0	7	51				0.6 U	0.1 U	
	UG/L	0.35	2%	10	0	1	51				0.2 U	0.2 U	
	UG/L	391000	100%		0	51	51				240000	92900	126
	UG/L	4.1	14%	50	0	7	51				1 U	1 U	
	UG/L	2	6%		0	3	51				3.5 U	1.3 U	
	UG/L	14.6	33%	200	0	17	51				1.6 U	2.2 J	
	UG/L	0	0%	100	0	0	51				10 U	10 U	
	UG/L	6350	63%	300	14	32	51				42.8 J	347 J	
	UG/L	3.8	10%	25	0	5	51				1 U	1.3 U	
m	UG/L	85900	100%		0	51	51				38000	9390	13
e	UG/L	344	100%	300	2	51	51				196	24	
	UG/L	0.14	2%	2	0	1	51				0.1 U	0.1 U	
	UG/L	6.2	10%		0	5	51				4.2 U	1.7 U	
	UG/L	25600	100%		0	51	51				4480 J	1610 J	
	UG/L	3	2%	10	0	1	51				2.2 U	2.2 U	
	UG/L	2.8	2%	50	0	1	51				1 UJ	1.3 UJ	
	UG/L	175000	90%	20000	23	46	51				60800 J	26500	8
	UG/L	7.4	6%		0	3	51				3.2 U	3.2 UJ	
	UG/L	10.8	8%		0	4	51				2.8 U	1.8 U	
	UG/L	1620	100%	300	1	51	51				2 J	7.9 J	

APPENDIX C2
GROUND WATER CHEMICAL RESULTS - 1Q 2000
GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

						FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH L
						LOCATION ID		MW-29	MW-30	MW-30	MW-31	MW-32	MW-3
						MATRIX		GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROU
						SAMPLE ID		ARD2148	ARD2129	ARD2115	ARD2114	ARD2119	ARD2
						DEPTH TO TOP OF SAMPLE		9.5	8.5	8.5	8.5	8.5	
						DEPTH TO BOTTOM OF SAMPLE		9.5	8.5	8.5	8.5	8.5	
						SAMPLE DATE		1/20/2000	1/9/2000	1/9/2000	1/9/2000	1/9/2000	1/9/2
						QC CODE		SA	DU	SA	SA	SA	SA
			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH R
ROUND			OF	CLASS GA	ABOVE	OF	OF	2	2	2	2	2	
TER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N	N
E ORGANICS													
hloroethane	UG/L	0	0%	5	0	0	54	4 U	1 U	1 U	1 U	1 U	
trachloroethane	UG/L	0	0%	5	0	0	54	4 U	1 UJ	1 UJ	1 U	1 UJ	
hloroethane	UG/L	0	0%		0	0	54	4 U	1 U	1 U	1 U	1 U	
roethane	UG/L	0	0%	5	0	0	54	4 U	1 U	1 U	1 U	1 U	
roethene	UG/L	0	0%	5	0	0	54	4 U	1 U	1 U	1 UJ	1 U	
hlorobenzene	UG/L	0	0%	5	0	0	54	4 U	1 U	1 U	1 U	1 U	
no-3-chloropropane	UG/L	0	0%		0	0	54	4 U	1 U	1 U	1 U	1 U	
noethane	UG/L	0	0%		0	0	54	4 U	1 U	1 U	1 U	1 U	
robenzene	UG/L	0	0%	4.7	0	0	54	4 U	1 U	1 U	1 U	1 U	
roethane	UG/L	3	2%	5	0	1	54	4 U	1 U	1 U	1 U	1 U	
ropropane	UG/L	0	0%	5	0	0	54	4 U	1 U	1 U	1 U	1 U	
robenzene	UG/L	0	0%	5	0	0	54	4 U	1 U	1 U	1 U	1 U	
robenzene	UG/L	0	0%	4.7	0	0	54	4 U	1 U	1 U	1 U	1 U	
	UG/L	1	4%		0	2	54	19 R	5 UJ	5 U	5 U	5 UJ	
	UG/L	0	0%	0.7	0	0	54	4 U	1 U	1 U	1 U	1 U	
romomethane	UG/L	0	0%		0	0	54	4 U	1 U	1 U	1 U	1 U	
hloromethane	UG/L	0	0%		0	0	54	4 U	1 U	1 U	1 U	1 U	
n	UG/L	0	0%		0	0	54	4 U	1 U	1 U	1 U	1 U	
sulfide	UG/L	0	0%		0	0	54	4 U	1 U	1 U	1 U	1 U	
trachloride	UG/L	0	0%	5	0	0	54	4 U	1 U	1 U	1 U	1 U	
zene	UG/L	0	0%	5	0	0	54	4 U	1 U	1 U	1 U	1 U	
romomethane	UG/L	0	0%		0	0	54	4 U	1 U	1 U	1 U	1 U	
ane	UG/L	0	0%	5	0	0	54	4 U	1 U	1 U	1 U	1 U	
n	UG/L	0	0%	7	0	0	54	4 U	1 UJ	1 U	1 U	1 UJ	
chloroethene	UG/L	980	28%	5	14	15	54	72	1 U	1 U	1 U	1 U	
chloropropene	UG/L	0	0%	5	0	0	54	4 U	1 U	1 U	1 U	1 U	
ene	UG/L	0	0%	5	0	0	54	4 U	1 U	1 U	1 U	1 U	
mide	UG/L	0	0%		0	0	54	4 U	1 UJ	1 U	1 U	1 UJ	
yl ketone	UG/L	0	0%		0	0	54	19 UJ	5 U	5 U	5 U	5 U	
oride	UG/L	0	0%	5	0	0	54	4 U	1 UJ	1 U	1 U	1 UJ	
yl ketone	UG/L	0	0%	50	0	0	54	19 U	5 UJ	5 U	5 U	5 UJ	
butyl ketone	UG/L	0	0%		0	0	54	19 U	5 U	5 U	5 U	5 U	
chloride	UG/L	0	0%	5	0	0	54	8 U	2 U	2 U	2 U	2 U	
	UG/L	0	0%		0	0	54	4 U	1 U	1 U	1 U	1 U	
oethene	UG/L	0	0%	5	0	0	54	4 U	1 U	1 U	1 U	1 U	
	UG/L	2	6%	5	0	3	54	4 U	1 U	1 U	1 U	1 U	
nes	UG/L	0	0%	5	0	0	54	4 U	1 U	1 U	1 U	1 U	
-Dichloroethene	UG/L	2	4%	5	0	2	54	4 U	1 U	1 U	1 U	1 U	
-Dichloropropene	UG/L	0	0%	5	0	0	54	4 U	1 U	1 U	1 U	1 U	
thene	UG/L	760	28%	5	8	15	54	2 J	0.7 J	1 U	1 U	1 U	
ide	UG/L	25	2%	2	1	1	54	4 U	1 UJ	1 U	1 UJ	1 UJ	
	UG/L	7700	49%		0	25	51	98 J	15.5 UJ	15.5 UJ	833 J	118 J	

APPENDIX C2
GROUND WATER CHEMICAL RESULTS - 1Q 2000
GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

						FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH L
						LOCATION ID		MW-29	MW-30	MW-30	MW-31	MW-32	MW-33
						MATRIX		GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROU
						SAMPLE ID		ARD2148	ARD2129	ARD2115	ARD2114	ARD2119	ARD21
						DEPTH TO TOP OF SAMPLE		9.5	8.5	8.5	8.5	8.5	
						DEPTH TO BOTTOM OF SAMPLE		9.5	8.5	8.5	8.5	8.5	
						SAMPLE DATE		1/20/2000	1/9/2000	1/9/2000	1/9/2000	1/9/2000	1/9/2
						QC CODE		SA	DU	SA	SA	SA	SA
			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH R
ROUND			OF	CLASS GA	ABOVE	OF	OF	2	2	2	2	2	
ER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N	N
	UG/L	4.5	12%		0	6	51	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	
	UG/L	5	22%	25	0	11	51	4.1 J	2.5 U	2.4 U	2.5 U	2.5 U	
	UG/L	173	100%	1000	0	51	51	64.1 J	37.6 J	38 J	34 J	41.3 J	3
	UG/L	0.26	14%		0	7	51	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	
	UG/L	0.35	2%	10	0	1	51	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
	UG/L	391000	100%		0	51	51	173000	94900	99300	82700	102000	975
	UG/L	4.1	14%	50	0	7	51	1 U	1.2 J	1 U	1.8 J	1 U	
	UG/L	2	6%		0	3	51	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	
	UG/L	14.6	33%	200	0	17	51	5.2 J	1.6 U	1.6 U	1.6 U	1.6 U	
	UG/L	0	0%	100	0	0	51	10 U	10 U	10 U	10 U	10 U	
	UG/L	6350	63%	300	14	32	51	98.6 J	63.7 J	20.3 UJ	647 J	158 J	2
	UG/L	3.8	10%	25	0	5	51	1 U	1.3 U	1.3 U	1.3 U	1.3 U	
n	UG/L	85900	100%		0	51	51	20800	14000	14500	10800	13800	11
e	UG/L	344	100%	300	2	51	51	7.6 J	1.8 J	1.5 J	16.9	12.3 J	
	UG/L	0.14	2%	2	0	1	51	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
	UG/L	6.2	10%		0	5	51	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	
	UG/L	25600	100%		0	51	51	594 J	1930 J	1830 J	1210 J	1980 J	6
	UG/L	3	2%	10	0	1	51	2.2 U	3 J	2.5 U	2.5 U	2.5 U	
	UG/L	2.8	2%	50	0	1	51	1.3 UJ	1 UJ	1 UJ	1 UJ	1 UJ	
	UG/L	175000	90%	20000	23	46	51	20900 U	13200	12300	11400	18100	15
	UG/L	7.4	6%		0	3	51	3.2 UJ	3.2 U	6.2 J	3.6 U	3.2 U	
	UG/L	10.8	8%		0	4	51	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	
	UG/L	1620	100%	300	1	51	51	5.2 J	4.3 J	5 J	6.4 J	5.1 J	

APPENDIX C2
GROUND WATER CHEMICAL RESULTS - 1Q 2000
GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

						FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH L
						LOCATION ID		MW-34	MW-35D	MW-36	MW-37	MW-38D	MW-39
						MATRIX		GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROU
						SAMPLE ID		ARD2117	ARD2127	ARD2124	ARD2120	ARD2122	ARD21
						DEPTH TO TOP OF SAMPLE		15	45	12	11.5	20	
						DEPTH TO BOTTOM OF SAMPLE		15	45	12	11.5	20	
						SAMPLE DATE		1/9/2000	1/11/2000	1/11/2000	1/10/2000	1/10/2000	1/6/2
						QC CODE		SA	SA	SA	SA	SA	SA
ROUND			FREQUENCY OF	NYSDEC CLASS GA	NUMBER ABOVE	NUMBER OF	NUMBER OF	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH R
TER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N 2	N 2	N 2	N 2	N 2	N
E ORGANICS													
loroethane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
trachloroethane	UG/L	0	0%	5	0	0	54	1 UJ	1 UJ	1 U	1 U	1 UJ	
loroethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
roethane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
roethene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
lorobenzene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
o-3-chloropropane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
oethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
robenzene	UG/L	0	0%	4.7	0	0	54	1 U	1 U	1 U	1 U	1 U	
roethane	UG/L	3	2%	5	0	1	54	1 U	1 U	1 U	1 U	1 U	
ropropane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
robenzene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
robenzene	UG/L	0	0%	4.7	0	0	54	1 U	1 U	1 U	1 U	1 U	
	UG/L	1	4%		0	2	54	5 UJ	5 UJ	5 U	5 U	5 UJ	
	UG/L	0	0%	0.7	0	0	54	1 U	1 U	1 U	1 U	1 U	
romethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
loromethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
n	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
ulfide	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
rachloride	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
zene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
omomethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
ne	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
n	UG/L	0	0%	7	0	0	54	1 UJ	1 UJ	1 U	1 U	1 UJ	
chloroethene	UG/L	980	28%	5	14	15	54	1 U	1 U	1 U	1 U	1 U	
chloropropene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
ene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
mide	UG/L	0	0%		0	0	54	1 UJ	1 UJ	1 U	1 U	1 UJ	
yl ketone	UG/L	0	0%		0	0	54	5 U	5 U	5 U	5 U	5 U	
oride	UG/L	0	0%	5	0	0	54	1 UJ	1 UJ	1 U	1 U	1 UJ	
yl ketone	UG/L	0	0%	50	0	0	54	5 UJ	5 UJ	5 U	5 U	5 UJ	
butyl ketone	UG/L	0	0%		0	0	54	5 U	5 U	5 U	5 U	5 U	
chloride	UG/L	0	0%	5	0	0	54	2 U	2 U	2 U	2 U	2 U	
	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
oethene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
	UG/L	2	6%	5	0	3	54	1 U	1 U	2	1 U	1 U	
nes	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
Dichloroethene	UG/L	2	4%	5	0	2	54	1 U	1 U	1 U	1 U	1 U	
Dichloropropene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
hene	UG/L	760	28%	5	8	15	54	1 U	1 U	1 U	1 U	1 U	
ide	UG/L	25	2%	2	1	1	54	1 UJ	1 UJ	1 U	1 U	1 UJ	
	UG/L	7700	49%		0	25	51	55.5 J	91.8 J	20.3 J	395 J	80.4 J	1

APPENDIX C2
GROUND WATER CHEMICAL RESULTS - 1Q 2000
GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

						FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LA
						LOCATION ID		MW-34	MW-35D	MW-36	MW-37	MW-38D	MW-39
						MATRIX		GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROU
						SAMPLE ID		ARD2117	ARD2127	ARD2124	ARD2120	ARD2122	ARD21
						DEPTH TO TOP OF SAMPLE		15	45	12	11.5	20	
						DEPTH TO BOTTOM OF SAMPLE		15	45	12	11.5	20	
						SAMPLE DATE		1/9/2000	1/11/2000	1/11/2000	1/10/2000	1/10/2000	1/6/20
						QC CODE		SA	SA	SA	SA	SA	SA
			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH RI
OUND			OF	CLASS GA	ABOVE	OF	OF	2	2	2	2	2	
ER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N	N
	UG/L	4.5	12%		0	6	51	2.2 U	3.6 J	2.2 U	2.2 U	2.2 U	
	UG/L	5	22%	25	0	11	51	2.5 U	3.2 J	2.5 U	2.5 U	3.1 J	
	UG/L	173	100%	1000	0	51	51	96.7 J	82.9 J	54.7 J	54.9 J	170 J	
	UG/L	0.26	14%		0	7	51	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0
	UG/L	0.35	2%	10	0	1	51	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
	UG/L	391000	100%		0	51	51	75800	14400	107000	95000	95900	944
	UG/L	4.1	14%	50	0	7	51	1 U	1 U	1 U	1 U	1 U	
	UG/L	2	6%		0	3	51	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	
	UG/L	14.6	33%	200	0	17	51	1.6 U	1.9 U	1.9 U	1.9 U	1.9 U	
	UG/L	0	0%	100	0	0	51	10 U	10 U	10 U	10 U	10 U	
	UG/L	6350	63%	300	14	32	51	203 J	97.8 J	20.3 UJ	498 J	595 J	2
	UG/L	3.8	10%	25	0	5	51	1.3 U	1.4 J	1.3 U	1.3 U	1.3 U	
n	UG/L	85900	100%		0	51	51	13300	4690 J	15900	12800	15800	127
e	UG/L	344	100%	300	2	51	51	39.7	44.4	41.1	53.1	251	
	UG/L	0.14	2%	2	0	1	51	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
	UG/L	6.2	10%		0	5	51	1.8 J	1.7 U	1.7 U	1.7 U	1.7 U	
	UG/L	25600	100%		0	51	51	1730 J	1650 J	1250 J	895 J	7990	16
	UG/L	3	2%	10	0	1	51	2.5 U	2.2 U	2.2 U	2.2 U	2.2 U	
	UG/L	2.8	2%	50	0	1	51	1 UJ	1.3 UJ	1.3 UJ	1.3 UJ	1.3 UJ	
	UG/L	175000	90%	20000	23	46	51	41200	107000	29300	10400	6750	74
	UG/L	7.4	6%		0	3	51	3.2 U	3.2 U	3.2 U	3.2 UJ	3.2 UJ	
	UG/L	10.8	8%		0	4	51	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	
	UG/L	1620	100%	300	1	51	51	19.1 J	6.4 J	5.4 J	13.8 J	7.5 J	1

APPENDIX C2
GROUND WATER CHEMICAL RESULTS - 1Q 2000
GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

						FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH L
						LOCATION ID		MW-40	MW-41D	MW-42D	MW-43	MW-44A	MW-45
						MATRIX		GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROU
						SAMPLE ID		ARD2108	ARD2100	ARD2109	ARD2103	ARD2155	ARD21
						DEPTH TO TOP OF SAMPLE		12	32	38	6.5	12	
						DEPTH TO BOTTOM OF SAMPLE		12	32	38	6.5	12	
						SAMPLE DATE		1/7/2000	1/6/2000	1/7/2000	1/6/2000	1/22/2000	1/8/2
						QC CODE		SA	SA	SA	SA	SA	SA
			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH R
ROUND			OF	CLASS GA	ABOVE	OF	OF	2	2	2	2	2	
ER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N	N
E ORGANICS													
loroethane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	18 U	
trachloroethane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	18 U	
loroethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	18 U	
roethane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	18 U	
roethene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 UJ	1 U	18 U	
lorobenzene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	18 U	
o-3-chloropropane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	18 U	
oethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	18 U	
robenzene	UG/L	0	0%	4.7	0	0	54	1 U	1 U	1 U	1 U	18 U	
roethane	UG/L	3	2%	5	0	1	54	1 U	1 U	1 U	1 U	18 U	
ropropane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	18 U	
robenzene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	18 U	
robenzene	UG/L	0	0%	4.7	0	0	54	1 U	1 U	1 U	1 U	18 U	
	UG/L	1	4%		0	2	54	5 U	5 UJ	5 U	5 UJ	88 R	
	UG/L	0	0%	0.7	0	0	54	1 U	1 U	1 U	1 U	18 U	
romethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	18 U	
loromethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	18 U	
n	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	18 U	
ulfide	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	18 U	
rachloride	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	18 U	
zene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	18 U	
omomethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	18 U	
ne	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	18 U	
n	UG/L	0	0%	7	0	0	54	1 U	1 U	1 U	1 U	18 U	
chloroethene	UG/L	980	28%	5	14	15	54	1 U	1 U	1 U	1 U	270	
chloropropene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	18 U	
ene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	18 U	
mide	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	18 U	
yl ketone	UG/L	0	0%		0	0	54	5 U	5 UJ	5 U	5 UJ	88 UJ	
oride	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	18 U	
yl ketone	UG/L	0	0%	50	0	0	54	5 U	5 UJ	5 U	5 UJ	88 U	
butyl ketone	UG/L	0	0%		0	0	54	5 U	5 U	5 U	5 U	88 U	
chloride	UG/L	0	0%	5	0	0	54	2 U	2 U	2 U	2 U	35 U	
	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	18 U	
oethene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	18 U	
	UG/L	2	6%	5	0	3	54	1 U	1 U	1 U	1 U	18 U	
nes	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	18 U	
Dichloroethene	UG/L	2	4%	5	0	2	54	1 U	1 U	1 U	1 U	18 U	
Dichloropropene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	18 U	
hene	UG/L	760	28%	5	8	15	54	1 U	1 U	1 U	1 U	13 J	
de	UG/L	25	2%	2	1	1	54	1 U	1 U	1 UJ	1 U	25	
	UG/L	7700	49%		0	25	51	15.5 UJ	15.5 UJ	15.5 UJ	15.5 UJ	34.4 UJ	1

APPENDIX C2
GROUND WATER CHEMICAL RESULTS - 1Q 2000
GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

						FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LA
						LOCATION ID		MW-40	MW-41D	MW-42D	MW-43	MW-44A	MW-45
						MATRIX		GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUI
						SAMPLE ID		ARD2108	ARD2100	ARD2109	ARD2103	ARD2155	ARD21
						DEPTH TO TOP OF SAMPLE		12	32	38	6.5	12	
						DEPTH TO BOTTOM OF SAMPLE		12	32	38	6.5	12	
						SAMPLE DATE		1/7/2000	1/6/2000	1/7/2000	1/6/2000	1/22/2000	1/8/20
						QC CODE		SA	SA	SA	SA	SA	SA
			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH RE
OUND			OF	CLASS GA	ABOVE	OF	OF	2	2	2	2	2	
ER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N	N
	UG/L	4.5	12%		0	6	51	2.2 U	2.2 U	2.2 U	2.2 U	2.5 J	
	UG/L	5	22%	25	0	11	51	2.5 U	2.5 U	2.5 U	2.5 U	2.8 J	
	UG/L	173	100%	1000	0	51	51	69.2 J	75.9 J	93.2 J	39.6 J	66.9 J	
	UG/L	0.26	14%		0	7	51	0.1 U	0.12 J	0.1 U	0.1 U	0.1 U	
	UG/L	0.35	2%	10	0	1	51	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
	UG/L	391000	100%		0	51	51	96800	74100	53700	114000	391000	936
	UG/L	4.1	14%	50	0	7	51	2.9 J	1 U	1 U	1 U	1 U	
	UG/L	2	6%		0	3	51	1.3 U	1.3 J	1.3 U	1.3 U	1.3 U	
	UG/L	14.6	33%	200	0	17	51	1.7 J	1.6 J	1.6 U	3.1 J	1.9 U	
	UG/L	0	0%	100	0	0	51	10 U	10 U	10 U	10 U	10 U	
	UG/L	6350	63%	300	14	32	51	20.3 UJ	20.3 UJ	137 J	20.3 UJ	48.9 J	2
	UG/L	3.8	10%	25	0	5	51	1.3 U	1.3 U	1.3 U	1 U	1 U	
	UG/L	85900	100%		0	51	51	11100	27100	28300	10800	85900	109
	UG/L	344	100%	300	2	51	51	1.8 J	182	71	0.95 J	300	
	UG/L	0.14	2%	2	0	1	51	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
	UG/L	6.2	10%		0	5	51	1.7 U	2.1 J	1.7 U	1.7 U	1.7 U	
	UG/L	25600	100%		0	51	51	1340 J	3230 J	1960 J	420 J	25600	7
	UG/L	3	2%	10	0	1	51	2.5 U	2.5 U	2.5 U	2.5 U	2.2 U	
	UG/L	2.8	2%	50	0	1	51	1 UJ	1 UJ	1 UJ	1 UJ	1.3 UJ	
	UG/L	175000	90%	20000	23	46	51	13900	**50400**	15900	9960	**91500** J	70
	UG/L	7.4	6%		0	3	51	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	
	UG/L	10.8	8%		0	4	51	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	
	UG/L	1620	100%	300	1	51	51	9.1 J	9.4 J	3.2 J	4.1 J	2.4 J	

APPENDIX C2
GROUND WATER CHEMICAL RESULTS - 1Q 2000
GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

						FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH
						LOCATION ID		MW-46	MW-48	MW-49D	MW-50D	MW-51D	MW-
						MATRIX		GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GRO
						SAMPLE ID		ARD2113	ARD2111	ARD2134	ARD2135	ARD2142	ARD
						DEPTH TO TOP OF SAMPLE		9.5	9.5	26	50	28	
						DEPTH TO BOTTOM OF SAMPLE		9.5	9.5	26	50	28	
						SAMPLE DATE		1/8/2000	1/8/2000	1/18/2000	1/18/2000	1/19/2000	1/18
						QC CODE		SA	SA	SA	SA	SA	SA
ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH
E ROUND			OF	CLASS GA	ABOVE	OF	OF	2	2	2	2	2	
ETER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N	N
LE ORGANICS													
ichloroethane	UG/L	0	0%	5	0	0	54	3 U	1 U	1 U	1 U	1 U	
Tetrachloroethane	UG/L	0	0%	5	0	0	54	3 UJ	1 UJ	1 U	1 U	1 U	
ichloroethane	UG/L	0	0%		0	0	54	3 U	1 U	1 U	1 U	1 U	
loroethane	UG/L	0	0%	5	0	0	54	3 U	1 U	1 U	1 U	1 U	
loroethene	UG/L	0	0%	5	0	0	54	3 U	1 U	1 U	1 U	1 U	
ichlorobenzene	UG/L	0	0%	5	0	0	54	3 U	1 U	1 U	1 U	1 U	
omo-3-chloropropane	UG/L	0	0%		0	0	54	3 U	1 U	1 U	1 U	1 U	
omoethane	UG/L	0	0%		0	0	54	3 U	1 U	1 U	1 U	1 U	
lorobenzene	UG/L	0	0%	4.7	0	0	54	3 U	1 U	1 U	1 U	1 U	
loroethane	UG/L	3	2%	5	0	1	54	3 U	1 U	1 U	1 U	1 U	
loropropane	UG/L	0	0%	5	0	0	54	3 U	1 U	1 U	1 U	1 U	
lorobenzene	UG/L	0	0%	5	0	0	54	3 U	1 U	1 U	1 U	1 U	
lorobenzene	UG/L	0	0%	4.7	0	0	54	3 U	1 U	1 U	1 U	1 U	
	UG/L	1	4%		0	2	54	17 U	5 U	5 UJ	5 UJ	5 UJ	
e	UG/L	0	0%	0.7	0	0	54	3 U	1 U	1 U	1 U	1 U	
hloromethane	UG/L	0	0%		0	0	54	3 U	1 U	1 U	1 U	1 U	
ichloromethane	UG/L	0	0%		0	0	54	3 U	1 U	1 U	1 U	1 U	
orm	UG/L	0	0%		0	0	54	3 U	1 U	1 U	1 U	1 U	
disulfide	UG/L	0	0%		0	0	54	3 U	1 U	1 U	1 U	1 U	
tetrachloride	UG/L	0	0%	5	0	0	54	3 U	1 U	1 U	1 U	1 U	
enzene	UG/L	0	0%	5	0	0	54	3 U	1 U	1 U	1 U	1 U	
ibromomethane	UG/L	0	0%		0	0	54	3 U	1 U	1 U	1 U	1 U	
thane	UG/L	0	0%	5	0	0	54	3 U	1 U	1 U	1 U	1 U	
orm	UG/L	0	0%	7	0	0	54	3 U	1 U	1 U	1 U	1 U	
Dichloroethene	UG/L	980	28%	5	14	15	54	**42**	1 U	**19**	1 U	1 U	
Dichloropropene	UG/L	0	0%	5	0	0	54	3 U	1 U	1 U	1 U	1 U	
nzene	UG/L	0	0%	5	0	0	54	3 U	1 U	1 U	1 U	1 U	
romide	UG/L	0	0%		0	0	54	3 U	1 U	1 U	1 U	1 U	
utyl ketone	UG/L	0	0%		0	0	54	17 U	5 U	5 U	5 U	5 U	
hloride	UG/L	0	0%	5	0	0	54	3 U	1 U	1 U	1 U	1 U	
thyl ketone	UG/L	0	0%	50	0	0	54	17 U	5 U	5 U	5 U	5 U	
sobutyl ketone	UG/L	0	0%		0	0	54	17 U	5 U	5 U	5 U	5 U	
ne chloride	UG/L	0	0%	5	0	0	54	7 U	2 U	2 U	2 U	2 U	
	UG/L	0	0%		0	0	54	3 U	1 U	1 U	1 U	1 U	
oroethene	UG/L	0	0%	5	0	0	54	3 U	1 U	1 U	1 U	1 U	
	UG/L	2	6%	5	0	3	54	3 U	1 U	1 U	1 U	1 U	
lenes	UG/L	0	0%	5	0	0	54	3 U	1 U	1 U	1 U	1 U	
,2-Dichloroethene	UG/L	2	4%	5	0	2	54	3 U	1 U	1 U	1 U	1 U	
,3-Dichloropropene	UG/L	0	0%	5	0	0	54	3 U	1 U	1 U	1 U	1 U	
oethene	UG/L	760	28%	5	8	15	54	**23**	1 U	4	1 U	1 U	
loride	UG/L	25	2%	2	1	1	54	3 U	1 U	1 U	1 U	1 U	
S													
m	UG/L	7700	49%		0	25	51	15.5 UJ	15.5 UJ	32.6 J	15.8 J	34.4 UJ	

APPENDIX C2
GROUND WATER CHEMICAL RESULTS - 1Q 2000
GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

						FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH
						LOCATION ID		MW-46	MW-48	MW-49D	MW-50D	MW-51D	MW-
						MATRIX		GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GRO
						SAMPLE ID		ARD2113	ARD2111	ARD2134	ARD2135	ARD2142	ARD
						DEPTH TO TOP OF SAMPLE		9.5	9.5	26	50	28	
						DEPTH TO BOTTOM OF SAMPLE		9.5	9.5	26	50	28	
						SAMPLE DATE		1/8/2000	1/8/2000	1/18/2000	1/18/2000	1/19/2000	1/18
						QC CODE		SA	SA	SA	SA	SA	SA
ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH
E ROUND			OF	CLASS GA	ABOVE	OF	OF	2	2	2	2	2	
ETER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N	N
y	UG/L	4.5	12%		0	6	51	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	
	UG/L	5	22%	25	0	11	51	2.5 U	2.5 U	2.5 U	2.5 U	2.9 J	
	UG/L	173	100%	1000	0	51	51	56 J	36.6 J	133 J	119 J	90.2 J	
n	UG/L	0.26	14%		0	7	51	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
n	UG/L	0.35	2%	10	0	1	51	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
	UG/L	391000	100%		0	51	51	126000	90100	93100	54100	86700	
m	UG/L	4.1	14%	50	0	7	51	1 U	1 U	1 U	1 U	1 U	
	UG/L	2	6%		0	3	51	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	
	UG/L	14.6	33%	200	0	17	51	2.2 J	1.6 U	1.9 U	1.9 U	1.9 U	
	UG/L	0	0%	100	0	0	51	10 U	10 U	10 U	10 U	10 U	
	UG/L	6350	63%	300	14	32	51	179 J	81.1 J	**418** J	150 J	43.5 J	
	UG/L	3.8	10%	25	0	5	51	1.3 U	1 U	1.3 U	1.3 U	1 U	
um	UG/L	85900	100%		0	51	51	15000	11200	24400	25100	13900	
ese	UG/L	344	100%	300	2	51	51	38.1	6.6 J	99.4	79.2	17.4	
	UG/L	0.14	2%	2	0	1	51	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
	UG/L	6.2	10%		0	5	51	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	
m	UG/L	25600	100%		0	51	51	730 J	1260 J	1860 J	2360 J	1100 J	
n	UG/L	3	2%	10	0	1	51	2.5 U	2.5 U	2.2 U	2.2 U	2.2 U	
	UG/L	2.8	2%	50	0	1	51	1 UJ	1 UJ	1.3 UJ	1.3 UJ	1.3 UJ	
	UG/L	175000	90%	20000	23	46	51	10500	6690	8970	19800	**27100**	
	UG/L	7.4	6%		0	3	51	3.2 U	3.2 U	3.2 U	3.2 U	3.2 UJ	
m	UG/L	10.8	8%		0	4	51	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	
	UG/L	1620	100%	300	1	51	51	3.8 J	4 J	4.5 J	10 J	3.2 J	

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GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

						FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH
						LOCATION ID		MW-53	MW-53	MW-54D	MW-55D	MW-56	MW-
						MATRIX		GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GRO
						SAMPLE ID		ARD2147	ARD2145	ARD2137	ARD2136	ARD2130	ARD2
						DEPTH TO TOP OF SAMPLE		9	9	25	50	6	
						DEPTH TO BOTTOM OF SAMPLE		9	9	25	50	6	
						SAMPLE DATE		1/20/2000	1/20/2000	1/18/2000	1/18/2000	1/11/2000	1/11/
						QC CODE		DU	SA	SA	SA	SA	SA
D			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH
ROUND			OF	CLASS GA	ABOVE	OF	OF	2	2	2	2	2	
ETER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N	N
LE ORGANICS													
chloroethane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
etrachloroethane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
chloroethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
oroethane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
oroethene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
chlorobenzene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
mo-3-chloropropane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
moethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
orobenzene	UG/L	0	0%	4.7	0	0	54	1 U	1 U	1 U	1 U	1 U	
oroethane	UG/L	3	2%	5	0	1	54	1 U	1 U	1 U	1 U	1 U	
oropropane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
orobenzene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
orobenzene	UG/L	0	0%	4.7	0	0	54	1 U	1 U	1 U	1 U	1 U	
	UG/L	1	4%		0	2	54	5 R	5 R	0.9 J	5 UJ	5 UJ	
	UG/L	0	0%	0.7	0	0	54	1 U	1 U	1 U	1 U	1 U	
loromethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
chloromethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
m	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
isulfide	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
etrachloride	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
nzene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
romomethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
nane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
m	UG/L	0	0%	7	0	0	54	1 U	1 U	1 U	1 U	1 U	
ichloroethene	UG/L	980	28%	5	14	15	54	22	23	1	1 U	1 U	
ichloropropene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
zene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
omide	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
tyl ketone	UG/L	0	0%		0	0	54	5 UJ	5 UJ	5 U	5 U	5 U	
loride	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
hyl ketone	UG/L	0	0%	50	0	0	54	5 U	5 U	5 U	5 U	5 UJ	
obutyl ketone	UG/L	0	0%		0	0	54	5 U	5 U	5 U	5 U	5 U	
e chloride	UG/L	0	0%	5	0	0	54	2 U	2 U	2 U	2 U	2 U	
	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
roethene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
	UG/L	2	6%	5	0	3	54	1 U	1 U	1 U	1 U	1 U	
enes	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
-Dichloroethene	UG/L	2	4%	5	0	2	54	1 U	1 U	1 U	1 U	1 U	
-Dichloropropene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
ethene	UG/L	760	28%	5	8	15	54	2	2	1 U	1 U	1 U	
oride	UG/L	25	2%	2	1	1	54	1 U	1 U	1 U	1 U	1 U	
n	UG/L	7700	49%		0	25	51	34.4 UJ	34.4 UJ	35.6 J	1410 J	7700 J	

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GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

						FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH
						LOCATION ID		MW-53	MW-53	MW-54D	MW-55D	MW-56	MW-
						MATRIX		GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GRO
						SAMPLE ID		ARD2147	ARD2145	ARD2137	ARD2136	ARD2130	ARD
						DEPTH TO TOP OF SAMPLE		9	9	25	50	6	
						DEPTH TO BOTTOM OF SAMPLE		9	9	25	50	6	
						SAMPLE DATE		1/20/2000	1/20/2000	1/18/2000	1/18/2000	1/11/2000	1/11
						QC CODE		DU	SA	SA	SA	SA	SA
ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH
E ROUND			OF	CLASS GA	ABOVE	OF	OF	2	2	2	2	2	
ETER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N	N
y	UG/L	4.5	12%		0	6	51	2.2 U	2.2 U	2.2 U	3.4 J	2.2 U	
	UG/L	5	22%	25	0	11	51	2.5 U	2.5 U	2.5 U	2.8 J	2.5 U	
	UG/L	173	100%	1000	0	51	51	59.4 J	58.9 J	130 J	73.7 J	90.2 J	
n	UG/L	0.26	14%		0	7	51	0.1 U	0.1 U	0.1 U	0.1 U	0.18 J	
n	UG/L	0.35	2%	10	0	1	51	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
	UG/L	391000	100%		0	51	51	145000	144000	86200	2960 J	106000	
m	UG/L	4.1	14%	50	0	7	51	1 U	1 U	1 U	1 U	4.1 J	
	UG/L	2	6%		0	3	51	1.3 U	1.3 U	1.3 U	1.3 U	2 J	
	UG/L	14.6	33%	200	0	17	51	1.9 U	1.9 U	1.9 U	1.9 U	5.5 J	
	UG/L	0	0%	100	0	0	51	10 U	10 U	10 U	10 U	10 U	
	UG/L	6350	63%	300	14	32	51	20.3 U	20.3 U	151 J	**1070** J	**6350** J	
	UG/L	3.8	10%	25	0	5	51	1 U	1 U	1.3 U	1.3 U	3.8	
um	UG/L	85900	100%		0	51	51	18800	17800	26000	916 J	13000	
ese	UG/L	344	100%	300	2	51	51	2.2 J	2.1 J	161	29.9	103	
	UG/L	0.14	2%	2	0	1	51	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
	UG/L	6.2	10%		0	5	51	1.7 U	1.7 U	1.7 U	1.7 U	6.2 J	
m	UG/L	25600	100%		0	51	51	951 J	971 J	2430 J	1250 J	3530 J	
n	UG/L	3	2%	10	0	1	51	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	
	UG/L	2.8	2%	50	0	1	51	1.3 UJ	1.3 UJ	1.3 UJ	1.3 UJ	1.3 UJ	
	UG/L	175000	90%	20000	23	46	51	**23200**	22900 U	**22900**	**102000**	13200	1
	UG/L	7.4	6%		0	3	51	3.2 UJ	3.2 UJ	3.2 U	3.2 U	3.2 U	
m	UG/L	10.8	8%		0	4	51	1.8 U	1.8 U	1.8 U	1.8 U	10.8 J	
	UG/L	1620	100%	300	1	51	51	3.6 J	4.5 J	3.9 J	18.2 J	28.4	

APPENDIX C2
GROUND WATER CHEMICAL RESULTS - 1Q 2000
GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

					FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH
					LOCATION ID		MW-58D	MW-59	MW-60	PT-10	PT-11	PT-1
					MATRIX		GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GRO
					SAMPLE ID		ARD2128	ARD2105	ARD2104	ARD2101	ARD2107	ARD
					DEPTH TO TOP OF SAMPLE		48	7	8	40	18	
					DEPTH TO BOTTOM OF SAMPLE		48	7	8	40	18	
					SAMPLE DATE		1/11/2000	1/7/2000	1/7/2000	1/6/2000	1/7/2000	1/11/
					QC CODE		SA	SA	SA	SA	SA	SA
D			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH
ROUND			OF	CLASS GA	ABOVE	OF	OF	2	2	2	2	2	
ETER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N	N
LE ORGANICS													
chloroethane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
etrachloroethane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
chloroethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
oroethane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
oroethene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
chlorobenzene	UG/L	0	0%	5	0	0	54	1 U	1 UJ	1 U	1 U	1 UJ	
mo-3-chloropropane	UG/L	0	0%		0	0	54	1 U	1 UJ	1 U	1 U	1 UJ	
moethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
orobenzene	UG/L	0	0%	4.7	0	0	54	1 U	1 UJ	1 U	1 U	1 UJ	
oroethane	UG/L	3	2%	5	0	1	54	1 U	1 U	1 U	1 U	1 U	
oropropane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
orobenzene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
orobenzene	UG/L	0	0%	4.7	0	0	54	1 U	1 UJ	1 U	1 U	1 UJ	
	UG/L	1	4%		0	2	54	5 UJ	5 UJ	5 U	5 UJ	5 UJ	
	UG/L	0	0%	0.7	0	0	54	1 U	1 U	1 U	1 U	1 U	
loromethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
chloromethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
rm	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
lisulfide	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
etrachloride	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
nzene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
romomethane	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
hane	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
rm	UG/L	0	0%	7	0	0	54	1 U	1 U	1 U	1 U	1 U	
Dichloroethene	UG/L	980	28%	5	14	15	54	1 U	1 U	1 U	1 U	1 U	
Dichloropropene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
nzene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
romide	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
utyl ketone	UG/L	0	0%		0	0	54	5 U	5 UJ	5 U	5 UJ	5 UJ	
hloride	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
thyl ketone	UG/L	0	0%	50	0	0	54	5 UJ	5 UJ	5 U	5 UJ	5 UJ	
obutyl ketone	UG/L	0	0%		0	0	54	5 U	5 U	5 U	5 U	5 U	
e chloride	UG/L	0	0%	5	0	0	54	2 U	2 U	2 U	2 U	2 U	
	UG/L	0	0%		0	0	54	1 U	1 U	1 U	1 U	1 U	
proethene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
	UG/L	2	6%	5	0	3	54	1 U	1 U	1 U	1 U	1 U	
enes	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
2-Dichloroethene	UG/L	2	4%	5	0	2	54	1 U	1 U	1 U	1 U	1 U	
3-Dichloropropene	UG/L	0	0%	5	0	0	54	1 U	1 U	1 U	1 U	1 U	
ethene	UG/L	760	28%	5	8	15	54	1 U	1 U	1 U	1 U	1 U	
oride	UG/L	25	2%	2	1	1	54	1 U	1 U	1 U	1 U	1 U	
S													
n	UG/L	7700	49%		0	25	51	3940 J	33.9 J	15.5 UJ	15.5 UJ	1550 J	

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GROUND WATER CHEMICAL RESULTS - 1Q 2000
GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

						FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH
						LOCATION ID		MW-58D	MW-59	MW-60	PT-10	PT-11	PT-15
						MATRIX		GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROU
						SAMPLE ID		ARD2128	ARD2105	ARD2104	ARD2101	ARD2107	ARD2
						DEPTH TO TOP OF SAMPLE		48	7	8	40	18	
						DEPTH TO BOTTOM OF SAMPLE		48	7	8	40	18	
						SAMPLE DATE		1/11/2000	1/7/2000	1/7/2000	1/6/2000	1/7/2000	1/11/
						QC CODE		SA	SA	SA	SA	SA	SA
D			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH
ROUND			OF	CLASS GA	ABOVE	OF	OF	2	2	2	2	2	
TER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N	N
	UG/L	4.5	12%		0	6	51	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	
	UG/L	5	22%	25	0	11	51	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	
	UG/L	173	100%	1000	0	51	51	86.9 J	94.2 J	39.3 J	173 J	95.9 J	
	UG/L	0.26	14%		0	7	51	0.26 J	0.1 U	0.1 U	0.1 U	0.13 J	
	UG/L	0.35	2%	10	0	1	51	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
	UG/L	391000	100%		0	51	51	5450	177000	104000	82600	126000	75
n	UG/L	4.1	14%	50	0	7	51	1 U	1 U	1 U	1.1 J	4 J	
	UG/L	2	6%		0	3	51	1.4 J	1.3 U	1.3 U	1.3 U	1.3 U	
	UG/L	14.6	33%	200	0	17	51	1.9 U	1.7 J	1.6 U	1.6 U	5.3 J	
	UG/L	0	0%	100	0	0	51	10 U	10 U	10 U	10 U	10 U	
	UG/L	6350	63%	300	14	32	51	**5010** J	68.2 J	20.3 UJ	20.3 UJ	**2020** J	
	UG/L	3.8	10%	25	0	5	51	1.9 J	1 U	1.3 U	1 U	1.3 U	
m	UG/L	85900	100%		0	51	51	1770 J	40500	15300	30700	34300	18
se	UG/L	344	100%	300	2	51	51	96.6	7.7 J	3.1 J	101	99.8	
	UG/L	0.14	2%	2	0	1	51	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
	UG/L	6.2	10%		0	5	51	5.2 J	1.7 U	1.7 U	1.7 U	4.6 J	
n	UG/L	25600	100%		0	51	51	1900 J	1470 J	850 J	2160 J	2520 J	
	UG/L	3	2%	10	0	1	51	2.2 U	2.5 U	2.5 U	2.5 U	2.5 U	
	UG/L	2.8	2%	50	0	1	51	1.3 UJ	1 UJ	1 UJ	1 UJ	1 UJ	
	UG/L	175000	90%	20000	23	46	51	**175000**	**29700**	16400	**27700**	**32200**	19
	UG/L	7.4	6%		0	3	51	3.2 UJ	3.2 U	3.2 U	3.2 U	3.6 U	
n	UG/L	10.8	8%		0	4	51	5.5 J	1.8 U	1.8 U	1.8 U	2 J	
	UG/L	1620	100%	300	1	51	51	15.1 J	6.1 J	5.1 J	3.5 J	13.8 J	

APPENDIX C2
GROUND WATER CHEMICAL RESULTS - 1Q 2000
GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

						FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH L
						LOCATION ID		PT-16	PT-16	PT-17	PT-18	PT-19	PT-20
						MATRIX		GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROU
						SAMPLE ID		ARD2121	ARD2125	ARD2149	ARD2154	ARD2110	ARD2
						DEPTH TO TOP OF SAMPLE		9	9	10	10	8.5	
						DEPTH TO BOTTOM OF SAMPLE		9	9	10	10	8.5	
						SAMPLE DATE		1/10/2000	1/10/2000	1/20/2000	1/21/2000	1/8/2000	1/21/2
						QC CODE		DU	SA	SA	SA	SA	SA
			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH R
ROUND			OF	CLASS GA	ABOVE	OF	OF	2	2	2	2	2	
TER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N	N
E ORGANICS													
hloroethane	UG/L	0	0%	5	0	0	54	1 U	1 U	7 U	23 U	1 U	
etrachloroethane	UG/L	0	0%	5	0	0	54	1 U	1 UJ	7 U	23 U	1 UJ	
hloroethane	UG/L	0	0%		0	0	54	1 U	1 U	7 U	23 U	1 U	
roethane	UG/L	0	0%	5	0	0	54	1 U	1 U	7 U	23 U	1 U	
roethene	UG/L	0	0%	5	0	0	54	1 U	1 U	7 U	23 U	1 U	
hlorobenzene	UG/L	0	0%	5	0	0	54	1 U	1 U	7 U	23 U	1 U	
mo-3-chloropropane	UG/L	0	0%		0	0	54	1 U	1 U	7 U	23 U	1 U	
moethane	UG/L	0	0%		0	0	54	1 U	1 U	7 U	23 U	1 U	
robenzene	UG/L	0	0%	4.7	0	0	54	1 U	1 U	7 U	23 U	1 U	
roethane	UG/L	3	2%	5	0	1	54	1 U	1 U	7 U	23 U	1 U	
ropropane	UG/L	0	0%	5	0	0	54	1 U	1 U	7 U	23 U	1 U	
robenzene	UG/L	0	0%	5	0	0	54	1 U	1 U	7 U	23 U	1 U	
robenzene	UG/L	0	0%	4.7	0	0	54	1 U	1 U	7 U	23 U	1 U	
	UG/L	1	4%		0	2	54	5 U	5 UJ	36 R	120 R	5 U	
	UG/L	0	0%	0.7	0	0	54	1 U	1 U	7 U	23 U	1 U	
romomethane	UG/L	0	0%		0	0	54	1 U	1 U	7 U	23 U	1 U	
hloromethane	UG/L	0	0%		0	0	54	1 U	1 U	7 U	23 U	1 U	
n	UG/L	0	0%		0	0	54	1 U	1 U	7 U	23 U	1 U	
sulfide	UG/L	0	0%		0	0	54	1 U	1 U	7 U	23 U	1 U	
trachloride	UG/L	0	0%	5	0	0	54	1 U	1 U	7 U	23 U	1 U	
nzene	UG/L	0	0%	5	0	0	54	1 U	1 U	7 U	23 U	1 U	
romomethane	UG/L	0	0%		0	0	54	1 U	1 U	7 U	23 U	1 U	
ane	UG/L	0	0%	5	0	0	54	1 U	1 U	7 U	23 U	1 U	
n	UG/L	0	0%	7	0	0	54	1 U	1 UJ	7 U	23 U	1 U	
chloroethene	UG/L	980	28%	5	14	15	54	1 U	1 U	27	16 J	1 U	
chloropropene	UG/L	0	0%	5	0	0	54	1 U	1 U	7 U	23 U	1 U	
zene	UG/L	0	0%	5	0	0	54	1 U	1 U	7 U	23 U	1 U	
mide	UG/L	0	0%		0	0	54	1 U	1 UJ	7 U	23 U	1 U	
tyl ketone	UG/L	0	0%		0	0	54	5 U	5 U	36 UJ	120 UJ	5 U	
oride	UG/L	0	0%	5	0	0	54	1 U	1 UJ	7 U	23 U	1 U	
yl ketone	UG/L	0	0%	50	0	0	54	5 U	5 UJ	36 U	120 U	5 U	
butyl ketone	UG/L	0	0%		0	0	54	5 U	5 U	36 U	120 U	5 U	
chloride	UG/L	0	0%	5	0	0	54	2 U	2 U	15 U	46 U	2 U	
	UG/L	0	0%		0	0	54	1 U	1 U	7 U	23 U	1 U	
oethene	UG/L	0	0%	5	0	0	54	1 U	1 U	7 U	23 U	1 U	
	UG/L	2	6%	5	0	3	54	1 J	1 J	7 U	23 U	1 U	
nes	UG/L	0	0%	5	0	0	54	1 U	1 U	7 U	23 U	1 U	
-Dichloroethene	UG/L	2	4%	5	0	2	54	1 U	1 U	7 U	23 U	1 U	
-Dichloropropene	UG/L	0	0%	5	0	0	54	1 U	1 U	7 U	23 U	1 U	
thene	UG/L	760	28%	5	8	15	54	1 U	1 U	140	370	1 U	
ride	UG/L	25	2%	2	1	1	54	1 U	1 UJ	7 U	23 U	1 U	
	UG/L	7700	49%		0	25	51	65.5 J	31.2 J	34.4 UJ	34.4 UJ	15.5 UJ	

APPENDIX C2
GROUND WATER CHEMICAL RESULTS - 1Q 2000
GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

						FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH L
						LOCATION ID		PT-16	PT-16	PT-17	PT-18	PT-19	PT-20
						MATRIX		GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROU
						SAMPLE ID		ARD2121	ARD2125	ARD2149	ARD2154	ARD2110	ARD2
						DEPTH TO TOP OF SAMPLE		9	9	10	10	8.5	
						DEPTH TO BOTTOM OF SAMPLE		9	9	10	10	8.5	
						SAMPLE DATE		1/10/2000	1/10/2000	1/20/2000	1/21/2000	1/8/2000	1/21/2
						QC CODE		DU	SA	SA	SA	SA	SA
			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH R
ROUND			OF	CLASS GA	ABOVE	OF	OF	2	2	2	2	2	
TER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N	N
	UG/L	4.5	12%		0	6	51	2.2 U	2.5 J	2.2 U	5.4 U	2.2 U	
	UG/L	5	22%	25	0	11	51	2.5 U	2.5 U	2.7 J	2.4 U	2.5 U	
	UG/L	173	100%	1000	0	51	51	39.4 J	39 J	54.6 J	47.8 J	44.8 J	
	UG/L	0.26	14%		0	7	51	0.1 U	0.1 U	0.1 U	0.6 U	0.11 J	
	UG/L	0.35	2%	10	0	1	51	0.2 U	0.2 U	0.2 U	0.35 J	0.2 U	
	UG/L	391000	100%		0	51	51	99100	99400	123000	289000	110000	154
	UG/L	4.1	14%	50	0	7	51	1 U	1 U	1 U	1 U	1 U	
	UG/L	2	6%		0	3	51	1.3 U	1.3 U	1.3 U	3.5 U	1.3 U	
	UG/L	14.6	33%	200	0	17	51	2.6 J	1.9 U	2.6 J	14.6 J	1.6 U	
	UG/L	0	0%	100	0	0	51	10 U	10 U	10 U	10 U	10 U	
	UG/L	6350	63%	300	14	32	51	82.6 J	20.3 UJ	20.3 U	14.8 UJ	**812** J	
	UG/L	3.8	10%	25	0	5	51	1.3 U	1.3 U	1 U	1 U	1.3 U	
m	UG/L	85900	100%		0	51	51	12400	12400	12100	44500	15300	19
e	UG/L	344	100%	300	2	51	51	15.7 J	7.1 J	2.2 J	9.7 J	**316**	
	UG/L	0.14	2%	2	0	1	51	0.1 U	0.1 U	0.1 U	0.14 J	0.1 U	
	UG/L	6.2	10%		0	5	51	1.7 U	1.7 U	1.7 U	4.2 U	1.7 U	
	UG/L	25600	100%		0	51	51	712 J	822 J	690 J	4740 J	1900 J	1
	UG/L	3	2%	10	0	1	51	2.2 U	2.2 U	2.2 U	2.2 U	2.5 U	
	UG/L	2.8	2%	50	0	1	51	1.3 UJ	1.3 UJ	1.3 UJ	1 UJ	1 UJ	
	UG/L	175000	90%	20000	23	46	51	5800	6010	24100 U	**39800** J	**20700**	2
	UG/L	7.4	6%		0	3	51	3.2 UJ	3.2 UJ	3.2 UJ	7.4 J	3.2 U	
	UG/L	10.8	8%		0	4	51	1.8 U	1.8 U	1.8 U	2.8 U	1.8 U	
	UG/L	1620	100%	300	1	51	51	3.1 J	4 J	4.1 J	**1620**	8 J	

APPENDIX C2
GROUND WATER CHEMICAL RESULTS - 1Q 2000
GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

						FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
						LOCATION ID		PT-21A	PT-22	PT-23	PT-24	PT-25
						MATRIX		GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
						SAMPLE ID		ARD2150	ARD2151	ARD2123	ARD2144	ARD2116
						DEPTH TO TOP OF SAMPLE		17.5	11.3	10.8	10.4	10
						DEPTH TO BOTTOM OF SAMPLE		17.5	11.3	10.8	10.4	10
						SAMPLE DATE		1/21/2000	1/21/2000	1/10/2000	1/20/2000	1/9/2000
						QC CODE		SA	SA	SA	SA	SA
TUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESIGN	ASH REMEDIAL D
AMPLE ROUND			OF	CLASS GA	ABOVE	OF	OF	2	2	2	2	2
ARAMETER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N
OLATILE ORGANICS												
1,1-Trichloroethane	UG/L	0	0%	5	0	0	54	1 U	5 U	1 U	4 U	1 U
1,2,2-Tetrachloroethane	UG/L	0	0%	5	0	0	54	1 U	5 U	1 U	4 U	1 UJ
1,2-Trichloroethane	UG/L	0	0%		0	0	54	1 U	5 U	1 U	4 U	1 U
1-Dichloroethane	UG/L	0	0%	5	0	0	54	1 U	5 U	1 U	4 U	1 U
1-Dichloroethene	UG/L	0	0%	5	0	0	54	1 U	5 U	1 U	4 U	1 U
2,4-Trichlorobenzene	UG/L	0	0%	5	0	0	54	1 U	5 U	1 U	4 U	1 U
2-Dibromo-3-chloropropane	UG/L	0	0%		0	0	54	1 U	5 U	1 U	4 U	1 U
2-Dibromoethane	UG/L	0	0%		0	0	54	1 U	5 U	1 U	4 U	1 U
2-Dichlorobenzene	UG/L	0	0%	4.7	0	0	54	1 U	5 U	1 U	4 U	1 U
2-Dichloroethane	UG/L	3	2%	5	0	1	54	1 U	3 J	1 U	4 U	1 U
2-Dichloropropane	UG/L	0	0%	5	0	0	54	1 U	5 U	1 U	4 U	1 U
3-Dichlorobenzene	UG/L	0	0%	5	0	0	54	1 U	5 U	1 U	4 U	1 U
4-Dichlorobenzene	UG/L	0	0%	4.7	0	0	54	1 U	5 U	1 U	4 U	1 U
etone	UG/L	1	4%		0	2	54	5 R	25 R	5 U	19 R	5 UJ
nzene	UG/L	0	0%	0.7	0	0	54	1 U	5 U	1 U	4 U	1 U
omochloromethane	UG/L	0	0%		0	0	54	1 U	5 U	1 U	4 U	1 U
omodichloromethane	UG/L	0	0%		0	0	54	1 U	5 U	1 U	4 U	1 U
omoform	UG/L	0	0%		0	0	54	1 U	5 U	1 U	4 U	1 U
rbon disulfide	UG/L	0	0%		0	0	54	1 U	5 U	1 U	4 U	1 U
rbon tetrachloride	UG/L	0	0%	5	0	0	54	1 U	5 U	1 U	4 U	1 U
lorobenzene	UG/L	0	0%	5	0	0	54	1 U	5 U	1 U	4 U	1 U
lorodibromomethane	UG/L	0	0%		0	0	54	1 U	5 U	1 U	4 U	1 U
loroethane	UG/L	0	0%	5	0	0	54	1 U	5 U	1 U	4 U	1 U
loroform	UG/L	0	0%	7	0	0	54	1 U	5 U	1 U	4 U	1 UJ
s-1,2-Dichloroethene	UG/L	980	28%	5	14	15	54	6	76	1 U	72	1 U
s-1,3-Dichloropropene	UG/L	0	0%	5	0	0	54	1 U	5 U	1 U	4 U	1 U
hyl benzene	UG/L	0	0%	5	0	0	54	1 U	5 U	1 U	4 U	1 U
ethyl bromide	UG/L	0	0%		0	0	54	1 U	5 U	1 U	4 U	1 UJ
ethyl butyl ketone	UG/L	0	0%		0	0	54	5 UJ	25 UJ	5 U	19 UJ	5 U
ethyl chloride	UG/L	0	0%	5	0	0	54	1 U	5 U	1 U	4 U	1 UJ
ethyl ethyl ketone	UG/L	0	0%	50	0	0	54	5 U	25 U	5 U	19 U	5 UJ
ethyl isobutyl ketone	UG/L	0	0%		0	0	54	5 U	25 U	5 U	19 U	5 U
ethylene chloride	UG/L	0	0%	5	0	0	54	2 U	10 U	2 U	8 U	2 U
yrene	UG/L	0	0%		0	0	54	1 U	5 U	1 U	4 U	1 U
trachloroethene	UG/L	0	0%	5	0	0	54	1 U	5 U	1 U	4 U	1 U
luene	UG/L	2	6%	5	0	3	54	1 U	5 U	1 U	4 U	1 U
tal Xylenes	UG/L	0	0%	5	0	0	54	1 U	5 U	1 U	4 U	1 U
ans-1,2-Dichloroethene	UG/L	2	4%	5	0	2	54	1 U	2 J	1 U	4 U	1 U
ans-1,3-Dichloropropene	UG/L	0	0%	5	0	0	54	1 U	5 U	1 U	4 U	1 U
chloroethene	UG/L	760	28%	5	8	15	54	2	65	1 U	4	1 U
hyl chloride	UG/L	25	2%	2	1	1	54	1 U	5 U	1 U	4 U	1 UJ
ETALS												
uminum	UG/L	7700	49%		0	25	51	34.4 UJ	34.4 UJ	243 J	34.4 UJ	15.5 UJ

APPENDIX C2
GROUND WATER CHEMICAL RESULTS - 1Q 2000
GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

						FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
						LOCATION ID		PT-21A	PT-22	PT-23	PT-24	PT-25
						MATRIX		GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
						SAMPLE ID		ARD2150	ARD2151	ARD2123	ARD2144	ARD2116
						DEPTH TO TOP OF SAMPLE		17.5	11.3	10.8	10.4	10
						DEPTH TO BOTTOM OF SAMPLE		17.5	11.3	10.8	10.4	10
						SAMPLE DATE		1/21/2000	1/21/2000	1/10/2000	1/20/2000	1/9/2000
						QC CODE		SA	SA	SA	SA	SA
UDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESI	ASH REMEDIAL DESIGN	ASH REMEDIAL D
MPLE ROUND			OF	CLASS GA	ABOVE	OF	OF	2	2	2	2	2
RAMETER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N	N	N	N	N
timony	UG/L	4.5	12%		0	6	51	5.4 U	2.2 U	2.6 J	2.2 U	2.2 U
senic	UG/L	5	22%	25	0	11	51	2.4 U	2.5 U	2.5 U	3.1 J	2.5 U
rium	UG/L	173	100%	1000	0	51	51	69.2 J	74.9 J	37.8 J	31.1 J	24.7 J
ryllium	UG/L	0.26	14%		0	7	51	0.6 U	0.1 U	0.1 U	0.1 U	0.1 U
dmium	UG/L	0.35	2%	10	0	1	51	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
lcium	UG/L	391000	100%		0	51	51	164000	247000	102000	91400	68100
romium	UG/L	4.1	14%	50	0	7	51	1 U	1 U	1 U	1 U	1 U
balt	UG/L	2	6%		0	3	51	3.5 U	1.3 U	1.3 U	1.3 U	1.3 U
pper	UG/L	14.6	33%	200	0	17	51	3 J	1.9 U	1.9 U	1.9 U	1.6 U
anide	UG/L	0	0%	100	0	0	51	10 U	10 U	10 U	10 U	10 U
n	UG/L	6350	63%	300	14	32	51	**369**	20.3 U	**386** J	20.3 U	20.3 UJ
ad	UG/L	3.8	10%	25	0	5	51	1 U	1 U	1.3 U	1 U	1.3 U
gnesium	UG/L	85900	100%		0	51	51	37800	26400	10800	9800	7480
nganese	UG/L	344	100%	300	2	51	51	**344**	10 J	5.6 J	198	2.4 J
rcury	UG/L	0.14	2%	2	0	1	51	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
ckel	UG/L	6.2	10%		0	5	51	4.2 U	1.7 U	1.7 U	1.7 U	1.7 U
tassium	UG/L	25600	100%		0	51	51	10300	879 J	574 J	753 J	626 J
lenium	UG/L	3	2%	10	0	1	51	2.2 U	2.2 U	2.2 U	2.2 U	2.5 U
ver	UG/L	2.8	2%	50	0	1	51	1 UJ	1.3 UJ	1.3 UJ	1.3 UJ	1 UJ
dium	UG/L	175000	90%	20000	23	46	51	**36300**	**43700**	5850	12000 U	10100
allium	UG/L	7.4	6%		0	3	51	3.2 UJ	3.2 UJ	3.2 UJ	3.2 UJ	3.2 U
nadium	UG/L	10.8	8%		0	4	51	2.8 U	1.8 U	1.8 U	1.8 U	1.8 U
nc	UG/L	1620	100%	300	1	51	51	3 J	4.3 J	5 J	4.7 J	4 J

APPENDIX C2
GROUND WATER CHEMICAL RESULTS - 1Q 2000
GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY	ASH LANDFILL
LOCATION ID	PT-26
MATRIX	GROUND WATER
SAMPLE ID	ARD2138
DEPTH TO TOP OF SAMPLE	13.5
DEPTH TO BOTTOM OF SAMPLE	13.5
SAMPLE DATE	1/29/2000
QC CODE	SA

STUDY ID				NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESIGN
SAMPLE ROUND			FREQUENCY OF	CLASS GA	ABOVE	OF	OF	2
PARAMETER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N
VOLATILE ORGANICS								
1,1,1-Trichloroethane	UG/L	0	0%	5	0	0	54	1 U
1,1,2,2-Tetrachloroethane	UG/L	0	0%	5	0	0	54	1 U
1,1,2-Trichloroethane	UG/L	0	0%		0	0	54	1 U
1,1-Dichloroethane	UG/L	0	0%	5	0	0	54	1 U
1,1-Dichloroethene	UG/L	0	0%	5	0	0	54	1 U
1,2,4-Trichlorobenzene	UG/L	0	0%	5	0	0	54	1 U
1,2-Dibromo-3-chloropropane	UG/L	0	0%		0	0	54	1 U
1,2-Dibromoethane	UG/L	0	0%		0	0	54	1 U
1,2-Dichlorobenzene	UG/L	0	0%	4.7	0	0	54	1 U
1,2-Dichloroethane	UG/L	3	2%	5	0	1	54	1 U
1,2-Dichloropropane	UG/L	0	0%	5	0	0	54	1 U
1,3-Dichlorobenzene	UG/L	0	0%	5	0	0	54	1 U
1,4-Dichlorobenzene	UG/L	0	0%	4.7	0	0	54	1 U
Acetone	UG/L	1	4%		0	2	54	5 UJ
Benzene	UG/L	0	0%	0.7	0	0	54	1 U
Bromochloromethane	UG/L	0	0%		0	0	54	1 U
Bromodichloromethane	UG/L	0	0%		0	0	54	1 U
Bromoform	UG/L	0	0%		0	0	54	1 U
Carbon disulfide	UG/L	0	0%		0	0	54	1 U
Carbon tetrachloride	UG/L	0	0%	5	0	0	54	1 U
Chlorobenzene	UG/L	0	0%	5	0	0	54	1 U
Chlorodibromomethane	UG/L	0	0%		0	0	54	1 U
Chloroethane	UG/L	0	0%	5	0	0	54	1 U
Chloroform	UG/L	0	0%	7	0	0	54	1 U
Cis-1,2-Dichloroethene	UG/L	980	28%	5	14	15	54	1 U
Cis-1,3-Dichloropropene	UG/L	0	0%	5	0	0	54	1 U
Ethyl benzene	UG/L	0	0%	5	0	0	54	1 U
Methyl bromide	UG/L	0	0%		0	0	54	1 U
Methyl butyl ketone	UG/L	0	0%		0	0	54	5 U
Methyl chloride	UG/L	0	0%	5	0	0	54	1 U
Methyl ethyl ketone	UG/L	0	0%	50	0	0	54	5 U
Methyl isobutyl ketone	UG/L	0	0%		0	0	54	5 U
Methylene chloride	UG/L	0	0%	5	0	0	54	2 U
Styrene	UG/L	0	0%		0	0	54	1 U
Tetrachloroethene	UG/L	0	0%	5	0	0	54	1 U
Toluene	UG/L	2	6%	5	0	3	54	1 U
Total Xylenes	UG/L	0	0%	5	0	0	54	1 U
Trans-1,2-Dichloroethene	UG/L	2	4%	5	0	2	54	1 U
Trans-1,3-Dichloropropene	UG/L	0	0%	5	0	0	54	1 U
Trichloroethene	UG/L	760	28%	5	8	15	54	1 U
Vinyl chloride	UG/L	25	2%	2	1	1	54	1 U
METALS								
Aluminum	UG/L	7700	49%		0	25	51	303 J

APPENDIX C2
GROUND WATER CHEMICAL RESULTS - 1Q 2000
GROUNDWATER MONITORING - ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

						FACILITY		ASH LANDFILL
						LOCATION ID		PT-26
						MATRIX		GROUND WATER
						SAMPLE ID		ARD2138
						DEPTH TO TOP OF SAMPLE		13.5
						DEPTH TO BOTTOM OF SAMPLE		13.5
						SAMPLE DATE		1/29/2000
						QC CODE		SA
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESIGN
SAMPLE ROUND			OF	CLASS GA	ABOVE	OF	OF	2
PARAMETER	UNIT	MAXIMUM	DETECTION	STD.	STD.	DETECTS	ANALYSES	N
Antimony	UG/L	4.5	12%		0	6	51	4.5 J
Arsenic	UG/L	5	22%	25	0	11	51	5 J
Barium	UG/L	173	100%	1000	0	51	51	78.9 J
Beryllium	UG/L	0.26	14%		0	7	51	0.1 U
Cadmium	UG/L	0.35	2%	10	0	1	51	0.2 U
Calcium	UG/L	391000	100%		0	51	51	91400
Chromium	UG/L	4.1	14%	50	0	7	51	1 U
Cobalt	UG/L	2	6%		0	3	51	1.3 U
Copper	UG/L	14.6	33%	200	0	17	51	1.9 U
Cyanide	UG/L	0	0%	100	0	0	51	10 U
Iron	UG/L	6350	63%	300	14	32	51	251 J
Lead	UG/L	3.8	10%	25	0	5	51	1.3 U
Magnesium	UG/L	85900	100%		0	51	51	33100
Manganese	UG/L	344	100%	300	2	51	51	23.7
Mercury	UG/L	0.14	2%	2	0	1	51	0.1 U
Nickel	UG/L	6.2	10%		0	5	51	1.7 U
Potassium	UG/L	25600	100%		0	51	51	1850 J
Selenium	UG/L	3	2%	10	0	1	51	2.2 U
Silver	UG/L	2.8	2%	50	0	1	51	1.3 UJ
Sodium	UG/L	175000	90%	20000	23	46	51	**38400**
Thallium	UG/L	7.4	6%		0	3	51	3.2 U
Vanadium	UG/L	10.8	8%		0	4	51	1.8 U
Zinc	UG/L	1620	100%	300	1	51	51	5.1 J

APPENDIX C3
GROUNDWATER MONITORING - ASH LANDFILL
CHEMICAL RESULTS TRENCH WELLS -2Q 1999
SENECA ARMY DEPOT ACTIVITY

		MAXIMUM	FREQUENCY OF DETECTION	NYS CLASS GA STANDARD	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	ASH LANDFILL MWT-1 GROUND WATER TR2002 8 8 4/26/1999 SA ASH TRENCH	ASH LANDFILL MWT-10 GROUND WATER TR2001 7 7 4/26/1999 SA ASH TRENCH	ASH LAND MWT-11 GROUND W TR2000 8 8 4/26/1999 SA ASH TREN
Trichloroethane	UG/L	0	0%	5	0	0	12	4 U	1 U	1
2-Tetrachloroethane	UG/L	0	0%	5	0	0	12	4 U	1 U	1
Trichloroethane	UG/L	0	0%		0	0	12	4 U	1 U	1
chloroethane	UG/L	0	0%	5	0	0	12	4 U	1 U	1
chloroethene	UG/L	0	0%	5	0	0	12	4 U	1 U	1
bromo-3-chloropropane	UG/L	0	0%		0	0	12	4 U	1 U	1
bromoethane	UG/L	0	0%		0	0	12	4 U	1 U	1
chloroethane	UG/L	0	0%	5	0	0	12	4 U	1 U	1
chloropropane	UG/L	0	0%	5	0	0	12	4 U	1 U	1
ne	UG/L	16	42%		0	5	12	20 U	5 U	5
ne	UG/L	0.9	50%	0.7	1	6	12	4 U	0.7 J	1
chloromethane	UG/L	0	0%		0	0	12	4 U	1 U	1
dichloromethane	UG/L	0	0%		0	0	12	4 U	1 U	1
form	UG/L	0	0%		0	0	12	4 U	1 U	1
n disulfide	UG/L	1	8%		0	1	12	4 U	1 U	1
n tetrachloride	UG/L	0	0%	5	0	0	12	4 U	1 U	1
benzene	UG/L	0	0%	5	0	0	12	4 U	1 U	1
dibromomethane	UG/L	0	0%		0	0	12	4 U	1 U	1
ethane	UG/L	0	0%	5	0	0	12	4 U	1 U	1
form	UG/L	0	0%	7	0	0	12	4 U	1 U	1
2-Dichloroethene	UG/L	73	83%	5	7	10	12	**73**	**6**	1
3-Dichloropropene	UG/L	0	0%	5	0	0	12	4 U	1 U	1
benzene	UG/L	0	0%	5	0	0	12	4 U	1 U	1
bromide	UG/L	0	0%		0	0	12	4 U	1 U	1
butyl ketone	UG/L	0	0%		0	0	12	20 U	5 U	5
chloride	UG/L	0	0%	5	0	0	12	4 U	1 U	1
ethyl ketone	UG/L	0	0%	50	0	0	12	20 U	5 U	5
isobutyl ketone	UG/L	0	0%		0	0	12	20 U	5 U	5
ene chloride	UG/L	0	0%	5	0	0	12	8 U	2 U	2
e	UG/L	0	0%		0	0	12	4 U	1 U	1
hloroethene	UG/L	0	0%	5	0	0	12	4 U	1 U	1
e	UG/L	0.7	17%	5	0	2	12	4 U	1 U	1
Xylenes	UG/L	0	0%	5	0	0	12	4 U	1 U	1

APPENDIX C3
GROUNDWATER MONITORING - ASH LANDFILL
CHEMICAL RESULTS TRENCH WELLS -2Q 1999
SENECA ARMY DEPOT ACTIVITY

								ASH LANDFILL MWT-1 GROUND WATER TR2002	ASH LANDFILL MWT-10 GROUND WATER TR2001	ASH LAND MWT-11 GROUND W TR2000
								8	7	8
								8	7	8
		MAXIMUM	FREQUENCY OF DETECTION	NYS CLASS GA STANDARD	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	4/26/1999 SA ASH TRENCH	4/26/1999 SA ASH TRENCH	4/26/1999 SA ASH TREN
1,2-Dichloroethene	UG/L	0	0%	5	0	0	12	4 U	1 U	1
1,3-Dichloropropene	UG/L	0	0%	5	0	0	12	4 U	1 U	1
roethene	UG/L	430	50%	5	3	6	12	**23**	1 U	1
hloride	UG/L	0	0%	2	0	0	12	4 U	1 U	1
Trichlorobenzene	UG/L	0	0%	5	0	0	12	4 U	1 U	1
chlorobenzene	UG/L	0	0%	4.7	0	0	12	4 U	1 U	1
chlorobenzene	UG/L	0	0%	5	0	0	12	4 U	1 U	1
chlorobenzene	UG/L	0	0%	4.7	0	0	12	4 U	1 U	1
m	UG/L	264000	100%		0	12	12	122000	49900	102000
	UG/L	548000	100%	300	9	12	12	**403**	**13100**	54.6
sium	UG/L	74400	100%		0	12	12	13800	10600	12800
nese	UG/L	6260	100%	300	5	12	12	13.2 B	191	78
sium	UG/L	15100	100%		0	12	12	.1460 B	1520 B	5600
n	UG/L	16400	100%	20000	0	12	12	9010	8860	12300

APPENDIX C3
GROUNDWATER MONITORING - ASH LANDFILL
CHEMICAL RESULTS TRENCH WELLS -2Q 1999
SENECA ARMY DEPOT ACTIVITY

								ASH LANDFILL MWT-2 GROUND WATER TR2008	ASH LANDFILL MWT-3 GROUND WATER TR2007	ASH LANDF MWT-4 GROUND W TR2004
								11.3	8	10
								11.3	8	10
		MAXIMUM	FREQUENCY OF DETECTION	NYS CLASS GA STANDARD	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	4/28/1999 SA ASH TRENCH	4/27/1999 SA ASH TRENCH	4/26/1999 SA ASH TRENC
richloroethane	UG/L	0	0%	5	0	0	12	1 U	2 U	3 U
-Tetrachloroethane	UG/L	0	0%	5	0	0	12	1 U	2 U	3 U
richloroethane	UG/L	0	0%		0	0	12	1 U	2 U	3 U
hloroethane	UG/L	0	0%	5	0	0	12	1 U	2 U	3 U
hloroethene	UG/L	0	0%	5	0	0	12	1 U	2 U	3 U
romo-3-chloropropane	UG/L	0	0%		0	0	12	1 U	2 U	3 U
romoethane	UG/L	0	0%		0	0	12	1 U	2 U	3 U
hloroethane	UG/L	0	0%	5	0	0	12	1 U	2 U	3 U
hloropropane	UG/L	0	0%	5	0	0	12	1 U	2 U	3 U
e	UG/L	16	42%		0	5	12	6	8 U	14 U
e	UG/L	0.9	50%	0.7	1	6	12	0.7 J	0.4 J	3 U
chloromethane	UG/L	0	0%		0	0	12	1 U	2 U	3 U
dichloromethane	UG/L	0	0%		0	0	12	1 U	2 U	3 U
form	UG/L	0	0%		0	0	12	1 U	2 U	3 U
disulfide	UG/L	1	8%		0	1	12	1	2 U	3 U
tetrachloride	UG/L	0	0%	5	0	0	12	1 U	2 U	3 U
benzene	UG/L	0	0%	5	0	0	12	1 U	2 U	3 U
dibromomethane	UG/L	0	0%		0	0	12	1 U	2 U	3 U
ethane	UG/L	0	0%	5	0	0	12	1 U	2 U	3 U
form	UG/L	0	0%	7	0	0	12	1 U	2 U	3 U
-Dichloroethene	UG/L	73	83%	5	7	10	12	**30** E	**27**	**49**
-Dichloropropene	UG/L	0	0%	5	0	0	12	1 U	2 U	3 U
enzene	UG/L	0	0%	5	0	0	12	1 U	2 U	3 U
bromide	UG/L	0	0%		0	0	12	1 U	2 U	3 U
butyl ketone	UG/L	0	0%		0	0	12	5 U	8 U	14 U
chloride	UG/L	0	0%	5	0	0	12	1 U	2 U	3 U
ethyl ketone	UG/L	0	0%	50	0	0	12	5 U	8 U	14 U
isobutyl ketone	UG/L	0	0%		0	0	12	5 U	8 U	14 U
ene chloride	UG/L	0	0%	5	0	0	12	2 U	3 U	6 U
e	UG/L	0	0%		0	0	12	1 U	2 U	3 U
hloroethene	UG/L	0	0%	5	0	0	12	1 U	2 U	3 U
e	UG/L	0.7	17%	5	0	2	12	0.7 J	2 U	3 U
ylenes	UG/L	0	0%	5	0	0	12	1 U	2 U	3 U

APPENDIX C3
GROUNDWATER MONITORING - ASH LANDFILL
CHEMICAL RESULTS TRENCH WELLS -2Q 1999
SENECA ARMY DEPOT ACTIVITY

								ASH LANDFILL	ASH LANDFILL	ASH LANDI
								MWT-2	MWT-3	MWT-4
								GROUND WATER	GROUND WATER	GROUND W
								TR2008	TR2007	TR2004
								11.3	8	10
								11.3	8	10
			FREQUENCY	NYS	NUMBER	NUMBER	NUMBER	4/28/1999	4/27/1999	4/26/1999
			OF	CLASS GA	ABOVE	OF	OF	SA	SA	SA
		MAXIMUM	DETECTION	STANDARD	TAGM	DETECTS	ANALYSES	ASH TRENCH	ASH TRENCH	ASH TRENC
1,2-Dichloroethene	UG/L	0	0%	5	0	0	12	1 U	2 U	3 U
1,3-Dichloropropene	UG/L	0	0%	5	0	0	12	1 U	2 U	3 U
roethene	UG/L	430	50%	5	3	6	12	1	1 J	2 J
hloride	UG/L	0	0%	2	0	0	12	1 U	2 U	3 U
Trichlorobenzene	UG/L	0	0%	5	0	0	12	1 U	2 U	3 U
chlorobenzene	UG/L	0	0%	4.7	0	0	12	1 U	2 U	3 U
chlorobenzene	UG/L	0	0%	5	0	0	12	1 U	2 U	3 U
chlorobenzene	UG/L	0	0%	4.7	0	0	12	1 U	2 U	3 U
m	UG/L	264000	100%		0	12	12	264000	58000	118000
	UG/L	548000	100%	300	9	12	12	**523000**	**3600**	**983**
sium	UG/L	74400	100%		0	12	12	60800	13000	14300
nese	UG/L	6260	100%	300	5	12	12	**6260**	**611**	37.1
ium	UG/L	15100	100%		0	12	12	15100	1900 B	1860 B
n	UG/L	16400	100%	20000	0	12	12	7410	9240	15900

APPENDIX C3
GROUNDWATER MONITORING - ASH LANDFILL
CHEMICAL RESULTS TRENCH WELLS -2Q 1999
SENECA ARMY DEPOT ACTIVITY

		MAXIMUM	FREQUENCY OF DETECTION	NYS CLASS GA STANDARD	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	ASH LANDFILL MWT-5 GROUND WATER TR2009 11.1 11.1 4/28/1999 SA ASH TRENCH	ASH LANDFILL MWT-6 GROUND WATER TR2006 10.5 10.5 4/28/1999 SA ASH TRENCH	ASH LANDI MWT-6 GROUND W TR2011 10.5 10.5 4/28/1999 DU ASH TREN
Trichloroethane	UG/L	0	0%	5	0	0	12	1 U	1 U	1
2-Tetrachloroethane	UG/L	0	0%	5	0	0	12	1 U	1 U	1
Trichloroethane	UG/L	0	0%		0	0	12	1 U	1 U	1
chloroethane	UG/L	0	0%	5	0	0	12	1 U	1 U	1
chloroethene	UG/L	0	0%	5	0	0	12	1 U	1 U	1
bromo-3-chloropropane	UG/L	0	0%		0	0	12	1 U	1 U	1
bromoethane	UG/L	0	0%		0	0	12	1 U	1 U	1
chloroethane	UG/L	0	0%	5	0	0	12	1 U	1 U	1
chloropropane	UG/L	0	0%	5	0	0	12	1 U	1 U	1
ne	UG/L	16	42%		0	5	12	7	5	6
ne	UG/L	0.9	50%	0.7	1	6	12	0.9 J	0.7 J	0.7
chloromethane	UG/L	0	0%		0	0	12	1 U	1 U	1
dichloromethane	UG/L	0	0%		0	0	12	1 U	1 U	1
form	UG/L	0	0%		0	0	12	1 U	1 U	1
n disulfide	UG/L	1	8%		0	1	12	1 U	1 U	1
n tetrachloride	UG/L	0	0%	5	0	0	12	1 U	1 U	1
benzene	UG/L	0	0%	5	0	0	12	1 U	1 U	1
dibromomethane	UG/L	0	0%		0	0	12	1 U	1 U	1
ethane	UG/L	0	0%	5	0	0	12	1 U	1 U	1
form	UG/L	0	0%	7	0	0	12	1 U	1 U	1
2-Dichloroethene	UG/L	73	83%	5	7	10	12	0.7 J	3	3
3-Dichloropropene	UG/L	0	0%	5	0	0	12	1 U	1 U	1
benzene	UG/L	0	0%	5	0	0	12	1 U	1 U	1
bromide	UG/L	0	0%		0	0	12	1 U	1 U	1
butyl ketone	UG/L	0	0%		0	0	12	5 U	5 U	5
chloride	UG/L	0	0%	5	0	0	12	1 U	1 U	1
ethyl ketone	UG/L	0	0%	50	0	0	12	5 U	5 U	5
isobutyl ketone	UG/L	0	0%		0	0	12	5 U	5 U	5
ene chloride	UG/L	0	0%	5	0	0	12	2 U	2 U	2
e	UG/L	0	0%		0	0	12	1 U	1 U	1
hloroethene	UG/L	0	0%	5	0	0	12	1 U	1 U	1
e	UG/L	0.7	17%	5	0	2	12	0.3 J	1 U	1
Xylenes	UG/L	0	0%	5	0	0	12	1 U	1 U	1

APPENDIX C3
GROUNDWATER MONITORING - ASH LANDFILL
CHEMICAL RESULTS TRENCH WELLS -2Q 1999
SENECA ARMY DEPOT ACTIVITY

		MAXIMUM	FREQUENCY OF DETECTION	NYS CLASS GA STANDARD	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	ASH LANDFILL MWT-5 GROUND WATER TR2009 11.1 11.1 4/28/1999 SA ASH TRENCH	ASH LANDFILL MWT-6 GROUND WATER TR2006 10.5 10.5 4/28/1999 SA ASH TRENCH	ASH LANDF MWT-6 GROUND W TR2011 10.5 10.5 4/28/1999 DU ASH TRENC
1,2-Dichloroethene	UG/L	0	0%	5	0	0	12	1 U	1 U	1 U
1,3-Dichloropropene	UG/L	0	0%	5	0	0	12	1 U	1 U	1 U
roethene	UG/L	430	50%	5	3	6	12	1 U	1 U	1 U
hloride	UG/L	0	0%	2	0	0	12	1 U	1 U	1 U
richlorobenzene	UG/L	0	0%	5	0	0	12	1 U	1 U	1 U
hlorobenzene	UG/L	0	0%	4.7	0	0	12	1 U	1 U	1 U
hlorobenzene	UG/L	0	0%	5	0	0	12	1 U	1 U	1 U
hlorobenzene	UG/L	0	0%	4.7	0	0	12	1 U	1 U	1 U
m	UG/L	264000	100%		0	12	12	177000	43800	44000
	UG/L	548000	100%	300	9	12	12	**548000**	244	**392**
sium	UG/L	74400	100%		0	12	12	74400	4920 B	4970 B
nese	UG/L	6260	100%	300	5	12	12	**5010**	170	169
ium	UG/L	15100	100%		0	12	12	14200	1910 B	2080 B
n	UG/L	16400	100%	20000	0	12	12	13900	16100	16100

APPENDIX C3
GROUNDWATER MONITORING - ASH LANDFILL
CHEMICAL RESULTS TRENCH WELLS -2Q 1999
SENECA ARMY DEPOT ACTIVITY

		MAXIMUM	FREQUENCY OF DETECTION	NYS CLASS GA STANDARD	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	ASH LANDFILL MWT-7 GROUND WATER TR2003 11.5 11.5 4/27/1999 SA ASH TRENCH	ASH LANDFILL MWT-8 GROUND WATER TR2010 11.58 11.58 4/28/1999 SA ASH TRENCH	ASH LAND MWT-9 GROUND W TR2005 12.14 12.14 4/27/1999 SA ASH TREN
Trichloroethane	UG/L	0	0%	5	0	0	12	22 U	1 U	2
2-Tetrachloroethane	UG/L	0	0%	5	0	0	12	22 U	1 U	2
Trichloroethane	UG/L	0	0%		0	0	12	22 U	1 U	2
chloroethane	UG/L	0	0%	5	0	0	12	22 U	1 U	2
chloroethene	UG/L	0	0%	5	0	0	12	22 U	1 U	2
bromo-3-chloropropane	UG/L	0	0%		0	0	12	22 U	1 U	2
bromoethane	UG/L	0	0%		0	0	12	22 U	1 U	2
chloroethane	UG/L	0	0%	5	0	0	12	22 U	1 U	2
chloropropane	UG/L	0	0%	5	0	0	12	22 U	1 U	2
ne	UG/L	16	42%		0	5	12	110 U	16	11
ne	UG/L	0.9	50%	0.7	1	6	12	22 U	1 U	2
chloromethane	UG/L	0	0%		0	0	12	22 U	1 U	2
dichloromethane	UG/L	0	0%		0	0	12	22 U	1 U	2
form	UG/L	0	0%		0	0	12	22 U	1 U	2
n disulfide	UG/L	1	8%		0	1	12	22 U	1 U	2
n tetrachloride	UG/L	0	0%	5	0	0	12	22 U	1 U	2
benzene	UG/L	0	0%	5	0	0	12	22 U	1 U	2
dibromomethane	UG/L	0	0%		0	0	12	22 U	1 U	2
ethane	UG/L	0	0%	5	0	0	12	22 U	1 U	2
form	UG/L	0	0%	7	0	0	12	22 U	1 U	2
2-Dichloroethene	UG/L	73	83%	5	7	10	12	**20** J	1 U	**32**
3-Dichloropropene	UG/L	0	0%	5	0	0	12	22 U	1 U	2
benzene	UG/L	0	0%	5	0	0	12	22 U	1 U	2
bromide	UG/L	0	0%		0	0	12	22 U	1 U	2
butyl ketone	UG/L	0	0%		0	0	12	110 U	5 U	11
chloride	UG/L	0	0%	5	0	0	12	22 U	1 U	2
ethyl ketone	UG/L	0	0%	50	0	0	12	110 U	5 U	11
isobutyl ketone	UG/L	0	0%		0	0	12	110 U	5 U	11
ene chloride	UG/L	0	0%	5	0	0	12	44 U	2 U	4
e	UG/L	0	0%		0	0	12	22 U	1 U	2
hloroethene	UG/L	0	0%	5	0	0	12	22 U	1 U	2
ne	UG/L	0.7	17%	5	0	2	12	22 U	1 U	2
Xylenes	UG/L	0	0%	5	0	0	12	22 U	1 U	2

APPENDIX C3
GROUNDWATER MONITORING - ASH LANDFILL
CHEMICAL RESULTS TRENCH WELLS -2Q 1999
SENECA ARMY DEPOT ACTIVITY

								ASH LANDFILL	ASH LANDFILL	ASH LANDF
								MWT-7	MWT-8	MWT-9
								GROUND WATER	GROUND WATER	GROUND W
								TR2003	TR2010	TR2005
								11.5	11.58	12.14
								11.5	11.58	12.14
			FREQUENCY	NYS	NUMBER	NUMBER	NUMBER	4/27/1999	4/28/1999	4/27/1999
			OF	CLASS GA	ABOVE	OF	OF	SA	SA	SA
		MAXIMUM	DETECTION	STANDARD	TAGM	DETECTS	ANALYSES	ASH TRENCH	ASH TRENCH	ASH TRENC
l,2-Dichloroethene	UG/L	0	0%	5	0	0	12	22 U	1 U	2 U
l,3-Dichloropropene	UG/L	0	0%	5	0	0	12	22 U	1 U	2 U
roethene	UG/L	430	50%	5	3	6	12	**430**	1 U	**43**
hloride	UG/L	0	0%	2	0	0	12	22 U	1 U	2 U
richlorobenzene	UG/L	0	0%	5	0	0	12	22 U	1 U	2 U
hlorobenzene	UG/L	0	0%	4.7	0	0	12	22 U	1 U	2 U
hlorobenzene	UG/L	0	0%	5	0	0	12	22 U	1 U	2 U
hlorobenzene	UG/L	0	0%	4.7	0	0	12	22 U	1 U	2 U
n	UG/L	264000	100%		0	12	12	122000	40200	36200
	UG/L	548000	100%	300	9	12	12	228	**37300**	**1010**
sium	UG/L	74400	100%		0	12	12	14300	9830	9520
nese	UG/L	6260	100%	300	5	12	12	22.5	**416**	**444**
um	UG/L	15100	100%		0	12	12	2030 B	6250	1600 B
	UG/L	16400	100%	20000	0	12	12	16400	10000	14100

APPENDIX C4
GROUND WATER CHEMICAL RESULTS - 3Q 2001
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

								FACILITY	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFIL
								LOCATION ID	FH-D	FH-S	MW-28	MW-44A	MW-48
								MATRIX	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWAT
								SAMPLE ID	ARD2157	ARD2158	ARD2159	ARD2161	ARD2162
								DEPTH TO TOP OF SAMPLE	0	0	9.39	11.98	10.58
								DEPTH TO BOTTON OF SAMPLE	0	0	9.39	11.98	10.58
								SAMPLE DATE	29-Aug-01	29-Aug-01	31-Aug-01	4-Sep-01	31-Aug-01
QC CODE									SA	SA	SA	SA	SA
STUDY ID			FREQUENCY			NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DE
SAMPLE ROUND			OF	Criteria	Criteria	ABOVE	OF	OF	16	16	16	16	16
PARAMETER	UNIT	MAXIMUM	DETECTION	Value	Source[1]	STD.	DETECTS	ANALYSES	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q
VOLATILE ORGANICS													
1,1,1,2-Tetrachloroethane	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
1,1,1-Trichloroethane	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
1,1,2,2-Tetrachloroethane	UG/L	0	0%			0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
1,1,2-Trichloroethane	UG/L	0	0%	1	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
1,1-Dichloroethane	UG/L	6	18%	5	GA	1	3	17	0.5 U	0.5 U	1 U	6 J	0.5 U
1,1-Dichloroethene	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
1,1-Dichloropropene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
1,2,3-Trichlorobenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
1,2,3-Trichloropropane	UG/L	0	0%	0.04	GA	0	0	11	0.5 U	0.5 U			0.5 U
1,2,4-Trichlorobenzene	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
1,2,4-Trimethylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
1,2-Dibromo-3-chloropropane	UG/L	0	0%	0.04	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
1,2-Dibromoethane	UG/L	0	0%	0.0006	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
1,2-Dichlorobenzene	UG/L	0	0%	3	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
1,2-Dichloroethane	UG/L	0.28	6%	0.6	GA	0	1	17	0.5 U	0.5 U	1 U	22 U	0.5 U
1,2-Dichloropropane	UG/L	0	0%	1	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
1,3,5-Trimethylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
1,3-Dichlorobenzene	UG/L	0	0%	3	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
1,3-Dichloropropane	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
1,4-Dichlorobenzene	UG/L	0	0%	3	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
2,2-Dichloropropane	UG/L	0	0%			0	0	11	0.5 U	0.5 U			0.5 U
2-Chlorotoluene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
2-Nitropropane	UG/L	0	0%			0	0	11	25 U	25 U			25 U
4-Bromofluorobenzene	UG/L	5	100%			0	6	6			5	5 J	
Acetone	UG/L	350	24%			0	4	17	5 U	5 U	5 UJ	110 UJ	5 U
Acrylonitrile	UG/L	0	0%	5	GA	0	0	11	0.5 UJ	0.5 UJ			0.5 U
Allyl chloride	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
Benzene	UG/L	0.81	12%	1	GA	0	2	17	0.5 U	0.5 U	1 U	22 U	0.5 U
Bromobenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
Bromochloromethane	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
Bromodichloromethane	UG/L	0.87	6%	80	MCL	0	1	17	0.87	0.5 U	1 U	22 U	0.5 U
Bromoform	UG/L	0.62	6%	80	MCL	0	1	17	0.62	0.5 U	1 U	22 U	0.5 U
Butyl chloride	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
Carbon disulfide	UG/L	0.34	6%			0	1	17	0.5 U	0.34 J	1 U	22 U	0.5 U
Carbon tetrachloride	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
Chloroacetonitrile	UG/L	0	0%			0	0	11	25 R	25 R			25 R
Chlorobenzene	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
Chlorodibromomethane	UG/L	1.1	6%	80	MCL	0	1	17	1.1	0.5 U	1 U	22 U	0.5 U
Chloroethane	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
Chloroform	UG/L	0.46	6%	7	GA	0	1	17	0.46 J	0.5 U	1 U	22 U	0.5 U
Cis-1,2-Dichloroethene	UG/L	2300	82%	5	GA	13	14	17	0.5 U	0.5 U	21	440	0.5 U
Cis-1,3-Dichloropropene	UG/L	0	0%	0.4	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U

APPENDIX C4
GROUND WATER CHEMICAL RESULTS - 3Q 2001
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
							LOCATION ID		FH-D	FH-S	MW-28	MW-44A	MW-48
							MATRIX		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWAT
							SAMPLE ID		ARD2157	ARD2158	ARD2159	ARD2161	ARD2162
							DEPTH TO TOP OF SAMPLE		0	0	9.39	11.98	10.58
							DEPTH TO BOTTON OF SAMPLE		0	0	9.39	11.98	10.58
							SAMPLE DATE		29-Aug-01	29-Aug-01	31-Aug-01	4-Sep-01	31-Aug-01
QC CODE									SA	SA	SA	SA	SA
STUDY ID			FREQUENCY			NUMBER	NUMBER	NUMBER	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DESIGN	ASH REMEDIAL DES
SAMPLE ROUND			OF	Criteria	Criteria	ABOVE	OF	OF	16	16	16	16	16
PARAMETER	UNIT	MAXIMUM	DETECTION	Value	Source[1]	STD.	DETECTS	ANALYSES	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q
Dichlorodifluoromethane	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
Dichloromethyl methyl ketone	UG/L	0	0%			0	0	11	25 R	25 R			25 R
Ethyl benzene	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
Ethyl ether	UG/L	0	0%			0	0	11	0.5 U	0.5 U			0.5 U
Ethyl methacrylate	UG/L	0	0%			0	0	11	0.5 U	0.5 U			0.5 U
Hexachlorobutadiene	UG/L	0	0%	0.5	GA	0	0	11	0.5 U	0.5 U			0.5 U
Hexachloroethane	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
Isopropylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
Meta/Para Xylene	UG/L	0	0%			0	0	11	0.5 U	0.5 U			0.5 U
Methacrylonitrile	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
Methyl 2-propenoate	UG/L	0	0%			0	0	11	0.5 U	0.5 U			0.5 U
Methyl Tertbutyl Ether	UG/L	0	0%			0	0	11	0.5 U	0.5 U			0.5 U
Methyl bromide	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
Methyl butyl ketone	UG/L	0	0%			0	0	17	2.5 UJ	2.5 UJ	5 UJ	110 UJ	2.5 U
Methyl chloride	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
Methyl ethyl ketone	UG/L	0	0%			0	0	17	5 U	5 U	5 U	110 U	5 U
Methyl iodide	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
Methyl isobutyl ketone	UG/L	0	0%			0	0	17	2.5 U	2.5 U	5 U	110 U	2.5 U
Methyl methacrylate	UG/L	0	0%	50	GA	0	0	11	0.5 U	0.5 U			0.5 U
Methylene bromide	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
Methylene chloride	UG/L	29	18%	5	GA	2	3	17	0.5 U	0.5 U	2 U	44 U	0.5 U
Naphthalene	UG/L	0	0%			0	0	11	0.5 U	0.5 U			0.5 U
Nitrobenzene	UG/L	0	0%	0.4	GA	0	0	11	25 R	25 R			25 R
Ortho Xylene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
Pentachloroethane	UG/L	0	0%	5	GA	0	0	11	0.5 UJ	0.5 UJ			0.5 U
Propionitrile	UG/L	0	0%			0	0	11	25 U	25 U			25 U
Propylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
Styrene	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
Tetrachloroethene	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
Tetrahydrofuran	UG/L	0	0%			0	0	11	2.5 U	2.5 U			2.5 U
Toluene	UG/L	0.29	6%	5	GA	0	1	17	0.5 U	0.5 U	1 U	22 U	0.5 U
Total Xylenes	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
Trans-1,2-Dichloroethene	UG/L	0.71	29%	5	GA	0	5	17	0.5 U	0.5 U	0.3 J	22 U	0.5 U
Trans-1,3-Dichloropropene	UG/L	0	0%	0.4	GA	0	0	17	0.5 U	0.5 U	1 U	22 U	0.5 U
Trans-1,4-Dichloro-2-butene	UG/L	0	0%			0	0	11	0.5 U	0.5 U			0.5 U
Trichloroethene	UG/L	9100	82%	5	GA	9	14	17	0.5 U	0.5 U	20	9 J	0.24 J
Trichlorofluoromethane	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
Vinyl chloride	UG/L	120	18%	2	GA	2	3	17	0.5 U	0.5 U	1 U	120	0.5 U
n-Butylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
p-Chlorotoluene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
p-Isopropyltoluene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
sec-Butylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U
tert-Butylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U			0.5 U

Notes:
1. GA: NY State Class GA Groundwater Standard (TOGS 1.1.1, June 1998)
   MCL: US EPA Maximum Contaminant Limit, March 2001.

APPENDIX C4
GROUND WATER CHEMICAL RESULTS - 3Q 2001
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFIL
							LOCATION ID		MWT-1	MWT-10	MWT-3	MWT-4	MWT-6
							MATRIX		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWA
							SAMPLE ID		TR2072	TR2078	TR2073	TR2074	TR2080
							DEPTH TO TOP OF SAMPLE		9.25	8	9.5	11.78	11.78
							DEPTH TO BOTTON OF SAMPLE		9.25	8	9.5	11.78	11.78
							SAMPLE DATE		30-Aug-01	30-Aug-01	30-Aug-01	30-Aug-01	30-Aug-01
QC CODE									SA	SA	SA	SA	DU
STUDY ID			FREQUENCY			NUMBER	NUMBER	NUMBER	ASH TRENCH	ASH TRENCH	ASH TRENCH	ASH TRENCH	ASH TRENCH
SAMPLE ROUND			OF	Criteria	Criteria	ABOVE	OF	OF	16	16	16	16	16
PARAMETER	UNIT	MAXIMUM	DETECTION	Value	Source[1]	STD.	DETECTS	ANALYSES	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (
VOLATILE ORGANICS													
1,1,1,2-Tetrachloroethane	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
1,1,1-Trichloroethane	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
1,1,2,2-Tetrachloroethane	UG/L	0	0%			0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
1,1,2-Trichloroethane	UG/L	0	0%	1	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
1,1-Dichloroethane	UG/L	6	18%	5	GA	1	3	17	0.5 U	0.5 U	0.5 U	2.2 U	0.56 J
1,1-Dichloroethene	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
1,1-Dichloropropene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
1,2,3-Trichlorobenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
1,2,3-Trichloropropane	UG/L	0	0%	0.04	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
1,2,4-Trichlorobenzene	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
1,2,4-Trimethylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
1,2-Dibromo-3-chloropropane	UG/L	0	0%	0.04	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
1,2-Dibromoethane	UG/L	0	0%	0.0006	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
1,2-Dichlorobenzene	UG/L	0	0%	3	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
1,2-Dichloroethane	UG/L	0.28	6%	0.6	GA	0	1	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
1,2-Dichloropropane	UG/L	0	0%	1	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
1,3,5-Trimethylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
1,3-Dichlorobenzene	UG/L	0	0%	3	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
1,3-Dichloropropane	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
1,4-Dichlorobenzene	UG/L	0	0%	3	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
2,2-Dichloropropane	UG/L	0	0%			0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
2-Chlorotoluene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
2-Nitropropane	UG/L	0	0%			0	0	11	25 U	25 U	25 U	110 U	38 U
4-Bromofluorobenzene	UG/L	5	100%			0	6	6					
Acetone	UG/L	350	24%			0	4	17	5 U	5 UJ	52 J	55 J	7.5 U
Acrylonitrile	UG/L	0	0%	5	GA	0	0	11	0.5 UJ	0.5 UJ	0.5 UJ	2.2 UJ	0.75 U
Allyl chloride	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Benzene	UG/L	0.81	12%	1	GA	0	2	17	0.5 U	0.81	0.5 U	2.2 U	0.75 U
Bromobenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Bromochloromethane	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Bromodichloromethane	UG/L	0.87	6%	80	MCL	0	1	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Bromoform	UG/L	0.62	6%	80	MCL	0	1	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Butyl chloride	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Carbon disulfide	UG/L	0.34	6%			0	1	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Carbon tetrachloride	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Chloroacetonitrile	UG/L	0	0%			0	0	11	25 R	25 R	25 R	110 R	38 R
Chlorobenzene	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Chlorodibromomethane	UG/L	1.1	6%	80	MCL	0	1	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Chloroethane	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Chloroform	UG/L	0.46	6%	7	GA	0	1	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Cis-1,2-Dichloroethene	UG/L	2300	82%	5	GA	13	14	17	25	0.29 J	25	100	28
Cis-1,3-Dichloropropene	UG/L	0	0%	0.4	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U

APPENDIX C4
GROUND WATER CHEMICAL RESULTS - 3Q 2001
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
							LOCATION ID	MWT-1	MWT-10	MWT-3	MWT-4	MWT-6
							MATRIX	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWAT
							SAMPLE ID	TR2072	TR2078	TR2073	TR2074	TR2080
							DEPTH TO TOP OF SAMPLE	9.25	8	9.5	11.78	11.78
							DEPTH TO BOTTON OF SAMPLE	9.25	8	9.5	11.78	11.78
							SAMPLE DATE	30-Aug-01	30-Aug-01	30-Aug-01	30-Aug-01	30-Aug-01
QC CODE								SA	SA	SA	SA	DU
STUDY ID			FREQUENCY			NUMBER	NUMBER	NUMBER	ASH TRENCH	ASH TRENCH	ASH TRENCH	ASH TRENCH	ASH TRENCH
SAMPLE ROUND			OF	Criteria	Criteria	ABOVE	OF	OF	16	16	16	16	16
PARAMETER	UNIT	MAXIMUM	DETECTION	Value	Source[1]	STD.	DETECTS	ANALYSES	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q
Dichlorodifluoromethane	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Dichloromethyl methyl ketone	UG/L	0	0%			0	0	11	25 R	25 R	25 R	110 R	38 R
Ethyl benzene	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Ethyl ether	UG/L	0	0%			0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Ethyl methacrylate	UG/L	0	0%			0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Hexachlorobutadiene	UG/L	0	0%	0.5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Hexachloroethane	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Isopropylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Meta/Para Xylene	UG/L	0	0%			0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Methacrylonitrile	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Methyl 2-propenoate	UG/L	0	0%			0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Methyl Tertbutyl Ether	UG/L	0	0%			0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Methyl bromide	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Methyl butyl ketone	UG/L	0	0%			0	0	17	2.5 UJ	2.5 UJ	2.5 UJ	11 UJ	3.8 U
Methyl chloride	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Methyl ethyl ketone	UG/L	0	0%			0	0	17	5 U	5 U	5 U	22 U	7.5 U
Methyl iodide	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Methyl isobutyl ketone	UG/L	0	0%			0	0	17	2.5 U	2.5 U	2.5 U	11 U	3.8 U
Methyl methacrylate	UG/L	0	0%	50	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Methylene bromide	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Methylene chloride	UG/L	29	18%	5	GA	2	3	17	0.5 U	0.5 U	0.5 U	2.2 U	0.91 J
Naphthalene	UG/L	0	0%			0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Nitrobenzene	UG/L	0	0%	0.4	GA	0	0	11	25 R	25 R	25 R	110 R	38 R
Ortho Xylene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Pentachloroethane	UG/L	0	0%	5	GA	0	0	11	0.5 UJ	0.5 UJ	0.5 UJ	2.2 UJ	0.75 U
Propionitrile	UG/L	0	0%			0	0	11	25 U	25 U	25 U	110 U	38 U
Propylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Styrene	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Tetrachloroethene	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Tetrahydrofuran	UG/L	0	0%			0	0	11	2.5 U	2.5 U	2.5 U	11 U	3.8 U
Toluene	UG/L	0.29	6%	5	GA	0	1	17	0.5 U	0.29 J	0.5 U	2.2 U	0.75 U
Total Xylenes	UG/L	0	0%	5	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Trans-1,2-Dichloroethene	UG/L	0.71	29%	5	GA	0	5	17	0.27 J	0.5 U	0.71	2.2 U	0.42 J
Trans-1,3-Dichloropropene	UG/L	0	0%	0.4	GA	0	0	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Trans-1,4-Dichloro-2-butene	UG/L	0	0%			0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Trichloroethene	UG/L	9100	82%	5	GA	9	14	17	6.4	0.5 U	6.5	3.5	0.86
Trichlorofluoromethane	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
Vinyl chloride	UG/L	120	18%	2	GA	2	3	17	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
n-Butylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
p-Chlorotoluene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
p-Isopropyltoluene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
sec-Butylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U
tert-Butylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	0.5 U	0.5 U	2.2 U	0.75 U

Notes:

1. GA: NY State Class GA Groundwater Standard (TOGS 1.1.1, June 1998)
   MCL: US EPA Maximum Contaminant Limit, March 2001.

APPENDIX C4
GROUND WATER CHEMICAL RESULTS - 3Q 2001
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH
							LOCATION ID		MWT-6	MWT-7	MWT-9	PT-12A	PT-12A	PT-1
							MATRIX		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GRO
							SAMPLE ID		TR2075	TR2076	TR2077	ARD2167	ARD2164	ARD
							DEPTH TO TOP OF SAMPLE		11.78	12.97	13.6	12.3	12.38	
							DEPTH TO BOTTON OF SAMPLE		11.78	12.97	13.6	12.3	12.38	
							SAMPLE DATE		30-Aug-01	30-Aug-01	29-Aug-01	31-Aug-01	31-Aug-01	4-
QC CODE									SA	SA	SA	DU	SA	SA
STUDY ID			FREQUENCY			NUMBER	NUMBER	NUMBER	ASH TRENCH	ASH TRENCH	ASH TRENCH	ASH REMEDIAL	ASH REMEDIAL	ASH
SAMPLE ROUND			OF	Criteria	Criteria	ABOVE	OF	OF	16	16	16	16	16	
PARAMETER	UNIT	MAXIMUM	DETECTION	Value	Source[1]	STD.	DETECTS	ANALYSES	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	
VOLATILE ORGANICS														
1,1,1,2-Tetrachloroethane	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
1,1,1-Trichloroethane	UG/L	0	0%	5	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
1,1,2,2-Tetrachloroethane	UG/L	0	0%			0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
1,1,2-Trichloroethane	UG/L	0	0%	1	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
1,1-Dichloroethane	UG/L	6	18%	5	GA	1	3	17	0.65 J	16 U	4.4 U	100 U	130 U	
1,1-Dichloroethene	UG/L	0	0%	5	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
1,1-Dichloropropene	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
1,2,3-Trichlorobenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
1,2,3-Trichloropropane	UG/L	0	0%	0.04	GA	0	0	11	0.5 U	16 U	4.4 U			
1,2,4-Trichlorobenzene	UG/L	0	0%	5	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
1,2,4-Trimethylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
1,2-Dibromo-3-chloropropane	UG/L	0	0%	0.04	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
1,2-Dibromoethane	UG/L	0	0%	0.0006	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
1,2-Dichlorobenzene	UG/L	0	0%	3	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
1,2-Dichloroethane	UG/L	0.28	6%	0.6	GA	0	1	17	0.28 J	16 U	4.4 U	100 U	130 U	
1,2-Dichloropropane	UG/L	0	0%	1	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
1,3,5-Trimethylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
1,3-Dichlorobenzene	UG/L	0	0%	3	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
1,3-Dichloropropane	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
1,4-Dichlorobenzene	UG/L	0	0%	3	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
2,2-Dichloropropane	UG/L	0	0%			0	0	11	0.5 U	16 U	4.4 U			
2-Chlorotoluene	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
2-Nitropropane	UG/L	0	0%			0	0	11	25 U	780 U	220 U			
4-Bromofluorobenzene	UG/L	5	100%			0	6	6				5 J	5 J	
Acetone	UG/L	350	24%			0	4	17	120 J	160 UJ	350 J	510 UJ	640 UJ	
Acrylonitrile	UG/L	0	0%	5	GA	0	0	11	0.5 UJ	16 UJ	4.4 UJ			
Allyl chloride	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
Benzene	UG/L	0.81	12%	1	GA	0	2	17	0.31 J	16 U	4.4 U	100 U	130 U	
Bromobenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
Bromochloromethane	UG/L	0	0%	5	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
Bromodichloromethane	UG/L	0.87	6%	80	MCL	0	1	17	0.5 U	16 U	4.4 U	100 U	130 U	
Bromoform	UG/L	0.62	6%	80	MCL	0	1	17	0.5 U	16 U	4.4 U	100 U	130 U	
Butyl chloride	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
Carbon disulfide	UG/L	0.34	6%			0	1	17	0.5 U	16 U	4.4 U	100 U	130 U	
Carbon tetrachloride	UG/L	0	0%	5	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
Chloroacetonitrile	UG/L	0	0%			0	0	11	25 R	780 R	220 R			
Chlorobenzene	UG/L	0	0%	5	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
Chlorodibromomethane	UG/L	1.1	6%	80	MCL	0	1	17	0.5 U	16 U	4.4 U	100 U	130 U	
Chloroethane	UG/L	0	0%	5	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
Chloroform	UG/L	0.46	6%	7	GA	0	1	17	0.5 U	16 U	4.4 U	100 U	130 U	
Cis-1,2-Dichloroethene	UG/L	2300	82%	5	GA	13	14	17	29 J	42	160	2300	2200	
Cis-1,3-Dichloropropene	UG/L	0	0%	0.4	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	

APPENDIX C4
GROUND WATER CHEMICAL RESULTS - 3Q 2001
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

							FACILITY		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH
							LOCATION ID		MWT-6	MWT-7	MWT-9	PT-12A	PT-12A	PT-
							MATRIX		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GRO
							SAMPLE ID		TR2075	TR2076	TR2077	ARD2167	ARD2164	ARD
							DEPTH TO TOP OF SAMPLE		11.78	12.97	13.6	12.3	12.38	
							DEPTH TO BOTTON OF SAMPLE		11.78	12.97	13.6	12.3	12.38	
							SAMPLE DATE		30-Aug-01	30-Aug-01	29-Aug-01	31-Aug-01	31-Aug-01	4
QC CODE									SA	SA	SA	DU	SA	SA
STUDY ID			FREQUENCY			NUMBER	NUMBER	NUMBER	ASH TRENCH	ASH TRENCH	ASH TRENCH	ASH REMEDIAL	ASH REMEDIAL	ASH
SAMPLE ROUND			OF	Criteria	Criteria	ABOVE	OF	OF	16	16	16	16	16	
PARAMETER	UNIT	MAXIMUM	DETECTION	Value	Source[1]	STD.	DETECTS	ANALYSES	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	
Dichlorodifluoromethane	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
Dichloromethyl methyl ketone	UG/L	0	0%			0	0	11	25 R	780 R	220 R			
Ethyl benzene	UG/L	0	0%	5	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
Ethyl ether	UG/L	0	0%			0	0	11	0.5 U	16 U	4.4 U			
Ethyl methacrylate	UG/L	0	0%			0	0	11	0.5 U	16 U	4.4 U			
Hexachlorobutadiene	UG/L	0	0%	0.5	GA	0	0	11	0.5 U	16 U	4.4 U			
Hexachloroethane	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
Isopropylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
Meta/Para Xylene	UG/L	0	0%			0	0	11	0.5 U	16 U	4.4 U			
Methacrylonitrile	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
Methyl 2-propenoate	UG/L	0	0%			0	0	11	0.5 U	16 U	4.4 U			
Methyl Tertbutyl Ether	UG/L	0	0%			0	0	11	0.5 U	16 U	4.4 U			
Methyl bromide	UG/L	0	0%	5	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
Methyl butyl ketone	UG/L	0	0%			0	0	17	2.5 UJ	78 UJ	22 UJ	510 UJ	640 UJ	
Methyl chloride	UG/L	0	0%	5	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
Methyl ethyl ketone	UG/L	0	0%			0	0	17	5 U	160 U	44 U	510 U	640 U	
Methyl iodide	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
Methyl isobutyl ketone	UG/L	0	0%			0	0	17	2.5 U	78 U	22 U	510 U	640 U	
Methyl methacrylate	UG/L	0	0%	50	GA	0	0	11	0.5 U	16 U	4.4 U			
Methylene bromide	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
Methylene chloride	UG/L	29	18%	5	GA	2	3	17	0.5 UJ	29 J	9.9 J	200 U	260 U	
Naphthalene	UG/L	0	0%			0	0	11	0.5 U	16 U	4.4 U			
Nitrobenzene	UG/L	0	0%	0.4	GA	0	0	11	25 R	780 R	220 R			
Ortho Xylene	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
Pentachloroethane	UG/L	0	0%	5	GA	0	0	11	0.5 UJ	16 UJ	4.4 UJ			
Propionitrile	UG/L	0	0%			0	0	11	25 U	780 U	220 U			
Propylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
Styrene	UG/L	0	0%	5	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
Tetrachloroethene	UG/L	0	0%	5	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
Tetrahydrofuran	UG/L	0	0%			0	0	11	2.5 U	78 U	22 U			
Toluene	UG/L	0.29	6%	5	GA	0	1	17	0.5 U	16 U	4.4 U	100 U	130 U	
Total Xylenes	UG/L	0	0%	5	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
Trans-1,2-Dichloroethene	UG/L	0.71	29%	5	GA	0	5	17	0.25 J	16 U	4.4 U	100 U	130 U	
Trans-1,3-Dichloropropene	UG/L	0	0%	0.4	GA	0	0	17	0.5 U	16 U	4.4 U	100 U	130 U	
Trans-1,4-Dichloro-2-butene	UG/L	0	0%			0	0	11	0.5 U	16 U	4.4 U			
Trichloroethene	UG/L	9100	82%	5	GA	9	14	17	0.96 J	620	28	1000	1000	
Trichlorofluoromethane	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
Vinyl chloride	UG/L	120	18%	2	GA	2	3	17	0.26 J	16 U	4.4 U	38 J	130 U	
n-Butylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
p-Chlorotoluene	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
p-Isopropyltoluene	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
sec-Butylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			
tert-Butylbenzene	UG/L	0	0%	5	GA	0	0	11	0.5 U	16 U	4.4 U			

Notes:
1. GA: NY State Class GA Groundwater Standard (TOGS 1.1.1, June 1998)
   MCL: US EPA Maximum Contaminant Limit, March 2001.

APPENDIX C4
GROUND WATER CHEMICAL RESULTS - 3Q 2001
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

FACILITY	ASH LANDFILL
LOCATION ID	PT-24
MATRIX	GROUNDWATER
SAMPLE ID	ARD2166
DEPTH TO TOP OF SAMPLE	10.88
DEPTH TO BOTTON OF SAMPLE	10.88
SAMPLE DATE	31-Aug-01
QC CODE	SA
STUDY ID	ASH REMEDIAL
SAMPLE ROUND	16

PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	Criteria Value	Criteria Source[1]	NUMBER ABOVE STD.	NUMBER OF DETECTS	NUMBER OF ANALYSES	Value (Q)
VOLATILE ORGANICS									
1,1,1,2-Tetrachloroethane	UG/L	0	0%	5	GA	0	0	11	
1,1,1-Trichloroethane	UG/L	0	0%	5	GA	0	0	17	4 U
1,1,2,2-Tetrachloroethane	UG/L	0	0%			0	0	17	4 U
1,1,2-Trichloroethane	UG/L	0	0%	1	GA	0	0	17	4 U
1,1-Dichloroethane	UG/L	6	18%	5	GA	1	3	17	4 U
1,1-Dichloroethene	UG/L	0	0%	5	GA	0	0	17	4 U
1,1-Dichloropropene	UG/L	0	0%	5	GA	0	0	11	
1,2,3-Trichlorobenzene	UG/L	0	0%	5	GA	0	0	11	
1,2,3-Trichloropropane	UG/L	0	0%	0.04	GA	0	0	11	
1,2,4-Trichlorobenzene	UG/L	0	0%	5	GA	0	0	17	4 U
1,2,4-Trimethylbenzene	UG/L	0	0%	5	GA	0	0	11	
1,2-Dibromo-3-chloropropane	UG/L	0	0%	0.04	GA	0	0	17	4 U
1,2-Dibromoethane	UG/L	0	0%	0.0006	GA	0	0	17	4 U
1,2-Dichlorobenzene	UG/L	0	0%	3	GA	0	0	17	4 U
1,2-Dichloroethane	UG/L	0.28	6%	0.6	GA	0	1	17	4 U
1,2-Dichloropropane	UG/L	0	0%	1	GA	0	0	17	4 U
1,3,5-Trimethylbenzene	UG/L	0	0%	5	GA	0	0	11	
1,3-Dichlorobenzene	UG/L	0	0%	3	GA	0	0	17	4 U
1,3-Dichloropropane	UG/L	0	0%	5	GA	0	0	11	
1,4-Dichlorobenzene	UG/L	0	0%	3	GA	0	0	17	4 U
2,2-Dichloropropane	UG/L	0	0%			0	0	11	
2-Chlorotoluene	UG/L	0	0%	5	GA	0	0	11	
2-Nitropropane	UG/L	0	0%			0	0	11	
4-Bromofluorobenzene	UG/L	5	100%			0	6	6	4 J
Acetone	UG/L	350	24%			0	4	17	21 UJ
Acrylonitrile	UG/L	0	0%	5	GA	0	0	11	
Allyl chloride	UG/L	0	0%	5	GA	0	0	11	
Benzene	UG/L	0.81	12%	1	GA	0	2	17	4 U
Bromobenzene	UG/L	0	0%	5	GA	0	0	11	
Bromochloromethane	UG/L	0	0%	5	GA	0	0	17	4 U
Bromodichloromethane	UG/L	0.87	6%	80	MCL	0	1	17	4 U
Bromoform	UG/L	0.62	6%	80	MCL	0	1	17	4 U
Butyl chloride	UG/L	0	0%	5	GA	0	0	11	
Carbon disulfide	UG/L	0.34	6%			0	1	17	4 U
Carbon tetrachloride	UG/L	0	0%	5	GA	0	0	17	4 U
Chloroacetonitrile	UG/L	0	0%			0	0	11	
Chlorobenzene	UG/L	0	0%	5	GA	0	0	17	4 U
Chlorodibromomethane	UG/L	1.1	6%	80	MCL	0	1	17	4 U
Chloroethane	UG/L	0	0%	5	GA	0	0	17	4 U
Chloroform	UG/L	0.46	6%	7	GA	0	1	17	4 U
Cis-1,2-Dichloroethene	UG/L	2300	82%	5	GA	13	14	17	73
Cis-1,3-Dichloropropene	UG/L	0	0%	0.4	GA	0	0	17	4 U

APPENDIX C4
GROUND WATER CHEMICAL RESULTS - 3Q 2001
GROUNDWATER MONITORING -
ASH REMEDIAL DESIGN
SENECA ARMY DEPOT ACTIVITY - ROMULUS, NY

FACILITY	ASH LANDFILL
LOCATION ID	PT-24
MATRIX	GROUNDWATER
SAMPLE ID	ARD2166
DEPTH TO TOP OF SAMPLE	10.88
DEPTH TO BOTTON OF SAMPLE	10.88
SAMPLE DATE	31-Aug-01

QC CODE									SA
STUDY ID			FREQUENCY			NUMBER	NUMBER	NUMBER	ASH REMEDIAL
SAMPLE ROUND			OF	Criteria	Criteria	ABOVE	OF	OF	16
PARAMETER	UNIT	MAXIMUM	DETECTION	Value	Source[1]	STD.	DETECTS	ANALYSES	Value (Q)
Dichlorodifluoromethane	UG/L	0	0%	5	GA	0	0	11	
Dichloromethyl methyl ketone	UG/L	0	0%			0	0	11	
Ethyl benzene	UG/L	0	0%	5	GA	0	0	17	4 U
Ethyl ether	UG/L	0	0%			0	0	11	
Ethyl methacrylate	UG/L	0	0%			0	0	11	
Hexachlorobutadiene	UG/L	0	0%	0.5	GA	0	0	11	
Hexachloroethane	UG/L	0	0%	5	GA	0	0	11	
Isopropylbenzene	UG/L	0	0%	5	GA	0	0	11	
Meta/Para Xylene	UG/L	0	0%			0	0	11	
Methacrylonitrile	UG/L	0	0%	5	GA	0	0	11	
Methyl 2-propenoate	UG/L	0	0%			0	0	11	
Methyl Tertbutyl Ether	UG/L	0	0%			0	0	11	
Methyl bromide	UG/L	0	0%	5	GA	0	0	17	4 U
Methyl butyl ketone	UG/L	0	0%			0	0	17	21 UJ
Methyl chloride	UG/L	0	0%	5	GA	0	0	17	4 U
Methyl ethyl ketone	UG/L	0	0%			0	0	17	21 U
Methyl iodide	UG/L	0	0%	5	GA	0	0	11	
Methyl isobutyl ketone	UG/L	0	0%			0	0	17	21 U
Methyl methacrylate	UG/L	0	0%	50	GA	0	0	11	
Methylene bromide	UG/L	0	0%	5	GA	0	0	11	
Methylene chloride	UG/L	29	18%	5	GA	2	3	17	8 U
Naphthalene	UG/L	0	0%			0	0	11	
Nitrobenzene	UG/L	0	0%	0.4	GA	0	0	11	
Ortho Xylene	UG/L	0	0%	5	GA	0	0	11	
Pentachloroethane	UG/L	0	0%	5	GA	0	0	11	
Propionitrile	UG/L	0	0%			0	0	11	
Propylbenzene	UG/L	0	0%	5	GA	0	0	11	
Styrene	UG/L	0	0%	5	GA	0	0	17	4 U
Tetrachloroethene	UG/L	0	0%	5	GA	0	0	17	4 U
Tetrahydrofuran	UG/L	0	0%			0	0	11	
Toluene	UG/L	0.29	6%	5	GA	0	1	17	4 U
Total Xylenes	UG/L	0	0%	5	GA	0	0	17	4 U
Trans-1,2-Dichloroethene	UG/L	0.71	29%	5	GA	0	5	17	4 U
Trans-1,3-Dichloropropene	UG/L	0	0%	0.4	GA	0	0	17	4 U
Trans-1,4-Dichloro-2-butene	UG/L	0	0%			0	0	11	
Trichloroethene	UG/L	9100	82%	5	GA	9	14	17	3 J
Trichlorofluoromethane	UG/L	0	0%	5	GA	0	0	11	
Vinyl chloride	UG/L	120	18%	2	GA	2	3	17	4 U
n-Butylbenzene	UG/L	0	0%	5	GA	0	0	11	
p-Chlorotoluene	UG/L	0	0%	5	GA	0	0	11	
p-Isopropyltoluene	UG/L	0	0%	5	GA	0	0	11	
sec-Butylbenzene	UG/L	0	0%	5	GA	0	0	11	
tert-Butylbenzene	UG/L	0	0%	5	GA	0	0	11	

Notes:
1. GA: NY State Class GA Groundwater Standard (TOGS 1.1.1, June 1998)
   MCL: US EPA Maximum Contaminant Limit, March 2001.

TABLE 3-3
RESULTS OF VOC (METHOD 524.2) ANALYSIS - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

STUDY LOCATION:		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
LOC ID:		BN-S	FH-D	FH-S	MW-30
MATRIX:		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMP_ID:		ARD2168	ARD2169	ARD2170	ARD2172
SAMP. DEPTH TOP:		0	0	0	10.52
SAMP. DEPTH BOT:		0	0	0	10.52
SAMP. DATE		4/10/02	4/10/02	4/10/02	4/10/02
FIELD QC CODE:		SA	SA	SA	SA
Parameter	Action Level Units	Value (Q)	Value (Q)	Value (Q)	Value (Q)
1,1,1,2-Tetrachloroethane	5 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	5 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethan	5 UG/L				
1,1,2-Trichloroethane	1 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	5 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	5 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	5 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	0.04 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	5 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	5 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,2-Dibromo-3-chloropropane	0.04 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane	0.0006 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	3 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.6 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethene (total)	70 UG/L				
1,2-Dichloropropane	1 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	5 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	3 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	5 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	3 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
1,4-Dioxane	UG/L				
2,2-Dichloropropane	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
2-Chloroethylvinylether	UG/L				
2-Chlorotoluene	5 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
2-Nitropropane	UG/L	420 U	25 U	25 U	25 U
Acetone	UG/L	84 UJ	5 UJ	5 UJ	5 UJ
Acrolein	5 UG/L				
Acrylonitrile	5 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Allyl chloride	5 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Benzene	1 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Bromobenzene	5 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Bromochloromethane	5 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	80 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Bromoform	80 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Butyl chloride	5 UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	UG/L	8.4 U	0.5 U	0.5 U	0.5 U

Shade: Indicates concentration above detection limit
t Shade: Indicates concentration above action level.

TABLE 3-3
RESULTS OF VOC (METHOD 524.2) ANALYSIS - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

STUDY LOCATION:			ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
LOC ID:			BN-S	FH-D	FH-S	MW-30
MATRIX:			GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMP_ID:			ARD2168	ARD2169	ARD2170	ARD2172
SAMP. DEPTH TOP:			0	0	0	10.52
SAMP. DEPTH BOT:			0	0	0	10.52
SAMP. DATE			4/10/02	4/10/02	4/10/02	4/10/02
FIELD QC CODE:			SA	SA	SA	SA
Parameter	Action Level	Units	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Carbon tetrachloride	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Chloroacetonitrile		UG/L	420 R	25 R	25 R	25 R
Chlorobenzene	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Chlorodibromomethane	80	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Chloroethane	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Chloroform	7	UG/L	8.4 U	0.46 J	0.45 J	0.5 U
Chloroprene	5	UG/L				
Cis-1,2-Dichloroethene	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Cis-1,3-Dichloropropene	0.4	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Dichloromethyl methyl ketone		UG/L	420 R	25 R	25 R	25 R
Ethyl benzene	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Ethyl ether		UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Ethyl methacrylate		UG/L	8.4 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Hexachlorobutadiene	0.5	UG/L	8.4 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Hexachloroethane	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Isobutyl alcohol		UG/L				
Isopropylbenzene	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Meta/Para Xylene		UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Methacrylonitrile	5	UG/L	8.4 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Methyl 2-propenoate		UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Methyl Tertbutyl Ether		UG/L	470	0.5 U	0.5 U	0.5 U
Methyl bromide	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Methyl butyl ketone		UG/L	42 UJ	2.5 UJ	2.5 UJ	2.5 UJ
Methyl chloride	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Methyl ethyl ketone		UG/L	84 R	5 R	5 R	5 R
Methyl iodide	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Methyl isobutyl ketone		UG/L	42 U	2.5 U	2.5 U	2.5 U
Methyl methacrylate	50	UG/L	8.4 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Methylene bromide	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Methylene chloride	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Naphthalene		UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Nitrobenzene	0.4	UG/L	420 R	25 R	25 R	25 R
Ortho Xylene	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Pentachloroethane	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Propionitrile		UG/L	420 R	25 R	25 R	25 R
Propylbenzene	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Styrene	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Tetrahydrofuran		UG/L	42 U	2.5 U	2.5 U	2.5 U

Shade: Indicates concentration above detection limit
Shade: Indicates concentration above action level.

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TABLE 3-3
RESULTS OF VOC (METHOD 524.2) ANALYSIS - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

	STUDY LOCATION:		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
	LOC ID:		BN-S	FH-D	FH-S	MW-30
	MATRIX:		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
	SAMP_ID:		ARD2168	ARD2169	ARD2170	ARD2172
	SAMP. DEPTH TOP:		0	0	0	10.52
	SAMP. DEPTH BOT:		0	0	0	10.52
	SAMP. DATE		4/10/02	4/10/02	4/10/02	4/10/02
	FIELD QC CODE:		SA	SA	SA	SA
Parameter	Action Level	Units	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Toluene	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Total Xylenes	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Total Xylenes-A		UG/L				
Total Xylenes-B		UG/L				
Trans-1,2-Dichloroethene	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Trans-1,3-Dichloropropene	0.4	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Trans-1,4-Dichloro-2-butene		UG/L	8.4 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Trichloroethene	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
Vinyl acetate		UG/L				
Vinyl chloride	2	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
cis-1,4-Dichloro-2-butene		UG/L				
n-Butylbenzene	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
p-Chlorotoluene	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
p-Isopropyltoluene	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	5	UG/L	8.4 U	0.5 U	0.5 U	0.5 U

hade: Indicates concentration above detection limit
Shade: Indicates concentration above action level.

TABLE 3-3
RESULTS OF VOC (METHOD 524.2) ANALYSIS - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

STUDY LOCATION:			ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
LOC ID:			MW-56	MWT-1	MWT-10	MWT-11	MWT-3
MATRIX:			GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMP_ID:			ARD2173	TR2081	TR2087	TR2088	TR2082
SAMP. DEPTH TOP:			6.88	9.75	8.95	9.95	10
SAMP. DEPTH BOT:			6.88	9.75	8.95	9.95	10
SAMP. DATE			4/10/02	4/9/02	4/9/02	4/10/02	4/9/02
FIELD QC CODE:			SA	SA	SA	SA	SA
Parameter	Action Level	Units	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
1,1,1,2-Tetrachloroethane	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane		UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethan	5	UG/L					
1,1,2-Trichloroethane	1	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	0.04	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,2-Dibromo-3-chloropropane	0.04	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane	0.0006	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	3	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethene (total)	70	UG/L					
1,2-Dichloropropane	1	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	3	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	3	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
1,4-Dioxane		UG/L					
2,2-Dichloropropane		UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
2-Chloroethylvinylether		UG/L					
2-Chlorotoluene	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
2-Nitropropane		UG/L	25 U	90 U	25 U	25 U	25 U
Acetone		UG/L	5 UJ	25 J	5 UJ	5 UJ	5 UJ
Acrolein	5	UG/L					
Acrylonitrile	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Allyl chloride	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Benzene	1	UG/L	0.5 U	1.8 U	0.46 J	0.5 U	0.28 J
Bromobenzene	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Bromochloromethane	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	80	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Bromoform	80	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Butyl chloride	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Carbon disulfide		UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U

Shade: Indicates concentration above detection limit
Shade: Indicates concentration above action level.

TABLE 3-3
RESULTS OF VOC (METHOD 524.2) ANALYSIS - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

STUDY LOCATION:		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
LOC ID:		MW-56	MWT-1	MWT-10	MWT-11	MWT-3
MATRIX:		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
SAMP_ID:		ARD2173	TR2081	TR2087	TR2088	TR2082
SAMP. DEPTH TOP:		6.88	9.75	8.95	9.95	10
SAMP. DEPTH BOT:		6.88	9.75	8.95	9.95	10
SAMP. DATE		4/10/02	4/9/02	4/9/02	4/10/02	4/9/02
FIELD QC CODE:		SA	SA	SA	SA	SA
Parameter	Action Level Units	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Carbon tetrachloride	5 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Chloroacetonitrile	UG/L	25 R	90 R	25 R	25 R	25 R
Chlorobenzene	5 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Chlorodibromomethane	80 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Chloroethane	5 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Chloroform	7 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Chloroprene	5 UG/L					
Cis-1,2-Dichloroethene	5 UG/L	[redacted]	64	[redacted]	0.5 U	28
Cis-1,3-Dichloropropene	0.4 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Dichloromethyl methyl ketone	UG/L	25 R	90 R	25 R	25 R	25 R
Ethyl benzene	5 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Ethyl ether	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Ethyl methacrylate	UG/L	0.5 UJ	1.8 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Hexachlorobutadiene	0.5 UG/L	0.5 UJ	1.8 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Hexachloroethane	5 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Isobutyl alcohol	UG/L					
Isopropylbenzene	5 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Meta/Para Xylene	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Methacrylonitrile	5 UG/L	0.5 UJ	1.8 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Methyl 2-propenoate	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Methyl Tertbutyl Ether	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Methyl bromide	5 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Methyl butyl ketone	UG/L	2.5 UJ	9 UJ	2.5 UJ	2.5 UJ	2.5 UJ
Methyl chloride	5 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Methyl ethyl ketone	UG/L	5 R	18 R	5 R	5 R	5 R
Methyl iodide	5 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Methyl isobutyl ketone	UG/L	2.5 U	9 U	2.5 U	2.5 U	2.5 U
Methyl methacrylate	50 UG/L	0.5 UJ	1.8 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Methylene bromide	5 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Methylene chloride	5 UG/L	0.5 U	7.2 J	0.5 U	0.5 U	0.5 U
Naphthalene	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Nitrobenzene	0.4 UG/L	25 R	90 R	25 R	25 R	25 R
Ortho Xylene	5 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Pentachloroethane	5 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Propionitrile	UG/L	25 R	90 R	25 R	25 R	25 R
Propylbenzene	5 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Styrene	5 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	5 UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Tetrahydrofuran	UG/L	2.5 U	9 U	2.5 U	2.5 U	2.5 U

hade: Indicates concentration above detection limit
hade: Indicates concentration above action level.

TABLE 3-3
RESULTS OF VOC (METHOD 524.2) ANALYSIS - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

STUDY LOCATION:		ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
LOC ID:		MW-56	MWT-1	MWT-10	MWT-11	MWT-3	
MATRIX:		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	
SAMP_ID:		ARD2173	TR2081	TR2087	TR2088	TR2082	
SAMP. DEPTH TOP:		6.88	9.75	8.95	9.95	10	
SAMP. DEPTH BOT:		6.88	9.75	8.95	9.95	10	
SAMP. DATE		4/10/02	4/9/02	4/9/02	4/10/02	4/9/02	
FIELD QC CODE:		SA	SA	SA	SA	SA	
Parameter	Action Level	Units	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Toluene	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Total Xylenes	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Total Xylenes-A		UG/L					
Total Xylenes-B		UG/L					
Trans-1,2-Dichloroethene	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	[illegible] J
Trans-1,3-Dichloropropene	0.4	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Trans-1,4-Dichloro-2-butene		UG/L	0.5 UJ	1.8 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Trichloroethene	5	UG/L	0.5 U	17	0.5 U	0.5 U	5.2
Trichlorofluoromethane	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
Vinyl acetate		UG/L					
Vinyl chloride	2	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
cis-1,4-Dichloro-2-butene		UG/L					
n-Butylbenzene	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
p-Chlorotoluene	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
p-Isopropyltoluene	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	5	UG/L	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U

hade: Indicates concentration above detection limit
Shade: Indicates concentration above action level.

TABLE 3-3
RESULTS OF VOC (METHOD 524.2) ANALYSIS - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

STUDY LOCATION:			ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
LOC ID:			MWT-4	MWT-6	MWT-6	MWT-7	MWT-9	
MATRIX:			GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	
SAMP_ID:			TR2083	TR2089	TR2084	TR2085	TR2086	
SAMP. DEPTH TOP:			12.28	12.42	12.42	13.97	14.08	
SAMP. DEPTH BOT:			12.28	12.42	12.42	13.97	14.08	
SAMP. DATE			4/9/02	4/9/02	4/9/02	4/9/02	4/9/02	
FIELD QC CODE:			SA	DU	SA	SA	SA	
Parameter	Action Level	Units	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)	
1,1,1,2-Tetrachloroethane	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,1,1-Trichloroethane	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,1,2,2-Tetrachloroethane		UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,1,2-Trichloro-1,2,2-Trifluoroethan	5	UG/L						
1,1,2-Trichloroethane	1	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,1-Dichloroethane	5	UG/L	1.8 U	0.35 J	0.34 J	11 U	2 U	
1,1-Dichloroethene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,1-Dichloropropene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,2,3-Trichlorobenzene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,2,3-Trichloropropane	0.04	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,2,4-Trichlorobenzene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,2,4-Trimethylbenzene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,2-Dibromo-3-chloropropane	0.04	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,2-Dibromoethane	0.0006	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,2-Dichlorobenzene	3	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,2-Dichloroethane	0.6	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,2-Dichloroethene (total)	70	UG/L						
1,2-Dichloropropane	1	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,3,5-Trimethylbenzene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,3-Dichlorobenzene	3	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,3-Dichloropropane	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,4-Dichlorobenzene	3	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
1,4-Dioxane		UG/L						
2,2-Dichloropropane		UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
2-Chloroethylvinylether		UG/L						
2-Chlorotoluene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
2-Nitropropane		UG/L	90 U	25 U	25 U	550 U	100 U	
Acetone		UG/L	23 J	5 UJ	5 UJ	110 UJ	20 UJ	
Acrolein	5	UG/L						
Acrylonitrile	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
Allyl chloride	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
Benzene	1	UG/L	1.8 U	0.42 J	0.38 J	11 U	2 U	
Bromobenzene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
Bromochloromethane	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
Bromodichloromethane	80	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
Bromoform	80	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
Butyl chloride	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	
Carbon disulfide		UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U	

ade: Indicates concentration above detection limit
ade: Indicates concentration above action level.

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TABLE 3-3
RESULTS OF VOC (METHOD 524.2) ANALYSIS - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

		STUDY LOCATION:	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
		LOC ID:	MWT-4	MWT-6	MWT-6	MWT-7	MWT-9
		MATRIX:	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
		SAMP_ID:	TR2083	TR2089	TR2084	TR2085	TR2086
		SAMP. DEPTH TOP:	12.28	12.42	12.42	13.97	14.08
		SAMP. DEPTH BOT:	12.28	12.42	12.42	13.97	14.08
		SAMP. DATE	4/9/02	4/9/02	4/9/02	4/9/02	4/9/02
		FIELD QC CODE:	SA	DU	SA	SA	SA
Parameter	Action Level	Units	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Carbon tetrachloride	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Chloroacetonitrile		UG/L	90 R	25 R	25 R	550 R	100 R
Chlorobenzene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Chlorodibromomethane	80	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Chloroethane	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Chloroform	7	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Chloroprene	5	UG/L					
Cis-1,2-Dichloroethene	5	UG/L	56	8.2	8	28	[illegible]
Cis-1,3-Dichloropropene	0.4	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Dichlorodifluoromethane	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Dichloromethyl methyl ketone		UG/L	90 R	25 R	25 R	550 R	100 R
Ethyl benzene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Ethyl ether		UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Ethyl methacrylate		UG/L	1.8 UJ	0.5 UJ	0.5 UJ	11 UJ	2 UJ
Hexachlorobutadiene	0.5	UG/L	1.8 UJ	0.5 UJ	0.5 UJ	11 UJ	2 UJ
Hexachloroethane	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Isobutyl alcohol		UG/L					
Isopropylbenzene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Meta/Para Xylene		UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Methacrylonitrile	5	UG/L	1.8 UJ	0.5 UJ	0.5 UJ	11 UJ	2 UJ
Methyl 2-propenoate		UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Methyl Tertbutyl Ether		UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Methyl bromide	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Methyl butyl ketone		UG/L	9 UJ	2.5 UJ	2.5 UJ	55 UJ	10 UJ
Methyl chloride	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Methyl ethyl ketone		UG/L	18 R	5 R	5 R	110 R	20 R
Methyl iodide	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Methyl isobutyl ketone		UG/L	9 U	2.5 U	2.5 U	55 U	10 U
Methyl methacrylate	50	UG/L	1.8 UJ	0.5 UJ	0.5 UJ	11 UJ	2 UJ
Methylene bromide	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Methylene chloride	5	UG/L	7.4 J	0.5 U	0.5 U	11 U	[illegible] J
Naphthalene		UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Nitrobenzene	0.4	UG/L	90 R	25 R	25 R	550 R	100 R
Ortho Xylene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Pentachloroethane	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Propionitrile		UG/L	90 R	25 R	25 R	550 R	100 R
Propylbenzene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Styrene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Tetrachloroethene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Tetrahydrofuran		UG/L	9 U	2.5 U	2.5 U	55 U	10 U

hade: Indicates concentration above detection limit
Shade: Indicates concentration above action level.

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TABLE 3-3
RESULTS OF VOC (METHOD 524.2) ANALYSIS - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT ACTIVITY

		STUDY LOCATION:	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
		LOC ID:	MWT-4	MWT-6	MWT-6	MWT-7	MWT-9
		MATRIX:	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
		SAMP_ID:	TR2083	TR2089	TR2084	TR2085	TR2086
		SAMP. DEPTH TOP:	12.28	12.42	12.42	13.97	14.08
		SAMP. DEPTH BOT:	12.28	12.42	12.42	13.97	14.08
		SAMP. DATE	4/9/02	4/9/02	4/9/02	4/9/02	4/9/02
		FIELD QC CODE:	SA	DU	SA	SA	SA
Parameter	Action Level	Units	Value (Q)	Value (Q)	Value (Q)	Value (Q)	Value (Q)
Toluene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Total Xylenes	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Total Xylenes-A		UG/L					
Total Xylenes-B		UG/L					
Trans-1,2-Dichloroethene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Trans-1,3-Dichloropropene	0.4	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Trans-1,4-Dichloro-2-butene		UG/L	1.8 UJ	0.5 UJ	0.5 UJ	11 UJ	2 UJ
Trichloroethene	5	UG/L	[illegible] J	0.5 U	0.5 U	540	100
Trichlorofluoromethane	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
Vinyl acetate		UG/L					
Vinyl chloride	2	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
cis-1,4-Dichloro-2-butene		UG/L					
n-Butylbenzene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
p-Chlorotoluene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
p-Isopropyltoluene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
sec-Butylbenzene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U
tert-Butylbenzene	5	UG/L	1.8 U	0.5 U	0.5 U	11 U	2 U

hade: Indicates concentration above detection limit
hade: Indicates concentration above action level.

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TABLE 3-4
RESULTS OF VOC (METHOD 8260B) ANALYSIS - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT

			ASH LANDFILL MW-28 GROUNDWATER ARD2171	ASH LANDFILL PT-24 GROUNDWATER ARD2175	ASH LANDFILL PT-24 GROUNDWATER ARD2174
			10.39	11.88	11.88
			10.39	11.88	11.88
			4/8/02	4/9/02	4/9/02
			SA	DU	SA
Parameter	Action Level	Units	Value (Q)	Value (Q)	Value (Q)
1,1,1,2-Tetrachloroethane	5	UG/L	1 U	1.7 U	1.7 U
1,1,1-Trichloroethane	5	UG/L	1 U	1.7 U	1.7 U
1,1,2,2-Tetrachloroethane		UG/L	1 U	1.7 U	1.7 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	UG/L	1 U	1.7 U	1.7 U
1,1,2-Trichloroethane	1	UG/L	1 U	1.7 U	1.7 U
1,1-Dichloroethane	5	UG/L	1 U	0.54 J	0.2 J
1,1-Dichloroethene	5	UG/L	1 U	1.7 U	1.7 U
1,1-Dichloropropene	5	UG/L	1 U	1.7 U	1.7 U
1,2,3-Trichlorobenzene	5	UG/L	1 U	1.7 U	1.7 U
1,2,3-Trichloropropane	0.04	UG/L	1 U	1.7 U	1.7 U
1,2,4-Trichlorobenzene	5	UG/L	1 U	1.7 U	1.7 U
1,2,4-Trimethylbenzene	5	UG/L	1 U	1.7 U	1.7 U
1,2-Dibromo-3-chloropropane	0.04	UG/L	1 U	1.7 U	1.7 U
1,2-Dibromoethane	0.0006	UG/L	1 U	1.7 U	1.7 U
1,2-Dichlorobenzene	3	UG/L	1 U	1.7 U	1.7 U
1,2-Dichloroethane	0.6	UG/L	1 U	1.7 U	1.7 U
1,2-Dichloroethene (total)	70	UG/L	13	58	27
1,2-Dichloropropane	1	UG/L	1 U	1.7 U	1.7 U
1,3,5-Trimethylbenzene	5	UG/L	1 U	1.7 U	1.7 U
1,3-Dichlorobenzene	3	UG/L	1 U	1.7 U	1.7 U
1,3-Dichloropropane	5	UG/L	1 U	1.7 U	1.7 U
1,4-Dichlorobenzene	3	UG/L	1 U	1.7 U	1.7 U
1,4-Dioxane		UG/L	50 R	85 R	85 R
2,2-Dichloropropane		UG/L	1 U	1.7 U	1.7 U

Shade: Indicates concentration above detection limit.
Shade: Indicates concentration above action level.

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TABLE 3-4
RESULTS OF VOC (METHOD 8260B) ANALYSIS - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT

			ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
			MW-28	PT-24	PT-24
			GROUNDWATER	GROUNDWATER	GROUNDWATER
			ARD2171	ARD2175	ARD2174
			10.39	11.88	11.88
			10.39	11.88	11.88
			4/8/02	4/9/02	4/9/02
			SA	DU	SA
Parameter	Action Level	Units	Value (Q)	Value (Q)	Value (Q)
2-Chloroethylvinylether		UG/L	1 U	1.7 U	1.7 U
2-Chlorotoluene	5	UG/L	1 U	1.7 U	1.7 U
2-Nitropropane		UG/L			
Acetone		UG/L	5 U	8.5 U	8.5 U
Acrolein	5	UG/L	5 R	8.5 R	8.5 R
Acrylonitrile	5	UG/L	1 U	1.7 U	1.7 U
Allyl chloride	5	UG/L	1 U	1.7 U	1.7 U
Benzene	1	UG/L	1 U	1.7 U	1.7 U
Bromobenzene	5	UG/L	1 U	1.7 U	1.7 U
Bromochloromethane	5	UG/L	1 U	1.7 U	1.7 U
Bromodichloromethane	80	UG/L	1 U	1.7 U	1.7 U
Bromoform	80	UG/L	1 U	1.7 U	1.7 U
Butyl chloride	5	UG/L			
Carbon disulfide		UG/L	1 U	1.7 U	1.7 U
Carbon tetrachloride	5	UG/L	1 U	1.7 U	1.7 U
Chloroacetonitrile		UG/L			
Chlorobenzene	5	UG/L	1 U	1.7 U	1.7 U
Chlorodibromomethane	80	UG/L	1 U	1.7 U	1.7 U
Chloroethane	5	UG/L	1 U	1.7 U	1.7 U
Chloroform	7	UG/L	1 U	1.7 U	1.7 U
Chloroprene	5	UG/L	1 U	1.7 U	1.7 U
Cis-1,2-Dichloroethene	5	UG/L	**12**	**54**	**53**
Cis-1,3-Dichloropropene	0.4	UG/L	1 U	1.7 U	1.7 U
Dichlorodifluoromethane	5	UG/L	1 U	1.7 U	1.7 U

hade: Indicates concentration above detection limit.
Shade: Indicates concentration above action level.

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TABLE 3-4
RESULTS OF VOC (METHOD 8260B) ANALYSIS - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT

			ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
			MW-28	PT-24	PT-24
			GROUNDWATER	GROUNDWATER	GROUNDWATER
			ARD2171	ARD2175	ARD2174
			10.39	11.88	11.88
			10.39	11.88	11.88
			4/8/02	4/9/02	4/9/02
			SA	DU	SA
Parameter	Action Level	Units	Value (Q)	Value (Q)	Value (Q)
Dichloromethyl methyl ketone		UG/L			
Ethyl benzene	5	UG/L	1 U	1.7 U	1.7 U
Ethyl ether		UG/L			
Ethyl methacrylate		UG/L	1 UJ	1.7 U	1.7 U
Hexachlorobutadiene	0.5	UG/L	1 U	1.7 U	1.7 U
Hexachloroethane	5	UG/L			
Isobutyl alcohol		UG/L	50 R	85 R	85 R
Isopropylbenzene	5	UG/L	1 U	1.7 U	1.7 U
Meta/Para Xylene		UG/L			
Methacrylonitrile	5	UG/L	1 U	1.7 U	1.7 U
Methyl 2-propenoate		UG/L			
Methyl Tertbutyl Ether	10	UG/L	1 U	1.7 U	1.7 U
Methyl bromide	5	UG/L	1 U	1.7 U	1.7 U
Methyl butyl ketone		UG/L	5 U	8.5 U	8.5 U
Methyl chloride	5	UG/L	1 U	1.7 U	1.7 U
Methyl ethyl ketone		UG/L	5 U	8.5 U	8.5 U
Methyl iodide	5	UG/L	1 U	1.7 U	1.7 U
Methyl isobutyl ketone		UG/L	5 U	8.5 U	8.5 U
Methyl methacrylate	50	UG/L	1 U	1.7 U	1.7 U
Methylene bromide	5	UG/L	1 U	1.7 U	1.7 U
Methylene chloride	5	UG/L	1 U	1.7 U	1.7 U
Naphthalene		UG/L	1 U	1.7 U	1.7 U
Nitrobenzene	0.4	UG/L			
Ortho Xylene	5	UG/L	1 U	1.7 U	1.7 U

Shade: Indicates concentration above detection limit.
Shade: Indicates concentration above action level.

TABLE 3-4
RESULTS OF VOC (METHOD 8260B) ANALYSIS - SECOND QUARTER 2002
GROUNDWATER MONITORING - ASH LANDFILL
SENECA ARMY DEPOT

			ASH LANDFILL	ASH LANDFILL	ASH LANDFILL
			MW-28	PT-24	PT-24
			GROUNDWATER	GROUNDWATER	GROUNDWATER
			ARD2171	ARD2175	ARD2174
			10.39	11.88	11.88
			10.39	11.88	11.88
			4/8/02	4/9/02	4/9/02
			SA	DU	SA
Parameter	Action Level	Units	Value (Q)	Value (Q)	Value (Q)
Pentachloroethane	5	UG/L			
Propionitrile		UG/L	4 R	6.8 R	6.8 R
Propylbenzene	5	UG/L	1 U	1.7 U	1.7 U
Styrene	5	UG/L	1 U	1.7 U	1.7 U
Tetrachloroethene	5	UG/L	1 U	1.7 U	1.7 U
Tetrahydrofuran		UG/L	14 U	24 U	24 U
Toluene	5	UG/L	1 U	1.7 U	1.7 U
Total Xylenes	5	UG/L			
Total Xylenes-A		UG/L	1 U	1.7 U	1.7 U
Total Xylenes-B		UG/L	1 U	1.7 U	1.7 U
Trans-1,2-Dichloroethene	5	UG/L	1 U	0.86 J	0.89 J
Trans-1,3-Dichloropropene	0.4	UG/L	1 U	1.7 U	1.7 U
Trans-1,4-Dichloro-2-butene		UG/L	1 U	1.7 U	1.7 U
Trichloroethene	5	UG/L	16	1.2	1.2
Trichlorofluoromethane	5	UG/L	1 U	1.7 U	1.7 U
Vinyl acetate		UG/L	1 U	1.7 U	1.7 U
Vinyl chloride	2	UG/L	1 U	1.7 U	1.7 U
cis-1,4-Dichloro-2-butene		UG/L	1 U	1.7 U	1.7 U
n-Butylbenzene	5	UG/L	1 U	1.7 U	1.7 U
p-Chlorotoluene	5	UG/L	1 U	1.7 U	1.7 U
p-Isopropyltoluene	5	UG/L	1 U	1.7 U	1.7 U
sec-Butylbenzene	5	UG/L	1 U	1.7 U	1.7 U
tert-Butylbenzene	5	UG/L	1 U	1.7 U	1.7 U

Shade: Indicates concentration above detection limit.
Shade: Indicates concentration above action level.

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