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Quarterly IRM Progress Report
Quarter 2 of IRM Operation
2-PHASE™ Extraction System
Erdle Perforating Company
Rochester, New York

Prepared for:

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Prepared by:

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Rochester, New York 14623

May 26, 1998

RADIAN ENGINEERING INC

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Project #705-013

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1. INTRODUCTION

This document presents a summary of the second quarter of 2-PHASE Extraction system operation as the Interim Remedial Measure (IRM) at Erdle Perforating Company (Erdle).

During the second quarter of IRM operation, relevant information has been collected by Radian to assess progress of the IRM. Weekly and Monthly Summary reports that contain uptime percentages, cumulative vapor/water production, and operational events are included in this document to quantify the mechanical performance of the 2-PHASE Extraction system. Analytical results from system vapor/water streams and quarterly groundwater/soil samples are included in this report as the basis's for mass removal calculations and points of comparison with historical (pre-IRM) sampling events. Groundwater level data collected during the quarter is used in this document to depict water table depression as a result of 2-PHASE Extraction operation. The collection of information presented in this document shows the overall progress of the IRM in the second quarter of operation.

2. SYSTEM OPERATIONAL PERFORMANCE

The reporting period for the 2nd Quarter of IRM operation in 1997 includes data from 9/29/97 to 12/31/97. The system ran for a total of 1,326.7 hours out of a possible 2,256.0 hours this quarter, thus having a 58.8% uptime. The majority of the downtime during the reporting period can be attributed to a malfunctioning temperature switch on vacuum pump #2 and a failed oil separator element in vacuum pump #1. During the reporting period, 32,192 gallons of water were removed from the subsurface at an average of 0.55 gallons per minute (gpm) from the four extraction wells. A total of 2,016,925 scfm of soil gas and aspiration air were treated during the reporting period with an average flow rate of 24.5 standard cubic feet per minute (scfm). Air and water flows were well within the maximum system design parameters of 100 scfm and 20 gpm respectively. Operational details are provided in Weekly and Monthly Summary reports in Appendices A and B respectively.

3. OPERATIONAL EVENTS/MAINTENANCE ACTIVITIES

Operational events that caused downtime and maintenance activities during this reporting period are listed below in Table 1.

Table 1. Operational Events/Maintenance Activities 2-PHASE Extraction System Erdle Perforating, Rochester, New York System Start-up Date: July 2, 1997 2ND Quarter of IRM Operation 1997	
Date	**Operational Events/Maintenance Actions**
10/6-10/9/97	System shut down for Quarterly Groundwater sampling.
10/24/97	Heat tracing construction on outdoor vacuum headers was completed.
10/28/97	System down due to power outage. The system was reset and restarted.
11/3/97	System down due to high bag filter pressure. The filter was changed and the system restarted.
11/13/97	System down due to skid 2 high temperature. Air circulation dampers were adjusted to exhaust air outside the trailer instead of recirculating warm air inside the trailer. The alarm was reset and the system restarted.
11/17/97	System down due to skid 2 high temperature. Air circulation dampers were adjusted to exhaust air outside the trailer instead of recirculating warm air inside the trailer. The alarm was reset and the system was restarted.
11/28/97	System down due to power outage. The system was reset and restarted.
12/1/97	System shut down to change aqueous phase GAC canisters. The two primary canisters were removed and the secondary canisters were placed in the primary position. New GAC canisters were installed in the secondary position. The two spent GAC canisters were disposed offsite by Laidlaw.
12/8/97	System down due to skid 2 high temperature. The alarm was reset and the system was restarted.
12/19/97	System down due to skid 2 high temperature. The alarm was reset and the system was restarted.
12/30/97	System down due to high inlet separator level. Water transfer pump tripped its power supply thermal overload switch. No cause for the trip was found, so the overload was reset and the pump was restarted.

4. ANALYTICAL RESULTS

Vapor stream samples were collected on November 12 and December 22, 1997, and January 14, 1998. Samples were collected from (a) the inlet to the first vapor phase Granular Activated Carbon (GAC) unit, (b) between the outlet of the first vapor phase GAC unit and the inlet of the second vapor phase GAC unit, and (c) the outlet of the second vapor phase GAC unit. Samples were submitted to Microseeps laboratory in Pittsburgh, Pennsylvania for analysis of EPA Method 601/602 list compounds by gas chromatography using Method AM4.03. Table 2 lists the vapor phase analytical results for the sampling events performed in November, December, and January. Lab results from Microseeps can be found in Appendix C.

Water samples were collected this quarter on November 12 and December 22, 1997, and January 19, 1998. Samples were taken from the primary carbon inlet, primary carbon outlet, and the secondary carbon outlet (discharge to sewer). The samples were composite samples from each parallel train (e.g., the volume of liquid in the tertiary outlet sample is approximately 50% from train 1 and 50 % from train 2). Samples were submitted to RECRA in Amherst, New York for analysis of VOCs using EPA methods 8010/8020. Table 3 shows the analytical results from the samples collected on November, December, and January. Lab results from RECRA can be found in Appendix D.

Table 2. Vapor Phase Analytical Results (ppmv) 2-PHASE Extraction System Erdle Perforating, Rochester, New York System Start-up Date: July 2, 1997 2ND Quarter of IRM Operation 1997			
	11/12/97	**12/22/97**	**1/14/98**
Primary Inlet			
Vinyl Chloride	ND	ND	ND
1,1-Dichloroethene	0.030	ND	0.035
t-1,2-Dichloroethene	ND	0.100	ND
1,1-Dichloroethane	0.070	0.130	0.055
1,1,1-Trichloroethane	0.025	0.033	0.011
Trichloroethylene	43.452	58.611	31.690
Toluene	ND	ND	ND
Perchloroethylene	0.026	0.032	0.021
Primary Outlet			
Vinyl Chloride	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND
t-1,2-Dichloroethene	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND
1,1,1-Trichloroethane	ND	0.016	ND
Trichloroethylene	ND	ND	ND
Toluene	ND	ND	ND
Perchloroethylene	ND	ND	ND
Secondary Outlet			
Vinyl Chloride	3.000	ND	ND
1,1-Dichloroethene	ND	ND	ND
t-1,2-Dichloroethene	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND
1,1,1-Trichloroethane	ND	0.025	ND
Trichloroethylene	ND	ND	ND
Toluene	ND	ND	ND
Perchloroethylene	ND	ND	ND

Note: "ND" = Not Detected.

Table 3. Liquid Phase Analytical Results (ug/l) 2-PHASE Extraction System Erdle Perforating, Rochester, New York System Start-up Date: July 2, 1997 2ND Quarter of IRM Operation 1997			
	11/12/97	**12/22/97**	**1/19/98**
Primary Inlet			
Vinyl Chloride	ND	76.00	ND
Methylene Chloride	1.10	ND	23.00
1,1-Dichloroethene	ND	ND	ND
t-1,2-Dichloroethene	ND	ND	ND
c-1,2-Dichloroethene	190.00	ND	ND
1,1-Dichloroethane	ND	ND	ND
1,1,1-Trichloroethane	1.80	ND	ND
1,1,2-Trichloroethane	2.00	ND	ND
Trichloroethylene	790.00	22000.00	1340.00
Toluene	ND	ND	ND
Perchloroethylene	ND	6.00	ND
Primary Outlet			
Vinyl Chloride	1.20	ND	ND
Methylene Chloride	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND
c-1,2-Dichloroethene	5.80	ND	ND
t-1,2-Dichloroethene	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND
Trichloroethylene	16.00	ND	6.40
Toluene	ND	ND	ND
Perchloroethylene	ND	ND	ND
Secondary Outlet			
Vinyl Chloride	ND	ND	ND
Methylene Chloride	2.10	ND	ND
1,1-Dichloroethene	ND	ND	ND
c-1,2-Dichloroethene	ND	ND	ND
t-1,2-Dichloroethene	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND
1,1,1-Trichloroethane	ND	0.25	ND
1,1,2-Trichloroethane	ND	ND	ND
Trichloroethylene	ND	ND	0.24
Toluene	ND	ND	ND
Perchloroethylene	ND	ND	ND

Note: "ND" = Not Detected.

5. MASS REMOVAL

Total mass removal for the quarter via the vapor phase was 30.92 lb. Vapor phase VOC concentrations in parts per million volume (ppmv) are converted to pounds using compound molecular weights, daily flow rates in standard cubic feet, and the proper unit conversions. Concentration data for each sample event is used to estimate concentrations for days preceding the sample up to the previous vapor stream sampling event. Figure 1 plots the mass removal during each of the three months of the quarter.

Table 4 shows the mass loading ratio on the Primary Vapor phase GAC unit since system start-up on July 2, 1997. The mass loading ratio is calculated by dividing the mass entering the Primary Vapor phase GAC unit by the mass exiting the Primary Vapor phase GAC unit.

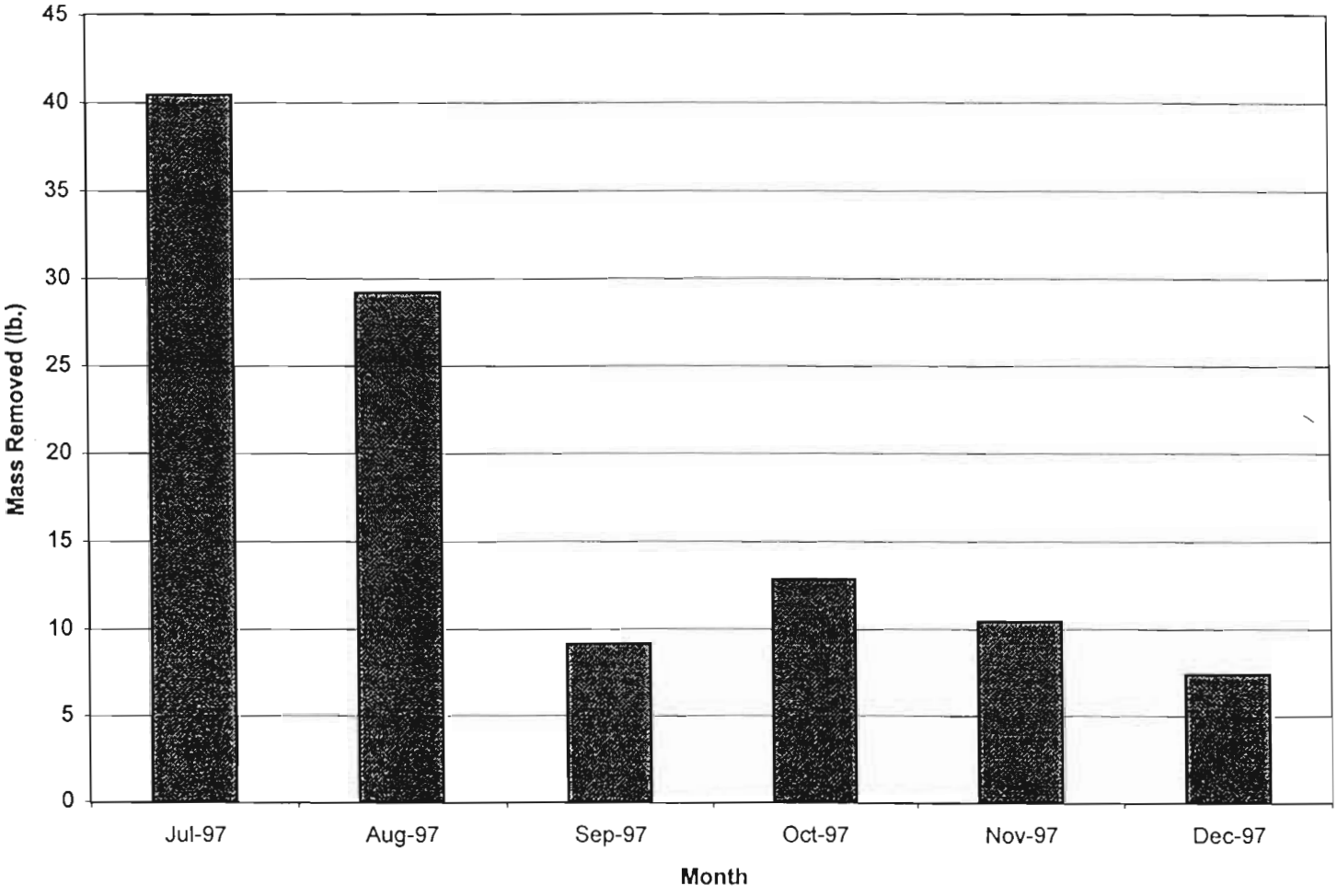
Table 4. Air Emission Log: Mass accumulated from 7/2/97 to 12/31/97
Primary Vapor GAC Filter Cumulative Loading Rates
2-PHASE Extraction System
Erdle Perforating, Gates, New York
System Start-up Date: July 2, 1997
2ND Quarter of IRM Operation 1997

Compound	Total Mass In (lbs)	Total Mass Out
Vinyl Chloride	2.182	0.250
1,1-Dichloroethene	0.101	0.000
t-1,2-Dichloroethene	0.350	0.000
1,1-Dichloroethane	0.160	0.000
1,1,1-Trichloroethane	0.051	0.003
Trichloroethylene	106.722	0.283
Toluene	0.007	0.000
Perchloroethylene	0.091	0.000
Total Volatiles	109.664	0.536

Notes: 1. "0.000" = Not detected.

Total mass removal for the quarter from the liquid phase was 2.59 lb. Liquid phase VOC concentrations in ug/L are converted to pounds using water flow rates and the proper unit conversions. Concentration data for each sample event is used to estimate concentrations for days preceding the sample up to the previous liquid stream sampling event.

Figure 1
Erdle Perforating
2-PHASE Extraction System
Mass Removal (lb.)
1st and 2nd Quarters of IRM Operation 1997



6. AIR/WATER VOC EMISSIONS AND SAFETY COMPLIANCE

At one time during the quarter (11/12/97), Vinyl Chloride concentrations exiting the secondary air carbon exceeded both the Annual Guideline Concentration (AGC) of 2.0×10^{-5} ug/L and the Short Term Guideline Concentration (SGC) of 1.3 ug/L from NYS Air Guide 1. The rest of the sampling events during the quarter were below both the AGC and SGC for Vinyl Chloride. At no time during the quarter did cis-1,2 Dichloroethene or Trichloroethylene or any other VOC compound concentrations exceed either the AGC or SGC limits. Analytical results from the outlet of the secondary vapor phase GAC unit show that 0.58 lb. of VOCs were exhausted to the atmosphere during the reporting period. Emission rates prior to the primary vapor phase GAC unit were not below AGC or SGC limits at any time during the reporting period, thus warranting the continued use of vapor phase GAC units.

At no time during the reporting period did water discharges to the sewer exceed MCPWD requirements. Analytical results from the outlet of the secondary liquid phase GAC unit show that 0.00032 lb. of VOCs were discharged to the Monroe County Pure Waters District (MCPWD) sewer during the reporting period.

During the reporting period, there were no environmental or safety incidents related to the Erdle Perforating IRM.

7. QUARTERLY GROUNDWATER/SOIL SAMPLING RESULTS

Quarterly soil and groundwater samples were collected on January 19 and January 29, 1998 respectively. For the quarterly groundwater sampling event, monitoring wells MW-1, MW-1D, MW-3, MW-3D, and MW-6D were sampled as specified in the IRM Plan (March 1997). In addition to the quarterly groundwater samples, semi-annual groundwater samples were collected from monitoring wells MW-2, MW-2D, MW-4, MW-4D, and MW-6. Quarterly soil samples were collected from 4 soil borings (CB-1-2 to CB-4-2). Due to the close proximity of borings CB-1-2 to CB-4-2, boring logs for CB-1 to CB-4 are provided in Appendix E. Water and soil samples were analyzed by RECRA Environmental Inc. using EPA Method SW8010/8020, the results are given below in Tables 5 and 6. Results of the quarterly and semi-annual groundwater and the quarterly soil sampling are also shown in Figures 2 and 3. Groundwater and soil analytical results from this quarter can be found in Appendices F and G. Previous sampling events from the Phase I and II Remedial Investigations are included in Tables 5 and 6 for comparative purposes.

Table 5. Quarterly Groundwater Monitoring Results (ug/L)
2-PHASE Extraction System
Erdle Perforating, Gates, New York
System Start-up Date: July 2, 1997
2ND Quarter of IRM Operation 1997

Well ID	Compound	12/21/94	8/7/96	10/8/97	1/29/98
MW-1	Vinyl Chloride	13,000	2,200	1,400	610
	Trichloroethylene	6,400	420	460	64
	Methylene Chloride	ND	ND	520	60
	1,1,1-Trichloroethane	ND	ND	ND	ND
	1,2-Dichloroethene	150,000	72	ND	ND
	Toluene	ND	ND	ND	ND
	Tetrachloroethene	ND	ND	ND	ND
MW-1D	Vinyl Chloride	ND	ND	16	ND
	Trichloroethylene	6,000	9,900	270	1300
	Methylene Chloride	ND	ND	5.7	37
	1,1,1-Trichloroethane	ND	ND	5.6	22
	1,2-Dichloroethene	1,300	ND	ND	ND
	Toluene	20	ND	ND	ND
	Tetrachloroethene	41	ND	ND	ND

Table 5. Quarterly Groundwater Monitoring Results (ug/L)
2-PHASE Extraction System
Erdle Perforating, Gates, New York
System Start-up Date: July 2, 1997
2ND Quarter of IRM Operation 1997

Well ID	Compound	12/21/94	8/7/96	10/8/97	1/29/98
MW-2	Vinyl Chloride	88	98	NS	77
	Trichloroethylene	1,600	1,000	NS	940
	Methylene Chloride	ND	ND	NS	64
	1,1,1-Trichloroethane	ND	ND	NS	ND
	1,2-Dichloroethene	ND	ND	NS	ND
	Toluene	ND	ND	NS	ND
	Tetrachloroethene	ND	ND	NS	ND
MW-2D	Vinyl Chloride	NA	ND	NS	0.94
	Trichloroethylene	NA	13	NS	1
	Methylene Chloride	NA	ND	NS	0.24
	1,1,1-Trichloroethane	NA	3.9	NS	2.7
	1,2-Dichloroethene	NA	1	NS	0.35
	Toluene	NA	ND	NS	0.25
	Tetrachloroethene	NA	ND	NS	0.23
MW-3	Vinyl Chloride	ND	ND	ND	ND
	Trichloroethylene	350,000	550,000	310,000	510,000
	Methylene Chloride	4,280	ND	9,000	ND
	1,1,1-Trichloroethane	ND	ND	ND	ND
	1,2-Dichloroethene	ND	ND	ND	ND
	Toluene	ND	ND	ND	ND
	Tetrachloroethene	ND	ND	ND	ND
MW-3D	Vinyl Chloride	ND	ND	ND	ND
	Trichloroethylene	380	850	51	60
	Methylene Chloride	ND	ND	2.7	ND
	1,1,1-Trichloroethane	ND	ND	ND	1.7
	1,2-Dichloroethene	ND	ND	ND	ND
	Toluene	ND	ND	ND	ND
	Tetrachloroethene	ND	ND	ND	ND
MW-4	Vinyl Chloride	37	18	NS	8.0
	Trichloroethylene	1.4	2.3	NS	1.1
	Methylene Chloride	ND	ND	NS	0.51
	1,1,1-Trichloroethane	ND	ND	NS	ND
	1,2-Dichloroethene	ND	2.6	NS	2.4
	Toluene	ND	ND	NS	ND
	Tetrachloroethene	ND	ND	NS	ND

Notes: ND = Not detected.
NA = Not available because well not constructed.
NS = Not specified in IRM Plan.

Table 5. Quarterly Groundwater Monitoring Results Continued
2-PHASE Extraction System
Erdle Perforating, Gates, New York
System Start-up Date: July 2, 1997
2ND Quarter of IRM Operation 1997

Well ID	Compound	12/21/94	8/7/96	10/8/97	1/29/98
MW-4D	Vinyl Chloride	ND	ND	NS	ND
	Trichloroethylene	13	29	NS	5.1
	Methylene Chloride	ND	ND	NS	0.27
	1,1,1-Trichloroethane	3.3	2.5	NS	0.64
	1,2-Dichloroethene	ND	ND	NS	ND
	Toluene	ND	ND	NS	0.25
	Tetrachloroethene	ND	ND	NS	ND
MW-6	Vinyl Chloride	NA	2.2	NS	1.5
	Trichloroethylene	NA	ND	NS	ND
	Methylene Chloride	NA	ND	NS	0.29
	1,1,1-Trichloroethane	NA	ND	NS	ND
	1,2-Dichloroethene	NA	ND	NS	ND
	Toluene	NA	ND	NS	ND
	Tetrachloroethene	NA	ND	NS	ND
MW-6D	Vinyl Chloride	NA	ND	ND	ND
	Trichloroethylene	NA	1,400	ND	1,000
	Methylene Chloride	NA	ND	ND	27
	1,1,1-Trichloroethane	NA	ND	ND	ND
	1,2-Dichloroethene	NA	ND	ND	ND
	Toluene	NA	ND	ND	ND
	Tetrachloroethene	NA	ND	ND	ND

Notes: ND = Not detected.
NA = Not available because well not constructed.
NS = Not specified in IRM Plan.

Table 6. Quarterly Soil Monitoring Results (ug/kg)
2-PHASE Extraction System
Erdle Perforating, Gates, New York
System Start-up Date: July 2, 1997
2ND Quarter of IRM Operation 1997

Sample Point ID	Compound	4/21/97	10/9/97	1/19/98
CB-1-2 (CB-1)	Vinyl Chloride	NA	1,300	1,700
	Trichloroethylene	NA	1,000	830
	Methylene Chloride	NA	22	140
	1,1,1-Trichloroethane	NA	ND	ND
	1,1-Dichloroethene	NA	45	ND
	1,2-Dichloroethene	NA	63	ND
	1,1-Dichloroethane	NA	69	ND
	Tetrachloroethene	NA	ND	ND
CB-2-2 (CB-2)	Vinyl Chloride	NA	ND	81
	Trichloroethylene	NA	4,000	1,300
	Methylene Chloride	NA	60	ND
	1,1,1-Trichloroethane	NA	ND	ND
	1,1-Dichloroethene	NA	ND	ND
	1,2-Dichloroethene	NA	ND	ND
	1,1-Dichloroethane	NA	ND	ND
	Tetrachloroethene	NA	ND	ND
CB-3-2 (CB-3)	Vinyl Chloride	NA	ND	50
	Trichloroethylene	NA	77	130
	Methylene Chloride	NA	ND	ND
	1,1,1-Trichloroethane	NA	ND	ND
	1,1-Dichloroethene	NA	ND	ND
	1,2-Dichloroethene	NA	ND	ND
	1,1-Dichloroethane	NA	ND	ND
	Tetrachloroethene	NA	ND	ND
CB-4-2 (CB-4)	Vinyl Chloride	NA	ND	ND
	Trichloroethylene	NA	340,000	140,000
	Methylene Chloride	NA	6,000	ND
	1,1,1-Trichloroethane	NA	ND	ND
	1,1-Dichloroethene	NA	ND	ND
	1,2-Dichloroethene	NA	ND	ND
	1,1-Dichloroethane	NA	ND	ND
	Tetrachloroethene	NA	ND	ND

Table 6. Quarterly Soil Monitoring Results (ug/kg)
2-PHASE Extraction System
Erdle Perforating, Gates, New York
System Start-up Date: July 2, 1997
2ND Quarter of IRM Operation 1997

Sample Point ID	Compound	4/21/97	10/9/97	1/19/98
CB-5	Vinyl Chloride	NA	ND	NA
	Trichloroethylene	NA	11000	NA
	Methylene Chloride	NA	160	NA
	1,1,1-Trichloroethane	NA	ND	NA
	1,1-Dichloroethene	NA	ND	NA
	1,2-Dichloroethene	NA	ND	NA
	1,1-Dichloroethane	NA	ND	NA
	Tetrachloroethene	NA	ND	NA
EW-1	Vinyl Chloride	720	NA	NA
	Trichloroethylene	2200	NA	NA
	Methylene Chloride	ND	NA	NA
	1,1,1-Trichloroethane	ND	NA	NA
	1,1-Dichloroethene	ND	NA	NA
	1,2-Dichloroethene	ND	NA	NA
	1,1-Dichloroethane	ND	NA	NA
	Tetrachloroethene	ND	NA	NA
EW-2	Vinyl Chloride	ND	NA	NA
	Trichloroethylene	170000	NA	NA
	Methylene Chloride	ND	NA	NA
	1,1,1-Trichloroethane	ND	NA	NA
	1,1-Dichloroethene	ND	NA	NA
	1,2-Dichloroethene	ND	NA	NA
	1,1-Dichloroethane	ND	NA	NA
	Tetrachloroethene	ND	NA	NA
EW-3	Vinyl Chloride	ND	NA	NA
	Trichloroethylene	170	NA	NA
	Methylene Chloride	ND	NA	NA
	1,1,1-Trichloroethane	ND	NA	NA
	1,1-Dichloroethene	ND	NA	NA
	1,2-Dichloroethene	ND	NA	NA
	1,1-Dichloroethane	ND	NA	NA
	Tetrachloroethene	ND	NA	NA

Table 6. Quarterly Soil Monitoring Results (ug/kg) 2-PHASE Extraction System Erdle Perforating, Gates, New York System Start-up Date: July 2, 1997 2ND Quarter of IRM Operation 1997				
Sample Point ID	Compound	4/21/97	10/9/97	1/19/98
EW-4	Vinyl Chloride	ND	NA	NA
	Trichloroethylene	ND	NA	NA
	Methylene Chloride	ND	NA	NA
	1,1,1-Trichloroethane	ND	NA	NA
	1,1-Dichloroethene	ND	NA	NA
	1,2-Dichloroethene	ND	NA	NA
	1,1-Dichloroethane	ND	NA	NA
	Tetrachloroethene	ND	NA	NA

Notes: ND = Not Detected
NA = Not Available or Not Applicable

Table 5 illustrates that significant VOC reduction has been realized in overburden well MW-1 and bedrock wells MW-1D and MW-3D. VOC reduction in MW-1 has resulted from the location of MW-1 within the radius of influence of EW-1. In the bedrock wells, VOC reduction can be attributed to overburden groundwater extraction initiating upwelling and some groundwater removal from the bedrock. Also, deeper overburden concentrations have likely been reduced. However, in overburden wells and MW-2, MW-3, and MW-4, VOC concentrations have remained fairly constant. Soil samples collected from the CB monitoring points listed in Table 6 confirm that VOC concentrations in the shallow overburden are still elevated probably as a result of the 2-PHASE system's focus on the deeper overburden. The connection of existing wells MW-1, MW-3, and MW-D-2 and new well EW-5 (as proposed on December 17, 1997 by Radian and verbally approved during a meeting with NYSDEC on February 6, 1998) is expected to augment the 2-PHASE system's ability to address the shallow overburden.

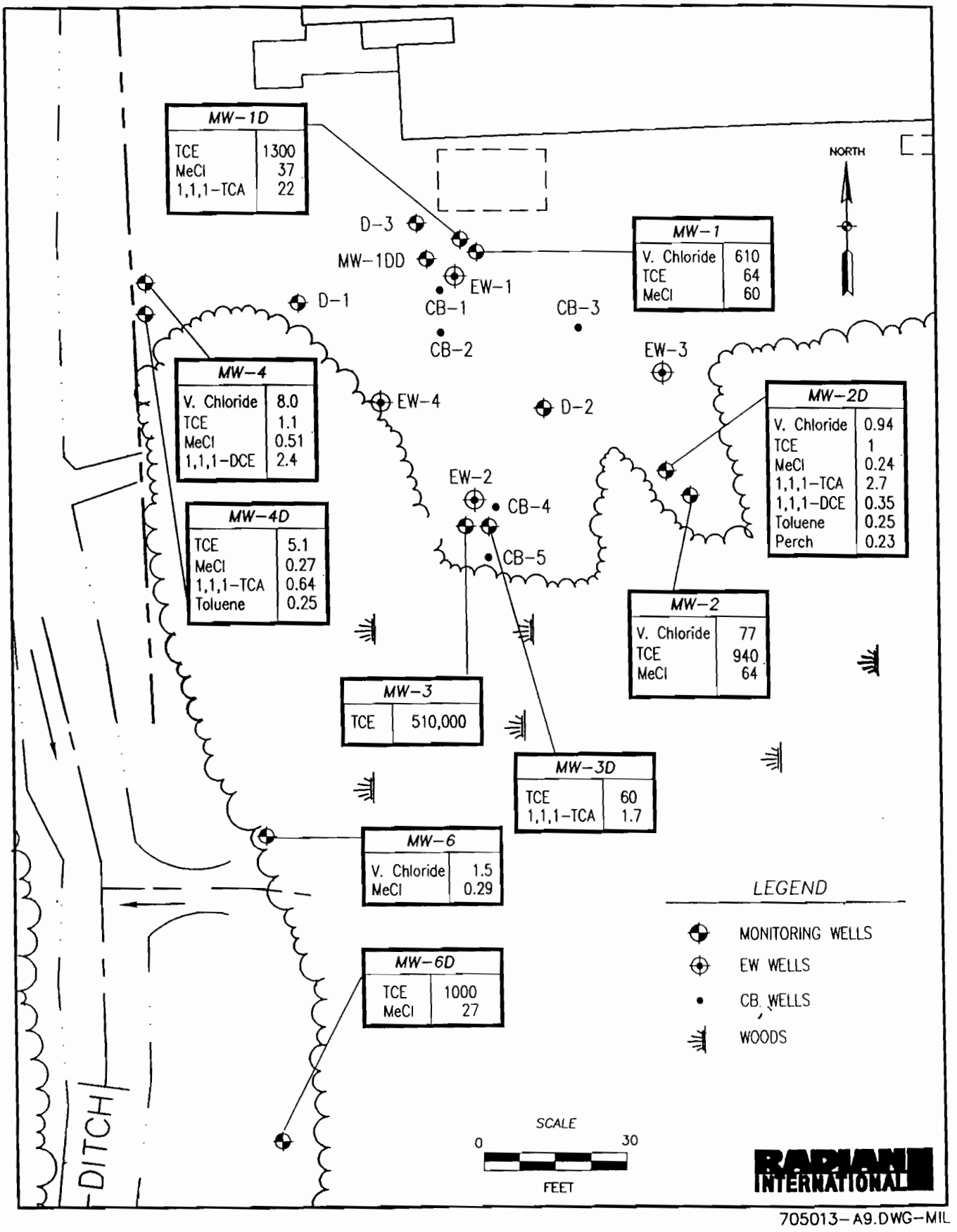


FIGURE 2: QUARTERLY/SEMI-ANNUAL GROUNDWATER SAMPLING RESULTS (ug/L)

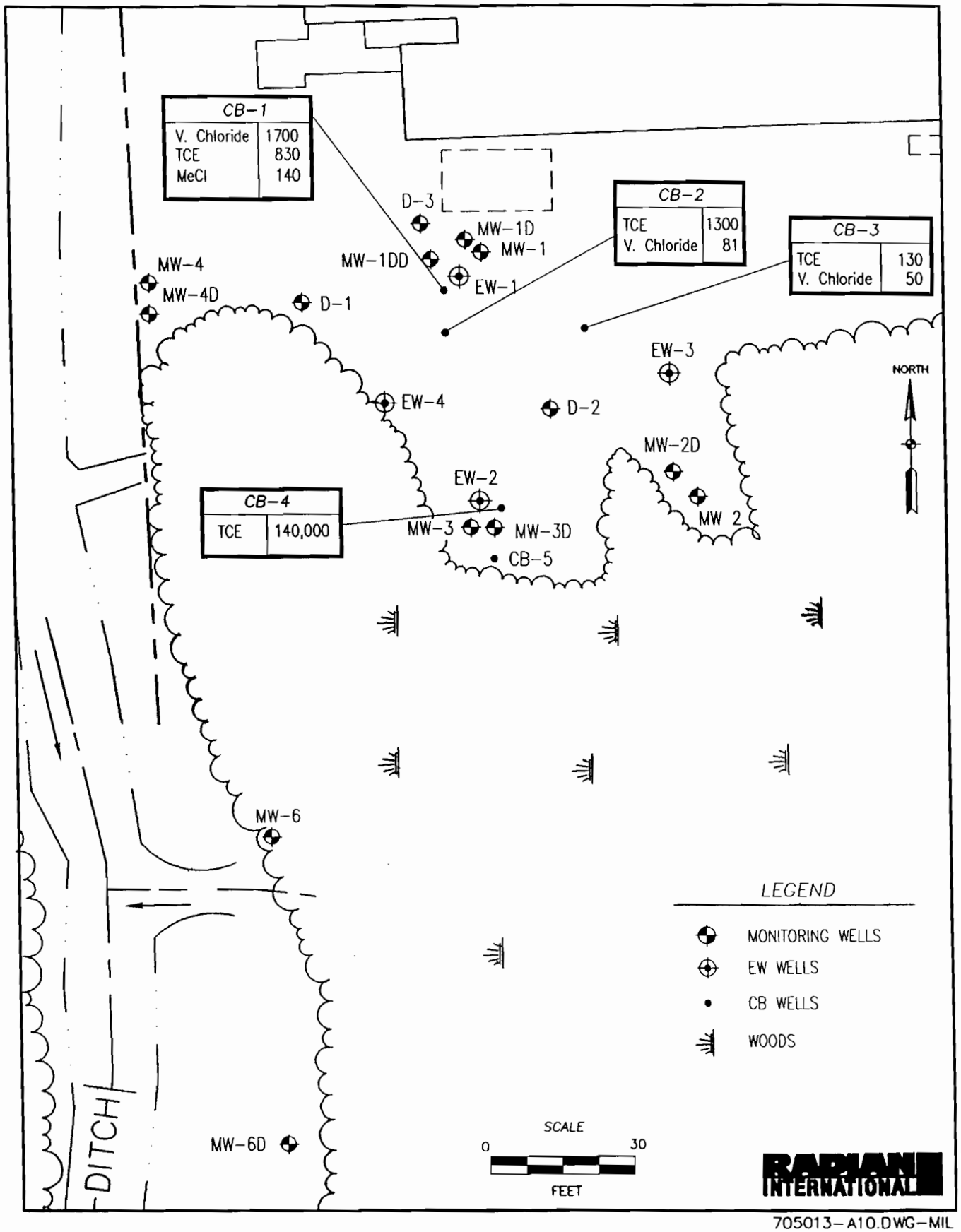


FIGURE 3: QUARTERLY SOIL SAMPLING RESULTS (ug/Kg)

8. GROUNDWATER DRAWDOWN

Throughout the 2ND quarter of IRM operation, water levels from monitoring wells in the remediation area have been continuously monitored. Water elevations from November 21 are illustrated in Figure 4. Areas of water table drawdown on Figure 4 can be seen near CB-2 and also around CB-4, illustrating the effect of 2-PHASE operation on the overburden groundwater. The degree of overburden dewatering is less than originally expected, probably as a result of recharge from the bedrock groundwater. The bedrock water bearing zone is under artesian conditions, with piezometric levels only slightly below ground surface and approximately 1 foot higher than overburden piezometric levels.

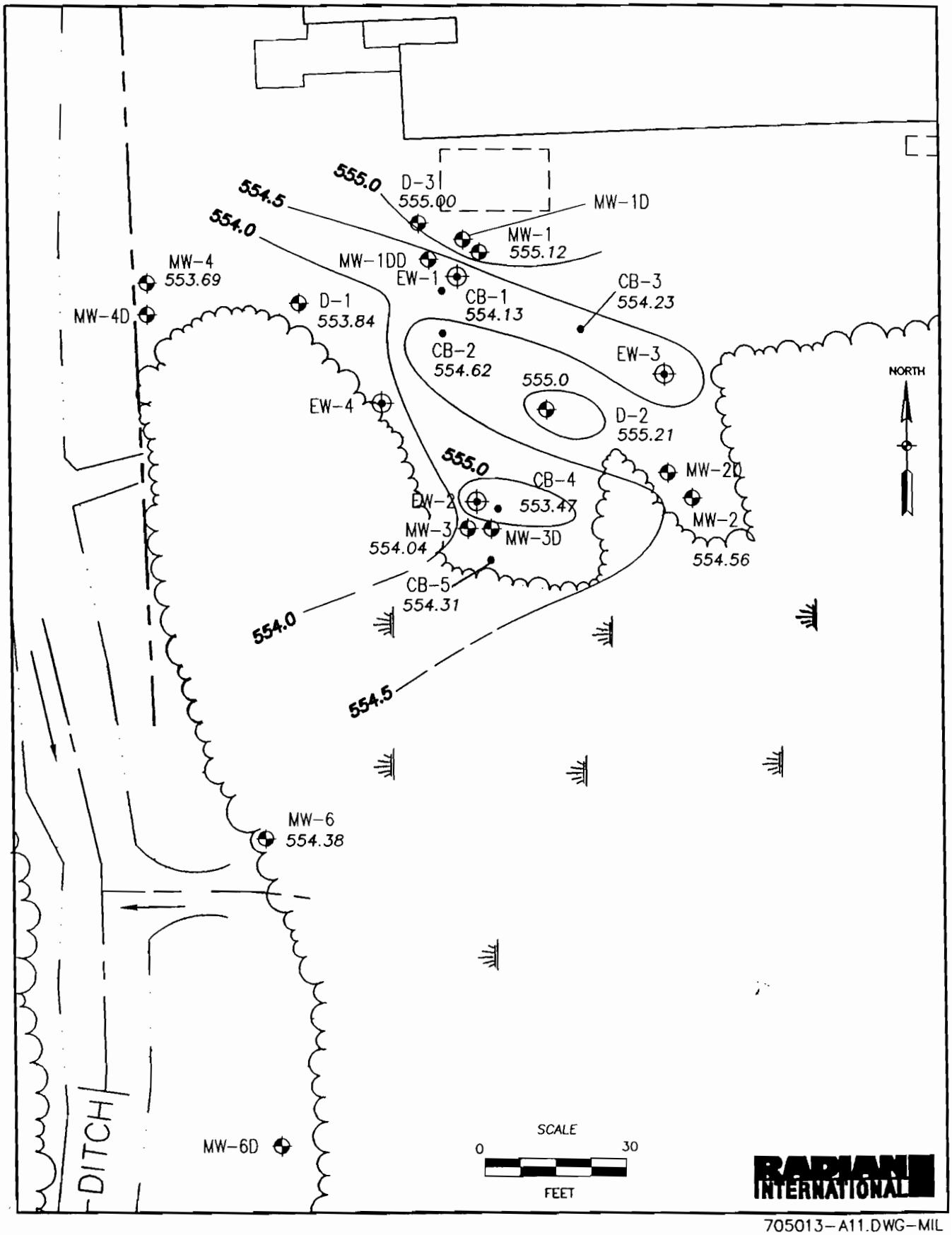


FIGURE 4: GROUNDWATER ELEVATIONS ON 11/21/97

Appendix A: Weekly Summary Reports

Weekly Summary Report

9/29-10/5/97

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Dates Covered:	29-Sep	30-Sep	1-Oct	2-Oct	3-Oct	4-Oct	5-Oct	Total
1. Total Water Treated (gallons)		840.1					2358.9	3199
2. Total Vapor Treated/ Discharged (scf)		35358.7					150927.9	186286.6
3. System Uptime (hours)		24.4					120	144.4

Note: Shading indicates the days included in the numeric totals at the end of the shaded block

4. Explanation of System Downtime (if any)

5. Extraction well vacuums (Formation/Wellhead)

EW-1: 21.6/26 in. Hg
EW-2: 21.5/NA in.Hg
EW-3: 25/27 in. Hg
EW-4: 20/NA in. Hg
Inlet Separator 26.5 in. Hg
Note: Aspiration air open on all wells.
Vacuum Pump #1 Off-line
Vacuum Pump #2 26.5 in. Hg

Comments:

Date:	10/6/97
Filed By:	Scott Daskiewich

Weekly Summary Report

10/6-10/12/97

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Dates Covered:	6-Oct	7-Oct	8-Oct	9-Oct	10-Oct	11-Oct	12-Oct	Total
1. Total Water Treated (gallons)	471.8			1.0			1332.4	1805.2
2. Total Vapor Treated/ Discharged (scf)	30185.6			534.8			102726.5	133446.9
3. System Uptime (hours)	24.0			0.4			73.9	98.3

Note: Shading indicates the days included in the numeric totals at the end of the shaded block

4. Explanation of System Downtime (if any)	System shut down for Quarterly Groundwater sampling 10/6-10/9.

5. Extraction well vacuums (Formation/Wellhead)

EW-1: 21.5/25 in. Hg
EW-2: 21/NA in. Hg
EW-3: 26/26.5 in. Hg
EW-4: 21/NA in. Hg
Inlet Separator 26.5 in. Hg
Note: Aspiration air open on all wells.
Vacuum Pump #1 Off-line
Vacuum Pump #2 26.5 in. Hg

Comments:

Date:	10/13/97
Filed By:	Scott Daskiewich

Weekly Summary Report

10/13-10/19/97

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Dates Covered:	13-Oct	14-Oct	15-Oct	16-Oct	17-Oct	18-Oct	19-Oct	**Total**
1. Total Water Treated (gallons)	441.1				1419.7		717	2580.8
2. Total Vapor Treated/ Discharged (scf)	34242.2				137536.6		72028.7	243807.5
3. System Uptime (hours)	24.6				96.1		48.11	168.8

Note: Shading indicates the days included in the numeric totals at the end of the shaded block

4. Explanation of System Downtime (if any)

5. Extraction well vacuums (Formation/Wellhead)

EW-1: 21.5/26 in. Hg
EW-2: 21.5/NA in.Hg
EW-3: 27/27 in. Hg
EW-4: 20.5/NA in. Hg
Inlet Separator 26 in. Hg
Note: Aspiration air open on all wells.
Vacuum Pump #1 Off-line
Vacuum Pump #2 26 in. Hg

Comments:

Date:	10/20/97
Filed By:	Scott Daskiewich

Weekly Summary Report

10/20-910/26/97

Dates Covered:	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
	20-Oct	21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct	Total
1. Total Water Treated (gallons)							2509.4	2509.4
2. Total Vapor Treated/ Discharged (scf)							252100.4	252100.4
3. System Uptime (hours)							168.4	168.4

Note: Shading indicates the days included in the numeric totals at the end of the shaded block

4. Explanation of System Downtime (if any)	

5. Extraction well vacuums (Formation/Wellhead)

EW-1: NA in. Hg
EW-2: NA in. Hg
EW-3: NA in. Hg
EW-4: NA in. Hg
Inlet Separator 25.5 in. Hg
Note: Aspiration air open on all wells.
Vacuum Pump #1 Off-line
Vacuum Pump #2 25.5 in. Hg

Comments:

Date:	10/29/97
Filed By:	Scott Daskiewich

Weekly Summary Report

10/27-11/2/97

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Dates Covered:	27-Oct	28-Oct	29-Oct	30-Oct	31-Oct	1-Nov	2-Nov	Total
1. Total Water Treated (gallons)	358.5						1759.4	2117.9
2. Total Vapor Treated/ Discharged (scf)	36014.3						82220.9	118235.2
3. System Uptime (hours)	24.1						63.0	87.1

Note: Shading indicates the days included in the numeric totals at the end of the shaded block

4. Explanation of System Downtime (if any)	System down due to power outage. The system was reset and restarted.

5. Extraction well vacuums (Formation/Wellhead)

EW-1: NA in. Hg
EW-2: NA in. Hg
EW-3: NA in. Hg
EW-4: NA in. Hg
Inlet Separator 25.5 in. Hg
Note: Aspiration air open on all wells.
Vacuum Pump #1 Off-line
Vacuum Pump #2 25.5 in. Hg

Comments:

Date:	11/3/97
Filed By:	Scott Daskiewich

Weekly Summary Report

11/3-11/9/97

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Dates Covered:	3-Nov	4-Nov	5-Nov	6-Nov	7-Nov	8-Nov	9-Nov	Total
1. Total Water Treated (gallons)					1466.1		1005.8	2471.9
2. Total Vapor Treated/ Discharged (scf)					68517.5		66872.3	135389.8
3. System Uptime (hours)					52.5		46.1	98.6

Note: Shading indicates the days included in the numeric totals at the end of the shaded block

4. Explanation of System Downtime (if any)	System down due to high bag filter pressure. The filter was changed and the system restarted.

5. Extraction well vacuums (Formation/Wellhead)

EW-1: 21.0/26 in. Hg
EW-2: 22/NA in. Hg
EW-3: 26/26 in. Hg
EW-4: 20.5/NA in. Hg
Inlet Separator 25.0 in. Hg
Note: Aspiration air open on all wells.
Vacuum Pump #1 Off-line
Vacuum Pump #2 25.0 in. Hg

Comments:

Date:	11/10/97
Filed By:	Scott Daskiewich

Weekly Summary Report

11/10-11/16/97

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Dates Covered:	10-Nov	11-Nov	12-Nov	13-Nov	14-Nov	15-Nov	16-Nov	Total
1. Total Water Treated (gallons)			1508.7				161.2	1669.9
2. Total Vapor Treated/ Discharged (scf)			100308.5				37994.3	138302.8
3. System Uptime (hours)			69.2				26.8	96.0

Note: Shading indicates the days included in the numeric totals at the end of the shaded block

4. Explanation of System Downtime (if any)	System down due to skid 2 high temperature. The alarm was reset and the system restarted.

5. Extraction well vacuums (Formation/Wellhead)

EW-1: NA in. Hg
EW-2: NA in. Hg
EW-3: NA in. Hg
EW-4: NA in. Hg
Inlet Separator 23.7 in. Hg
Note: Aspiration air open on all wells.
Vacuum Pump #1 Off-line
Vacuum Pump #2 23.7 in. Hg

Comments:

Date:	11/17/97
Filed By:	Scott Daskiewich

Weekly Summary Report

11/17-11/23/97

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Dates Covered:	17-Nov	18-Nov	19-Nov	20-Nov	21-Nov	22-Nov	23-Nov	Total
1. Total Water Treated (gallons)							282	282
2. Total Vapor Treated/ Discharged (scf)							66490.1	66490.1
3. System Uptime (hours)							46.9	46.9

Note: Shading indicates the days included in the numeric totals at the end of the shaded block

4. Explanation of System Downtime (if any)	System down due to skid 2 high temperature. The alarm was reset and the system was restarted.

5. Extraction well vacuums (Formation/Wellhead)

EW-1: NA in. Hg
EW-2: NA in. Hg
EW-3: NA in. Hg
EW-4: NA in. Hg
Inlet Separator 25 in. Hg
Note: Aspiration air open on all wells.
Vacuum Pump #1 Off-line
Vacuum Pump #2 24 in. Hg

Comments:

Date:	11/25/97
Filed By:	Scott Daskiewich

Weekly Summary Report

11/24-11/30/97

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Dates Covered:	24-Nov	25-Nov	26-Nov	27-Nov	28-Nov	29-Nov	30-Nov	Total
1. Total Water Treated (gallons)	40.3						4339.7	4380
2. Total Vapor Treated/ Discharged (scf)	9498.6						104193.7	113692.3
3. System Uptime (hours)	6.7						96.5	103.2

Note: Shading indicates the days included in the numeric totals at the end of the shaded block

4. Explanation of System Downtime (if any)	System down due to power outage. The system was reset and restarted.

5. Extraction well vacuums (Formation/Wellhead)

EW-1: NA in. Hg
EW-2: NA in. Hg
EW-3: NA in. Hg
EW-4: NA in. Hg
Inlet Separator 25.4 in. Hg
Note: Aspiration air open on all wells.
Vacuum Pump #1 Off-line
Vacuum Pump #2 25.4 in. Hg

Comments:

Date:	12/1/97
Filed By:	Scott Daskiewich

Weekly Summary Report

12/1-12/7/97

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Dates Covered:	1-Dec	2-Dec	3-Dec	4-Dec	5-Dec	6-Dec	7-Dec	Total
1. Total Water Treated (gallons)		1446.6					1482.6	2929.2
2. Total Vapor Treated/ Discharged (scf)		34731.2					13263.7	47994.9
3. System Uptime (hours)		32.2					10.6	42.8

Note: Shading indicates the days included in the numeric totals at the end of the shaded block

4. Explanation of System Downtime (if any)	System shut down to change aqueous phase GAC canisters. The two primary canisters were removed and the secondary canisters were placed in the primary position. New GAC canisters were installed in the secondary position. The two spent GAC canisters were disposed offsite by Laidlaw.

5. Extraction well vacuums (Formation/Wellhead)

EW-1: 21.5/25 in. Hg
EW-2: 21/NA in. Hg
EW-3: 26/26 in. Hg
EW-4: 21/NA in. Hg
Inlet Separator 25.4 in. Hg
Note: Aspiration air open on all wells.
Vacuum Pump #1 Off-line
Vacuum Pump #2 25.4 in. Hg

Comments:

Date:	12/8/97
Filed By:	Scott Daskiewich

Weekly Summary Report

12/8-12/14/97

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Dates Covered:	8-Dec	9-Dec	10-Dec	11-Dec	12-Dec	13-Dec	14-Dec	Total
1. Total Water Treated (gallons)			889.6				1502.3	2391.9
2. Total Vapor Treated/ Discharged (scf)			7958.2				162792.6	170750.8
3. System Uptime (hours)			6.4				73.2	79.6

Note: Shading indicates the days included in the numeric totals at the end of the shaded block

4. Explanation of System Downtime (if any)	System down due to vacuum pump #2 high temperature. The alarm was reset and the system was restarted.

5. Extraction well vacuums (Formation/Wellhead)

EW-1: NA in. Hg
EW-2: NA in. Hg
EW-3: NA in. Hg
EW-4: NA in. Hg
Inlet Separator 23.2 in. Hg
Note: Aspiration air open on all wells.
Vacuum Pump #1 Off-line
Vacuum Pump #2 23.2 in. Hg

Comments:

Date:	12/17/97
Filed By:	Scott Daskiewich

Appendix B: Monthly Summary Reports

Weekly Summary Report

12/29-12/31/97

Dates Covered:	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
	29-Dec	30-Dec	31-Dec					
1. Total Water Treated (gallons)			925					925
2. Total Vapor Treated/ Discharged (scf)			25567.5					25567.5
3. System Uptime (hours)			14.2					14.2

Note: Shading indicates the days included in the numeric totals at the end of the shaded block

4. Explanation of System Downtime (if any)	System down due to high inlet separator level. Water transfer pump tripped its power supply thermal overload switch. The overload was reset and the pump was restarted.

5. Extraction well vacuums (Formation/Wellhead)

EW-1: NA in. Hg
EW-2: NA in. Hg
EW-3: NA in. Hg
EW-4: NA in. Hg
Inlet Separator 23.8 in. Hg
Note: Aspiration air open on all wells.
Vacuum Pump #1 Off-line
Vacuum Pump #2 23.8 in. Hg

Comments:

Date:	1/12/97
Filed By:	Scott Daskiewich

Weekly Summary Report

12/15-12/21/97

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Dates Covered:	15-Dec	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec	**Total**
1. Total Water Treated (gallons)							2629.1	2629.1
2. Total Vapor Treated/ Discharged (scf)							284887	284887
3. System Uptime (hours)							128	128

Note: Shading indicates the days included in the numeric totals at the end of the shaded block

4. Explanation of System Downtime (if any)	System down due to skid 2 high temperature. The alarm was reset and the system was restarted.

5. Extraction well vacuums (Formation/Wellhead)

EW-1: 22.3 in. Hg
EW-2: 27 in. Hg
EW-3: 23.1 in. Hg
EW-4: 24.5/NA in. Hg
Inlet Separator 21.0 in. Hg
Note: Aspiration air open on all wells.
Vacuum Pump #1 Off-line
Vacuum Pump #2 20.0 in. Hg

Comments:

Date:	12/22/97
Filed By:	Scott Daskiewich

Weekly Summary Report

12/22-12/28/97

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Dates Covered:	22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec	28-Dec	Total
1. Total Water Treated (gallons)	450.7						1850	2300.7
2. Total Vapor Treated/ Discharged (scf)	48837.8						51135.1	99972.9
3. System Uptime (hours)	22						28.4	50.4
Note: Shading indicates the days included in the numeric totals at the end of the shaded block								
4. Explanation of System Downtime (if any)								

5. Extraction well vacuums (Formation/Wellhead)

EW-1: NA in. Hg
EW-2: NA in. Hg
EW-3: NA in. Hg
EW-4: NA in. Hg
Inlet Separator 21.0 in. Hg
Note: Aspiration air open on all wells.
Vacuum Pump #1 Off-line
Vacuum Pump #2 20.0 in. Hg

Comments:

Date:	1/2/98
Filed By:	Scott Daskiewich

Monthly Summary Report
October 1997 (9/29 – 10/26)

	Week 1	Week 2	Week 3	Week 4	Week 5	
Dates Covered	9/29-10/5/97	10/6-10/12/97	10/13-10/19/97	10/20-10/26/97	-	Total
1. Total Water Treated (gallons)	3199.0	1805.2	2580.8	2509.4	-	10094.4
2. Total Vapor Treated/ Discharged (scf)	186286.6	133446.9	243807.5	252100.4	-	815641.4
3. System Uptime (hours)	144.4	98.2	168.8	168.4	-	579.8

Comments: System ran for 579.8 hours out of a possible 672.0 hours (86.3% uptime). Downtime this month was attributed to the Quarterly Groundwater sampling. During the reporting period, 10.98 lb. of VOCs were removed from the vapor phase and from the liquid phase. There were 0.42 lb. of VOC discharged to the atmosphere from the vapor phase this reporting period. In the liquid phase, 0.0 lb. of VOCs were discharged to the sewer. Air flow during the month averaged 23.8 scfm while water flow averaged 0.48 gpm.

Date:	11/6/97
Filed By:	Scott Daskiewich

Monthly Summary Report
November 1997 (10/27 – 11/30/97)

	Week 1	Week 2	Week 3	Week 4	Week 5	
Dates Covered	10/27-11/2/97	11/3-11/9/97	11/10-11/16/97	11/17-11/23/97	11/24-11/30/97	Total
1. Total Water Treated (gallons)	2117.9	2471.9	1669.9	282	4360	10921.7
2. Total Vapor Treated/ Discharged (scf)	118235.2	135389.8	138302.8	66490.1	113692.3	572110.2
3. System Uptime (hours)	87.1	98.6	96	46.9	103.2	431.8

Comments: System ran for 431.8 hours out of a possible 838 hours (51.4% uptime). Downtime this month was attributed to a power outage, a plugged bag filter, and high temperature alarm on vacuum pump #2. During the reporting period, 10.42 lb. of VOCs were removed from the vapor phase and 1.102 lb. from the liquid phase. There were 0.23 lb. of VOC discharged to the atmosphere from the vapor phase this reporting period. In the liquid phase, 0.0001 lb. of VOCs were discharged to the sewer. Air flow during the month averaged 23.6 scfm while water flow averaged 0.37 gpm.

Date:	12/3/97
Filed By:	Scott Daskiewich

Monthly Summary Report
December 1997 (12/1 – 12/31/97)

		Week 1	Week 2	Week 3	Week 4	Week 5	
	Dates Covered	12/1-12/7/97	12/8-12/14/97	12/15-12/21/97	12/33-12/28/97	12/29-12/31/97	Total
1.	Total Water Treated (gallons)	2929.2	2391.9	2629.1	2300.7	925	11175.9
2.	Total Vapor Treated/ Discharged (scf)	47994.9	170750.8	284887	99972.9	25567.5	629173.1
3.	System Uptime (hours)	42.8	79.6	128	50.4	14.2	315

Comments: System ran for 315 hours out of a possible 744 hours (42.3% uptime). Downtime this month was attributed to water GAC unit change-out, a tripped thermal overload for the water transfer pump, and a faulty temperature switch on Skid #2. During the reporting period, 7.37 lb. of VOCs were removed from the vapor phase and 1.004 lb. from the liquid phase. There were 0.002 lb. of VOC discharged to the atmosphere from the vapor phase this reporting period. In the liquid phase, 9.7×10^{-6} lb. of VOCs were discharged to the sewer. Air flow during the month averaged 26.5 scfm while water flow averaged 0.38 gpm.

Date:	1/5/98
Filed By:	Scott Daskiewich

Appendix C: Vapor Phase Analytical Results

MICROSEEPS

RAD285-973416

----- RADIAN INTERNATIONAL LLC ----
----- PROJECT LOC: ERDLE PERFORATING CO. -----
----- PROJECT NO: 705-013-05-01 -----
----- 601/602 SCAN -----
----- CONCENTRATIONS IN PPMV -----

	SAMPLE ID	SAMPLE ID	SAMPLE ID	SAMPLE ID	
COMPOUND NAME	V-1-6	V-2-6	V-3-6	V-4-6	LDLs
CHLOROMETHANE	<1	<1	<1	<1	1
VINYL CHLORIDE	<2	<2	3	3	2
BROMOMETHANE/CHLOROETHANE*	<1	<1	<1	<1	1
FLUOROTRICHLOROMETHANE	<.005	<.005	<.005	<.005	0.005
1,1 DICHLOROETHYLENE	0.03	<.01	<.01	<.01	0.01
METHYLENE CHLORIDE	<1	<1	<1	<1	1
TRANS-1,2 DICHLOROETHYLENE	<.1	<.1	<.1	<.1	0.1
1,1 DICHLOROETHANE	0.07	<.01	<.01	<.01	0.01
CHLOROFORM	<.005	<.005	<.005	<.005	0.005
1,1,1 TRICHLOROETHANE	0.025	<.005	<.005	<.005	0.005
CARBON TETRACHLORIDE	<.005	<.005	<.005	<.005	0.005
BENZENE	<.07	<.07	<.07	<.07	0.07
1,2 DICHLOROETHANE	<.01	<.01	<.01	<.01	0.01
TRICHLOROETHYLENE	43.452	<.005	<.005	<.005	0.005
1,2 DICHLOROPROPANE	<.01	<.01	<.01	<.01	0.01
BROMODICHLOROMETHANE	<.005	<.005	<.005	<.005	0.005
CIS-1,3 DICHLOROPROPYLENE	<.01	<.01	<.01	<.01	0.01
TOLUENE	<.07	<.07	<.07	<.07	0.07
TRANS-1,3 DICHLOROPROPYLENE	<.01	<.01	<.01	<.01	0.01
1,1,2 TRICHLOROETHANE	<.005	<.005	<.005	<.005	0.005
TETRACHLOROETHYLENE	0.026	<.005	<.005	<.005	0.005
CHLORODIBROMOMETHANE	<.005	<.005	<.005	<.005	0.005
CHLOROBENZENE	<.07	<.07	<.07	<.07	0.07
ETHYL BENZENE	<.07	<.07	<.07	<.07	0.07
BROMOFORM	<.005	<.005	<.005	<.005	0.005
1,1,2,2 TETRACHLOROETHANE	<.005	<.005	<.005	<.005	0.005
1,3 DICHLOROBENZENE	<.07	<.07	<.07	<.07	0.07
1,4 DICHLOROBENZENE	<.07	<.07	<.07	<.07	0.07
1,2 DICHLOROBENZENE	<.07	<.07	<.07	<.07	0.07
FILE NAME	W78 433	W78 434	W78 435	W78 436	
DATE SAMPLED	11/12/97	11/12/97	11/12/97	11/12/97	
DATE RECEIVED	11/13/97	11/13/97	11/13/97	11/13/97	
DATE ANALYZED	11/14/97	11/14/97	11/14/97	11/14/97	

* COMPOUNDS ELUTE TOGETHER ON ECD: VALUES REPRESENT EITHER OR A COMBINATION OF BOTH.

19-Nov-97

ANALYST INITIALS 

REVIEW 

MICROSEEPS

RAD297-973613

----- RADIAN INTERNATIONAL LLC ----
----- PROJECT LOC: ERDLE PERFORATING CO. -----
----- PROJECT NO: 705-013-05-01 -----
----- 601/602 SCAN -----
----- CONCENTRATIONS IN PPMV -----

	SAMPLE ID	SAMPLE ID	SAMPLE ID	SAMPLE ID	
COMPOUND NAME	V-1-7	V-2-7	V-3-7	V-4-7	LDLs
CHLOROMETHANE	<1	<1	<1	<1	1
VINYL CHLORIDE	<3	<3	<3	<3	3
BROMOMETHANE/CHLOROETHANE*	<1	<1	<1	<1	1
FLUOROTRICHLOROMETHANE	<.005	<.005	<.005	<.005	0.005
1,1 DICHLOROETHYLENE	<.01	<.01	<.01	<.01	0.01
METHYLENE CHLORIDE	<2	<2	<2	<2	2
TRANS-1,2 DICHLOROETHYLENE	0.1	<.1	<.1	<.1	0.1
1,1 DICHLOROETHANE	0.13	<.01	<.01	<.01	0.01
CHLOROFORM	<.005	<.005	<.005	<.005	0.005
1,1,1 TRICHLOROETHANE	0.033	0.016	0.025	0.025	0.005
CARBON TETRACHLORIDE	<.005	<.005	<.005	<.005	0.005
BENZENE	<.07	<.07	<.07	<.07	0.07
1,2 DICHLOROETHANE	<.01	<.01	<.01	<.01	0.01
TRICHLOROETHYLENE	58.611	<.005	<.005	<.005	0.005
1,2 DICHLOROPROPANE	<.01	<.01	<.01	<.01	0.01
BROMODICHLOROMETHANE	<.005	<.005	<.005	<.005	0.005
CIS-1,3 DICHLOROPROPYLENE	<.01	<.01	<.01	<.01	0.01
TOLUENE	<.07	<.07	<.07	<.07	0.07
TRANS-1,3 DICHLOROPROPYLENE	<.01	<.01	<.01	<.01	0.01
1,1,2 TRICHLOROETHANE	<.005	<.005	<.005	<.005	0.005
TETRACHLOROETHYLENE	0.032	<.005	<.005	<.005	0.005
CHLORODIBROMOMETHANE	<.005	<.005	<.005	<.005	0.005
CHLOROBENZENE	<.07	<.07	<.07	<.07	0.07
ETHYL BENZENE	<.07	<.07	<.07	<.07	0.07
BROMOFORM	<.005	<.005	<.005	<.005	0.005
1,1,2,2 TETRACHLOROETHANE	<.005	<.005	<.005	<.005	0.005
1,3 DICHLOROBENZENE	<.07	<.07	<.07	<.07	0.07
1,4 DICHLOROBENZENE	<.07	<.07	<.07	<.07	0.07
1,2 DICHLOROBENZENE	<.07	<.07	<.07	<.07	0.07
FILE NAME	W80 108	W80 109	W80 110	W80 111	
DATE SAMPLED	12/22/97	12/22/97	12/22/97	12/22/97	
DATE RECEIVED	12/23/97	12/23/97	12/23/97	12/23/97	
DATE ANALYZED	12/24/97	12/24/97	12/24/97	12/24/97	

* COMPOUNDS ELUTE TOGETHER ON ECD: VALUES REPRESENT EITHER OR A COMBINATION OF BOTH.

24-Dec-97

ANALYST INITIALS

REVIEW

MICROSEEPS

RAD308-982078

----- RADIAN INTERNATIONAL LLC ----
----- PROJECT LOC: ERDLE PERFORATING CO. -----
----- PROJECT NO: 705-013-05-01 -----
----- 601/602 SCAN -----
----- CONCENTRATIONS IN PPMV -----

	SAMPLE ID	SAMPLE ID	SAMPLE ID	SAMPLE ID	
COMPOUND NAME	V-1-8	V-2-8	V-3-8	V-4-8	LDLs
CHLOROMETHANE	<1	<1	<1	<1	1
VINYL CHLORIDE	<3	<3	<3	<3	3
BROMOMETHANE/CHLOROETHANE*	<1	<1	<1	<1	1
FLUOROTRICHLOROMETHANE	<.005	<.005	<.005	<.005	0.005
1,1 DICHLOROETHYLENE	0.03	<.01	<.01	0.04	0.01
METHYLENE CHLORIDE	<2	<2	<2	<2	2
TRANS-1,2 DICHLOROETHYLENE	<.1	<.1	<.1	<.1	0.1
1,1 DICHLOROETHANE	0.06	<.01	<.01	0.05	0.01
CHLOROFORM	<.005	<.005	<.005	<.005	0.005
1,1,1 TRICHLOROETHANE	0.012	<.005	<.005	0.010	0.005
CARBON TETRACHLORIDE	<.005	<.005	<.005	<.005	0.005
BENZENE	<.07	<.07	<.07	<.07	0.07
1,2 DICHLOROETHANE	<.01	<.01	<.01	<.01	0.01
TRICHLOROETHYLENE	33.233	<.005	<.005	30.147	0.005
1,2 DICHLOROPROPANE	<.01	<.01	<.01	<.01	0.01
BROMODICHLOROMETHANE	<.005	<.005	<.005	<.005	0.005
CIS-1,3 DICHLOROPROPYLENE	<.01	<.01	<.01	<.01	0.01
TOLUENE	<.07	<.07	<.07	<.07	0.07
TRANS-1,3 DICHLOROPROPYLENE	<.01	<.01	<.01	<.01	0.01
1,1,2 TRICHLOROETHANE	<.005	<.005	<.005	<.005	0.005
TETRACHLOROETHYLENE	0.021	<.005	<.005	0.021	0.005
CHLORODIBROMOMETHANE	<.005	<.005	<.005	<.005	0.005
CHLOROBENZENE	<.07	<.07	<.07	<.07	0.07
ETHYL BENZENE	<.07	<.07	<.07	<.07	0.07
BROMOFORM	<.005	<.005	<.005	<.005	0.005
1,1,2,2 TETRACHLOROETHANE	<.005	<.005	<.005	<.005	0.005
1,3 DICHLOROBENZENE	<.07	<.07	<.07	<.07	0.07
1,4 DICHLOROBENZENE	<.07	<.07	<.07	<.07	0.07
1,2 DICHLOROBENZENE	<.07	<.07	<.07	<.07	0.07
FILE NAME	B16 291	B16 292	B16 293	B16 294	
DATE SAMPLED	01/14/98	01/14/98	01/14/98	01/14/98	
DATE RECEIVED	01/21/98	01/21/98	01/21/98	01/21/98	
DATE ANALYZED	01/21/98	01/21/98	01/21/98	01/21/98	

* COMPOUNDS ELUTE TOGETHER ON ECD: VALUES REPRESENT EITHER OR A COMBINATION OF BOTH.

26-Jan-98

ANALYST INITIALS

REVIEW

Appendix D: Liquid Phase Analytical Results

RADIAN CORPORATION
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: W-1-5

Lab Name: Recra LabNet Contract: _____

Lab Code: RECPA Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: P7323001

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2A39096.TX0

Level: (low/med) Med Date Samp/Recv: 11/12/97 11/14/97

% Moisture: not dec. _____ Date Analyzed: 11/25/97

GC Column: RTX-502.2 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 5000.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
110-75-8	2-Chloroethylvinyl ether	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-09-2	Methylene chloride	1.1	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
71-55-6	1,1,1-Trichloroethane	1.8	
79-00-5	1,1,2-Trichloroethane	2.0	
79-01-6	Trichloroethene	130	E
75-69-4	Trichlorofluoromethane	1.0	U
75-01-4	Vinyl chloride	3.8	
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
156-59-2	cis-1,2-Dichloroethene	82	E

000013

RADIAN CORPORATION
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

W-1-5

Lab Name: Recra LabNet Contract: _____

Lab Code: RECPA Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: P7323001

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2A39096.TX0

Level: (low/med) Med Date Samp/Recv: 11/12/97 11/14/97

% Moisture: not dec. _____ Date Analyzed: 11/25/97

GC Column: RTX-502.2 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 5000.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	1.0	U
75-71-8	Dichlorodifluoromethane	1.0	U

RADIAN CORPORATION
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: W-1-5DL

Lab Name: Recra LabNet Contract: _____

Lab Code: RECPA Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: P7323001DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2A39106.TX0

Level: (low/med) Med Date Samp/Recv: 11/12/97 11/14/97

% Moisture: not dec. _____ Date Analyzed: 11/26/97

GC Column: RTX-502.2 Dia: 0.53 (mm) Dilution Factor: 50.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 5000.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	50	U
75-25-2	Bromoform	50	U
74-83-9	Bromomethane	50	U
56-23-5	Carbon Tetrachloride	50	U
108-90-7	Chlorobenzene	50	U
75-00-3	Chloroethane	50	U
110-75-8	2-Chloroethylvinyl ether	50	U
67-66-3	Chloroform	50	U
74-87-3	Chloromethane	50	U
124-48-1	Dibromochloromethane	50	U
95-50-1	1,2-Dichlorobenzene	50	U
541-73-1	1,3-Dichlorobenzene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
75-34-3	1,1-Dichloroethane	50	U
107-06-2	1,2-Dichloroethane	50	U
75-35-4	1,1-Dichloroethene	50	U
156-60-5	trans-1,2-Dichloroethene	50	U
78-87-5	1,2-Dichloropropane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
75-09-2	Methylene chloride	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	U
127-18-4	Tetrachloroethene	50	U
71-55-6	1,1,1-Trichloroethane	50	U
79-00-5	1,1,2-Trichloroethane	50	U
79-01-6	Trichloroethene	790	
75-69-4	Trichlorofluoromethane	50	U
75-01-4	Vinyl chloride	50	U
630-20-6	1,1,1,2-Tetrachloroethane	50	U
96-18-4	1,2,3-Trichloropropane	50	U
108-86-1	Bromobenzene	50	U
156-59-2	cis-1,2-Dichloroethene	190	

000018

RADIAN CORPORATION
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: W-1-5DL

Lab Name: Recra LabNet Contract: _____

Lab Code: RECPA Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: P7323001DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2A39106.TX0

Level: (low/med) Med Date Samp/Recv: 11/12/97 11/14/97

% Moisture: not dec. _____ Date Analyzed: 11/26/97

GC Column: RTX-502.2 Dia: 0.53 (mm) Dilution Factor: 50.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 5000.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	50	U
75-71-8	Dichlorodifluoromethane	50	U

000019

RADIAN CORPORATION
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: W-2-5

Lab Name: Recra LabNet Contract: _____

Lab Code: RECPA Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: P7323002

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2A39101.TX0

Level: (low/med) Med Date Samp/Recv: 11/12/97 11/14/97

% Moisture: not dec. _____ Date Analyzed: 11/25/97

GC Column: RTX-502.2 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 5000.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
110-75-8	2-Chloroethylvinyl ether	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.3	
10061-01-5	cis-1,3-Dichloropropene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-09-2	Methylene chloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.7	
127-18-4	Tetrachloroethene	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
79-01-6	Trichloroethene	16	
75-69-4	Trichlorofluoromethane	1.0	U
75-01-4	Vinyl chloride	1.2	
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
156-59-2	cis-1,2-Dichloroethene	5.8	

000023

RADIAN CORPORATION
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: W-2-5

Lab Name: Recra LabNet Contract: _____

Lab Code: RECPA Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: P7323002

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2A39101.TX0

Level: (low/med) Med Date Samp/Recv: 11/12/97 11/14/97

% Moisture: not dec. _____ Date Analyzed: 11/25/97

GC Column: RTX-502.2 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 5000.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	1.9	
75-71-8	Dichlorodifluoromethane	1.0	U

RADIAN CORPORATION
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: W-3-5

Lab Name: Recra LabNet Contract: _____

Lab Code: RECPA Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: P7323003

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2A39098.TX0

Level: (low/med) Med Date Samp/Recv: 11/12/97 11/14/97

% Moisture: not dec. _____ Date Analyzed: 11/25/97

GC Column: RTX-502.2 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 5000.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
110-75-8	2-Chloroethylvinyl ether	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-09-2	Methylene chloride	2.1	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
79-01-6	Trichloroethene	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U

000028

RADIAN CORPORATION
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: W-3-5

Lab Name: Recra LabNet Contract: _____

Lab Code: RECPA Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: P7323003

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2A39098.TX0

Level: (low/med) Med Date Samp/Recv: 11/12/97 11/14/97

% Moisture: not dec. _____ Date Analyzed: 11/25/97

GC Column: RTX-502.2 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 5000.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	1.0	U
75-71-8	Dichlorodifluoromethane	1.0	U

000029

RADIAN CORPORATION
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

W-4-5

Lab Name: Recra LabNet Contract: _____

Lab Code: RECPA Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: P7323004

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2A39099.TX0

Level: (low/med) Med Date Samp/Recv: 11/12/97 11/14/97

% Moisture: not dec. _____ Date Analyzed: 11/25/97

GC Column: RTX-502.2 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 5000.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
110-75-8	2-Chloroethylvinyl ether	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-09-2	Methylene chloride	2.1	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
71-55-6	1,1,1-Trichloroethane	1.2	
79-00-5	1,1,2-Trichloroethane	2.1	
79-01-6	Trichloroethene	1.3	E
75-69-4	Trichlorofluoromethane	1.0	U
75-01-4	Vinyl chloride	3.8	
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
156-59-2	cis-1,2-Dichloroethene	83	E

RADIAN CORPORATION
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

W-4-5

Lab Name: Recra LabNet Contract: _____

Lab Code: RECPA Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: P7323004

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2A39099.TX0

Level: (low/med) Med Date Samp/Recv: 11/12/97 11/14/97

% Moisture: not dec. _____ Date Analyzed: 11/25/97

GC Column: RTX-502.2 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 5000.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	1.0	U
75-71-8	Dichlorodifluoromethane	1.0	U

000034

RADIAN CORPORATION
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: W-4-5DL

Lab Name: Recra LabNet Contract: _____

Lab Code: RECPA Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: P7323004DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2A39107.TX0

Level: (low/med) Med Date Samp/Recv: 11/12/97 11/14/97

% Moisture: not dec. _____ Date Analyzed: 11/26/97

GC Column: RTX-502.2 Dia: 0.53 (mm) Dilution Factor: 50.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 5000.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	50	U
75-25-2	Bromoform	50	U
74-83-9	Bromomethane	50	U
56-23-5	Carbon Tetrachloride	50	U
108-90-7	Chlorobenzene	50	U
75-00-3	Chloroethane	50	U
110-75-8	2-Chloroethylvinyl ether	50	U
67-66-3	Chloroform	50	U
74-87-3	Chloromethane	50	U
124-48-1	Dibromochloromethane	50	U
95-50-1	1,2-Dichlorobenzene	50	U
541-73-1	1,3-Dichlorobenzene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
75-34-3	1,1-Dichloroethane	50	U
107-06-2	1,2-Dichloroethane	50	U
75-35-4	1,1-Dichloroethene	50	U
156-60-5	trans-1,2-Dichloroethene	50	U
78-87-5	1,2-Dichloropropane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
75-09-2	Methylene chloride	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	U
127-18-4	Tetrachloroethene	50	U
71-55-6	1,1,1-Trichloroethane	50	U
79-00-5	1,1,2-Trichloroethane	50	U
79-01-6	Trichloroethene	950	
75-69-4	Trichlorofluoromethane	50	U
75-01-4	Vinyl chloride	50	U
630-20-6	1,1,1,2-Tetrachloroethane	50	U
96-18-4	1,2,3-Trichloropropane	50	U
108-86-1	Bromobenzene	50	U
156-59-2	cis-1,2-Dichloroethene	250	

RADIAN CORPORATION
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

W-4-5DL

Lab Name: Recra LabNet Contract: _____

Lab Code: RECPA Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: P7323004DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2A39107.TX0

Level: (low/med) Med Date Samp/Recv: 11/12/97 11/14/97

% Moisture: not dec. _____ Date Analyzed: 11/26/97

GC Column: RTX-502.2 Dia: 0.53 (mm) Dilution Factor: 50.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 5000.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	50	U
75-71-8	Dichlorodifluoromethane	50	U

RADIAN CORPORATION
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: TB-1

Lab Name: Recra LabNet Contract: _____

Lab Code: RECPA Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: P7323005

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2A39102.TX0

Level: (low/med) Med Date Samp/Recv: 11/12/97 11/14/97

% Moisture: not dec. _____ Date Analyzed: 11/25/97

GC Column: RTX-502.2 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 5000.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
110-75-8	2-Chloroethylvinyl ether	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
124-48-1	Dibromochloromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-09-2	Methylene chloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
79-01-6	Trichloroethene	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U

000043

RADIAN CORPORATION
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

TB-1

Lab Name: Recra LabNet Contract: _____

Lab Code: RECPA Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: P7323005

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2A39102.TX0

Level: (low/med) Med Date Samp/Recv: 11/12/97 11/14/97

% Moisture: not dec. _____ Date Analyzed: 11/25/97

GC Column: RTX-502.2 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 5000.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-95-3	Dibromomethane	1.0	U
75-71-8	Dichlorodifluoromethane	1.0	U

ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

000008
Client No.

TB-1-7

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A7479601

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0A14230.TX0

Level: (low/med) Low Date Samp/Recv: 12/22/97 12/23/97

% Moisture: not dec. _____ Date Analyzed: 12/24/97

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	0.20	U
108-90-7	Chlorobenzene	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
100-41-4	Ethylbenzene	0.20	U
108-88-3	Toluene	0.20	U
108-38-3	m-Xylene	0.20	U
95-47-6	o-Xylene	0.20	U
106-42-3	p-Xylene	0.20	U

EADLE SITE

METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000003
Client No.

TB-1-7

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A7479601

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B14230.TX0

Level: (low/med) Low Date Samp/Recv: 12/22/97 12/23/97

% Moisture: not dec. _____ Date Analyzed: 12/24/97

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	0.20	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	0.20	U
108-90-7	Chlorobenzene	0.40	U
75-00-3	Chloroethane	1.0	U
110-75-8	2-Chloroethylvinyl ether	1.0	U
67-66-3	Chloroform	0.20	U
74-87-3	Chloromethane	1.0	U
124-48-1	Dibromochloromethane	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
75-34-3	1,1-Dichloroethane	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
75-35-4	1,1-Dichloroethene	0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
75-09-2	Methylene chloride	0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
79-01-6	Trichloroethene	0.20	U
75-69-4	Trichlorofluoromethane	0.20	U
75-01-4	Vinyl chloride	1.0	U

METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

000010 No.

W-1-7

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A7479602

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0A14231.TX0

Level: (low/med) Low Date Samp/Recv: 12/22/97 12/23/97

Moisture: not dec. _____ Date Analyzed: 12/24/97

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 20.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	0.80	U
108-90-7	Chlorobenzene	0.80	U
95-50-1	1,2-Dichlorobenzene	0.80	U
541-73-1	1,3-Dichlorobenzene	0.80	U
106-46-7	1,4-Dichlorobenzene	0.80	U
100-41-4	Ethylbenzene	0.80	U
108-88-3	Toluene	0.80	U
108-38-3	m-Xylene	0.80	U
95-47-6	o-Xylene	0.80	U
106-42-3	p-Xylene	0.80	U

ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000011
Client No.

W-1-7

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A7479602

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B14231.TX0

Level: (low/med) Low Date Samp/Recv: 12/22/97 12/23/97

% Moisture: not dec. _____ Date Analyzed: 12/24/97

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 20.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	4.0	U
75-25-2	Bromoform	16	U
74-83-9	Bromomethane	16	U
56-23-5	Carbon Tetrachloride	4.0	U
108-90-7	Chlorobenzene	8.0	U
75-00-3	Chloroethane	16	U
110-75-8	2-Chloroethylvinyl ether	10	U
67-66-3	Chloroform	4.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	4.0	U
95-50-1	1,2-Dichlorobenzene	4.0	U
541-73-1	1,3-Dichlorobenzene	4.0	U
106-46-7	1,4-Dichlorobenzene	4.0	U
75-34-3	1,1-Dichloroethane	4.0	U
107-06-2	1,2-Dichloroethane	4.0	U
75-35-4	1,1-Dichloroethene	4.0	U
156-60-5	trans-1,2-Dichloroethene	4.0	U
78-87-5	1,2-Dichloropropane	4.0	U
10061-01-5	cis-1,3-Dichloropropene	4.0	U
10061-02-6	trans-1,3-Dichloropropene	4.0	U
75-09-2	Methylene chloride	4.0	U
79-34-5	1,1,2,2-Tetrachloroethane	4.0	U
127-18-4	Tetrachloroethene	6.0	
71-55-6	1,1,1-Trichloroethane	4.0	U
79-00-5	1,1,2-Trichloroethane	4.0	U
79-01-6	Trichloroethene	1500	E
75-69-4	Trichlorofluoromethane	4.0	U
75-01-4	Vinyl chloride	76	

ERDLE SITE

METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000012
Client No.

W-1-7

Lab Name: Recra LabNet Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A7479602DL

ample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B14252.TX0

evel: (low/med) Low Date Samp/Recv: 12/22/97 12/23/97

% Moisture: not dec. _____ Date Analyzed: 12/29/97

C Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1000.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	200	U
75-25-2	Bromoform	800	U
74-83-9	Bromomethane	800	U
56-23-5	Carbon Tetrachloride	200	U
108-90-7	Chlorobenzene	400	U
75-00-3	Chloroethane	800	U
110-75-8	2-Chloroethylvinyl ether	500	U
67-66-3	Chloroform	200	U
74-87-3	Chloromethane	500	U
124-48-1	Dibromochloromethane	200	U
95-50-1	1,2-Dichlorobenzene	200	U
541-73-1	1,3-Dichlorobenzene	200	U
106-46-7	1,4-Dichlorobenzene	200	U
75-34-3	1,1-Dichloroethane	200	U
107-06-2	1,2-Dichloroethane	200	U
75-35-4	1,1-Dichloroethene	200	U
156-60-5	trans-1,2-Dichloroethene	200	U
78-87-5	1,2-Dichloropropane	200	U
10061-01-5	cis-1,3-Dichloropropene	200	U
10061-02-6	trans-1,3-Dichloropropene	200	U
75-09-2	Methylene chloride	200	U
79-34-5	1,1,2,2-Tetrachloroethane	200	U
127-18-4	Tetrachloroethene	200	U
71-55-6	1,1,1-Trichloroethane	200	U
79-00-5	1,1,2-Trichloroethane	200	U
79-01-6	Trichloroethene	22000	D
75-69-4	Trichlorofluoromethane	200	U
75-01-4	Vinyl chloride	800	U

METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

000013

Client No.

W-2-7

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A7479603

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0A14232.TX0

Level: (low/med) Low Date Samp/Recv: 12/22/97 12/23/97

% Moisture: not dec. _____ Date Analyzed: 12/25/97

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	0.20	U
108-90-7	Chlorobenzene	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
100-41-4	Ethylbenzene	0.20	U
108-88-3	Toluene	0.20	U
108-38-3	m-Xylene	0.20	U
95-47-6	o-Xylene	0.20	U
106-42-3	p-Xylene	0.20	U

METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000014

Client No.

W-2-7

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A7479603

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B14243.TX0

Level: (low/med) Low Date Samp/Recv: 12/22/97 12/23/97

% Moisture: not dec. _____ Date Analyzed: 12/26/97

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	0.20	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	0.20	U
108-90-7	Chlorobenzene	0.40	U
75-00-3	Chloroethane	1.0	U
110-75-8	2-Chloroethylvinyl ether	1.0	U
67-66-3	Chloroform	0.20	U
74-87-3	Chloromethane	1.0	U
124-48-1	Dibromochloromethane	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
75-34-3	1,1-Dichloroethane	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
75-35-4	1,1-Dichloroethene	0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
75-09-2	Methylene chloride	0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
79-01-6	Trichloroethene	0.20	U
75-69-4	Trichlorofluoromethane	0.20	U
75-01-4	Vinyl chloride	1.0	U

ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

000015

Client No.

W-3-7

Lab Name: Recra LabNet Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A7479604

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0A14233.TX0

evel: (low/med) Low Date Samp/Recv: 12/22/97 12/23/97

% Moisture: not dec. _____ Date Analyzed: 12/25/97

C Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	0.20	U
108-90-7	Chlorobenzene	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
100-41-4	Ethylbenzene	0.20	U
108-88-3	Toluene	0.20	U
108-38-3	m-Xylene	0.20	U
95-47-6	o-Xylene	0.20	U
106-42-3	p-Xylene	0.20	U

METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000016
Client No.

W-3-7

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A7479604

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B14233.TX0

Level: (low/med) Low Date Samp/Recv: 12/22/97 12/23/97

% Moisture: not dec. _____ Date Analyzed: 12/25/97

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	0.20	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	0.20	U
108-90-7	Chlorobenzene	0.40	U
75-00-3	Chloroethane	1.0	U
110-75-8	2-Chloroethylvinyl ether	1.0	U
67-66-3	Chloroform	0.20	U
74-87-3	Chloromethane	1.0	U
124-48-1	Dibromochloromethane	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
75-34-3	1,1-Dichloroethane	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
75-35-4	1,1-Dichloroethene	0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
75-09-2	Methylene chloride	0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
79-01-6	Trichloroethene	0.20	U
75-69-4	Trichlorofluoromethane	0.20	U
75-01-4	Vinyl chloride	1.0	U

ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

000017

Client No.

W-4-7

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A7479605

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0A14234.TX0

Level: (low/med) Low Date Samp/Recv: 12/22/97 12/23/97

% Moisture: not dec. _____ Date Analyzed: 12/25/97

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	0.20	U
108-90-7	Chlorobenzene	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
100-41-4	Ethylbenzene	0.20	U
108-88-3	Toluene	0.20	U
108-38-3	m-Xylene	0.20	U
95-47-6	o-Xylene	0.20	U
106-42-3	p-Xylene	0.20	U

METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000018

Client No.

W-4-7

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A7479605

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B14234.TX0

Level: (low/med) Low Date Samp/Recv: 12/22/97 12/23/97

% Moisture: not dec. _____ Date Analyzed: 12/25/97

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	0.20	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	0.20	U
108-90-7	Chlorobenzene	0.40	U
75-00-3	Chloroethane	1.0	U
110-75-8	2-Chloroethylvinyl ether	1.0	U
67-66-3	Chloroform	0.20	U
74-87-3	Chloromethane	1.0	U
124-48-1	Dibromochloromethane	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
75-34-3	1,1-Dichloroethane	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
75-35-4	1,1-Dichloroethene	0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
75-09-2	Methylene chloride	0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
71-55-6	1,1,1-Trichloroethane	0.50	
79-00-5	1,1,2-Trichloroethane	0.20	U
79-01-6	Trichloroethene	0.20	U
75-69-4	Trichlorofluoromethane	0.20	U
75-01-4	Vinyl chloride	1.0	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000008

Client No.

TB-1-8

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8017401

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B15090.TX0

Level: (low/med) Low Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. _____ Date Analyzed: 01/21/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	0.20	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	0.20	U
108-90-7	Chlorobenzene	0.40	U
75-00-3	Chloroethane	1.0	U
110-75-8	2-Chloroethylvinyl ether	1.0	U
67-66-3	Chloroform	0.20	U
74-87-3	Chloromethane	1.0	U
124-48-1	Dibromochloromethane	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
75-34-3	1,1-Dichloroethane	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
75-35-4	1,1-Dichloroethene	0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
75-09-2	Methylene chloride	0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
79-01-6	Trichloroethene	0.20	U
75-69-4	Trichlorofluoromethane	0.20	U
75-01-4	Vinyl chloride	1.0	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000009

Client No.

W-1-8

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8017402

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B15191.TX0

Level: (low/med) Low Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. _____ Date Analyzed: 01/30/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 100.00

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	20	U
75-25-2	Bromoform	80	U
74-83-9	Bromomethane	80	U
56-23-5	Carbon Tetrachloride	20	U
108-90-7	Chlorobenzene	40	U
75-00-3	Chloroethane	80	U
110-75-8	2-Chloroethylvinyl ether	50	U
67-66-3	Chloroform	20	U
74-87-3	Chloromethane	50	U
124-48-1	Dibromochloromethane	20	U
95-50-1	1,2-Dichlorobenzene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
75-34-3	1,1-Dichloroethane	20	U
107-06-2	1,2-Dichloroethane	20	U
75-35-4	1,1-Dichloroethene	20	U
156-60-5	trans-1,2-Dichloroethene	20	U
78-87-5	1,2-Dichloropropane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
75-09-2	Methylene chloride	23	
79-34-5	1,1,2,2-Tetrachloroethane	20	U
127-18-4	Tetrachloroethene	20	U
71-55-6	1,1,1-Trichloroethane	20	U
79-00-5	1,1,2-Trichloroethane	20	U
79-01-6	Trichloroethene	1700	
75-69-4	Trichlorofluoromethane	20	U
75-01-4	Vinyl chloride	80	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000010

Client No.

W-2-8

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8017403

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B15096.TX0

Level: (low/med) Low Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. _____ Date Analyzed: 01/22/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	0.20	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	0.20	U
108-90-7	Chlorobenzene	0.40	U
75-00-3	Chloroethane	1.0	U
110-75-8	2-Chloroethylvinyl ether	1.0	U
67-66-3	Chloroform	0.20	U
74-87-3	Chloromethane	1.0	U
124-48-1	Dibromochloromethane	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
75-34-3	1,1-Dichloroethane	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
75-35-4	1,1-Dichloroethene	0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
75-09-2	Methylene chloride	0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
79-01-6	Trichloroethene	6.4	
75-69-4	Trichlorofluoromethane	0.20	U
75-01-4	Vinyl chloride	1.0	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000011

Client No.

W-3-8

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8017404

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B15093.TX0

Level: (low/med) Low Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. _____ Date Analyzed: 01/21/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	0.20	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	0.20	U
108-90-7	Chlorobenzene	0.40	U
75-00-3	Chloroethane	1.0	U
110-75-8	2-Chloroethylvinyl ether	1.0	U
67-66-3	Chloroform	0.20	U
74-87-3	Chloromethane	1.0	U
124-48-1	Dibromochloromethane	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
75-34-3	1,1-Dichloroethane	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
75-35-4	1,1-Dichloroethene	0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
75-09-2	Methylene chloride	0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
79-01-6	Trichloroethene	0.24	
75-69-4	Trichlorofluoromethane	0.20	U
75-01-4	Vinyl chloride	1.0	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

W-4-8

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8017405

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B15197.TX0

Level: (low/med) Low Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. _____ Date Analyzed: 01/30/98

GC Column: DB-624 Dia: 0.53 (mm) Dilution Factor: 100.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	20	U
75-25-2	Bromoform	80	U
74-83-9	Bromomethane	80	U
56-23-5	Carbon Tetrachloride	20	U
108-90-7	Chlorobenzene	40	U
75-00-3	Chloroethane	80	U
110-75-8	2-Chloroethylvinyl ether	50	U
67-66-3	Chloroform	20	U
74-87-3	Chloromethane	50	U
124-48-1	Dibromochloromethane	20	U
95-50-1	1,2-Dichlorobenzene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
75-34-3	1,1-Dichloroethane	20	U
107-06-2	1,2-Dichloroethane	20	U
75-35-4	1,1-Dichloroethene	20	U
156-60-5	trans-1,2-Dichloroethene	20	U
78-87-5	1,2-Dichloropropane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
75-09-2	Methylene chloride	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
127-18-4	Tetrachloroethene	20	U
71-55-6	1,1,1-Trichloroethane	20	U
79-00-5	1,1,2-Trichloroethane	20	U
79-01-6	Trichloroethene	980	
75-69-4	Trichlorofluoromethane	20	U
75-01-4	Vinyl chloride	80	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

000013

Client No.

TB-1-8

ab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A8017401

ample wt/vol: 5.00 (g/mL) ML Lab File ID: 0A15090.TX0

Level: (low/med) Low Date Samp/Recv: 01/19/98 01/21/98

Moisture: not dec. _____ Date Analyzed: 01/21/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

oil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	0.20	U
108-90-7	Chlorobenzene	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
100-41-4	Ethylbenzene	0.20	U
108-88-3	Toluene	0.20	U
108-38-3	m-Xylene	0.20	U
95-47-6	o-Xylene	0.20	U
106-42-3	p-Xylene	0.20	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

000014

Client No.

W-1-8

ab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A8017402

ample wt/vol: 5.00 (g/mL) ML Lab File ID: 0A15097.TX0

Level: (low/med) Low Date Samp/Recv: 01/19/98 01/21/98

Moisture: not dec. _____ Date Analyzed: 01/22/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 10.00

oil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	2.0	U
108-90-7	Chlorobenzene	2.0	U
95-50-1	1,2-Dichlorobenzene	2.0	U
541-73-1	1,3-Dichlorobenzene	2.0	U
106-46-7	1,4-Dichlorobenzene	2.0	U
100-41-4	Ethylbenzene	2.0	U
108-88-3	Toluene	2.0	U
108-38-3	m-Xylene	2.0	U
95-47-6	o-Xylene	2.0	U
106-42-3	p-Xylene	2.0	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

000015

Client No.

W-2-8

ab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A8017403

ample wt/vol: 5.00 (g/mL) ML Lab File ID: 0A15096.TX0

Level: (low/med) Low Date Samp/Recv: 01/19/98 01/21/98

Moisture: not dec. _____ Date Analyzed: 01/22/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

oil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	0.89	
108-90-7	Chlorobenzene	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
100-41-4	Ethylbenzene	0.20	U
108-88-3	Toluene	0.20	U
108-38-3	m-Xylene	0.20	U
95-47-6	o-Xylene	0.20	U
106-42-3	p-Xylene	0.20	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

000016

Client No.

W-3-8

ab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A8017404

ample wt/vol: 5.00 (g/mL) ML Lab File ID: 0A15093.TX0

Level: (low/med) Low Date Samp/Recv: 01/19/98 01/21/98

Moisture: not dec. _____ Date Analyzed: 01/21/98

GC Column: DB-624 Dia: 0.53 (mm) Dilution Factor: 1.00

oil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	0.20	U
108-90-7	Chlorobenzene	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
100-41-4	Ethylbenzene	0.20	U
108-88-3	Toluene	0.20	U
108-38-3	m-Xylene	0.33	1
95-47-6	o-Xylene	0.20	U
106-42-3	p-Xylene	0.20	1U

RADIAN CORPORATION
ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

000017

Client No.

W-4-8

ab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8017405

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0A15098.TX0

Level: (low/med) Low Date Samp/Recv: 01/19/98 01/21/98

Moisture: not dec. _____ Date Analyzed: 01/22/98

GC Column: DB-624 Dia: 0.53 (mm) Dilution Factor: 10.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	2.0	U
108-90-7	Chlorobenzene	2.0	U
95-50-1	1,2-Dichlorobenzene	2.0	U
541-73-1	1,3-Dichlorobenzene	2.0	U
106-46-7	1,4-Dichlorobenzene	2.0	U
100-41-4	Ethylbenzene	2.0	U
108-88-3	Toluene	2.0	U
108-38-3	m-Xylene	2.0	U
95-47-6	o-Xylene	2.0	U
106-42-3	p-Xylene	2.0	U

Appendix E: Soil Boring Logs for CB-1, CB-2, CB-3, CB-4, and CB-5

RADIAN INTERNATIONAL

Piezometer #: CB-1

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LOG OF DRILLING OPERATIONS

PROJECT 2-PHASE Extraction IRM LOCATION Erdle Facility
TOTAL DEPTH 7.00 START DATE 10/9/97 FINISH DATE 10/9/97
GEOLOGIST Baxter APPROVED BY N/A R.G.# N/A
DRILLING COMPANY Marcor DRILLER Marcor
DRILLING METHOD Direct Push (Geoprobe) EQUIPMENT Geoprobe
DRILL BIT TYPE AND SIZE
BORING LOCATION (ST. ADDRESS OR DESCRIPTION)

Depth Below Surface (ft)	Sample Interval	Blow Count	Recovery(Soil) Rec./RQD(Rock)	Hdsp.Screening (ppm)	Lithologic Description (Color, Texture, Moisture, etc.)	Graphic Log	Elevation (ft MSL)	Piezometer Installation Log
0					**STRATIFIED GLACIAL DRIFT** Grey sand.		557.00	Casing elevation=557.92
								Granular bentonite seal 1.0
							555	Silica sand
					WEATHERED GLACIAL TILL Greyish red lean clay, stiff, slightly mottled.			
5				500				1" dia. PVC machine slotted screen, 0.010" slots 6.0
					Boring Terminated at 7.0 feet.		550	

NOTES

RADIAN INTERNATIONAL

Piezometer #: CB-2

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LOG OF DRILLING OPERATIONS

PROJECT 2-PHASE Extraction IRM LOCATION Erdle Facility
TOTAL DEPTH 7.00 START DATE 10/9/97 FINISH DATE 10/9/97
GEOLOGIST Baxter APPROVED BY N/A R.G.# N/A
DRILLING COMPANY Marcor DRILLER Marcor
DRILLING METHOD Direct Push (Geoprobe) EQUIPMENT Geoprobe
DRILL BIT TYPE AND SIZE
BORING LOCATION (ST. ADDRESS OR DESCRIPTION)

Depth Below Surface (ft)	Sample Interval	Blow Count	Recovery(Soil) Rec./RQD(Rock)	Hdsp.Screening (ppm)	Lithologic Description (Color, Texture, Moisture, etc.)	Graphic Log	Elevation (ft MSL)
0					**EARTH FILL** Reddish grey silty clay.		556.70
					STRATIFIED GLACIAL DRIFT Grey sand, friable, moist.		555
					WEATHERED GLACIAL TILL Greyish red lean clay, stiff, slightly mottled.		
5				250			
					Boring Terminated at 7.0 feet.		550

Piezometer Installation Log

Casing elevation = 557.93

Granular bentonite seal

Silica sand

1" dia. PVC machine slotted screen, 0.010" slots

1.5

6.5

NOTES

RADIAN INTERNATIONAL

Piezometer #: CB-3

LOG OF DRILLING OPERATIONS

PROJECT	2-PHASE Extraction IRM	LOCATION	Erdle Facility
TOTAL DEPTH	7.00	START DATE	10/9/97
FINISH DATE	10/9/97		
GEOLOGIST	Baxter	APPROVED BY	N/A
R.G.#	N/A		
DRILLING COMPANY	Marcor	DRILLER	Marcor
DRILLING METHOD	Direct Push (Geoprobe)	EQUIPMENT	Geoprobe
DRILL BIT TYPE AND SIZE			
BORING LOCATION (ST. ADDRESS OR DESCRIPTION)			

Depth Below Surface (ft)	Sample Interval	Blow Count	Recovery(Soil) Rec./RQD(Rock)	Hdsp.Screening (ppm)	Lithologic Description (Color, Texture, Moisture, etc.)	Graphic Log	Elevation (ft MSL)
0					**EARTH FILL** Reddish grey silty clay.		556.50
					STRATIFIED GLACIAL DRIFT Grey sand, friable, moist.		555
					WEATHERED GLACIAL TILL Greyish red lean clay, stiff, slightly mottled.		
5				15			550
					Boring Terminated at 7.0 feet.		

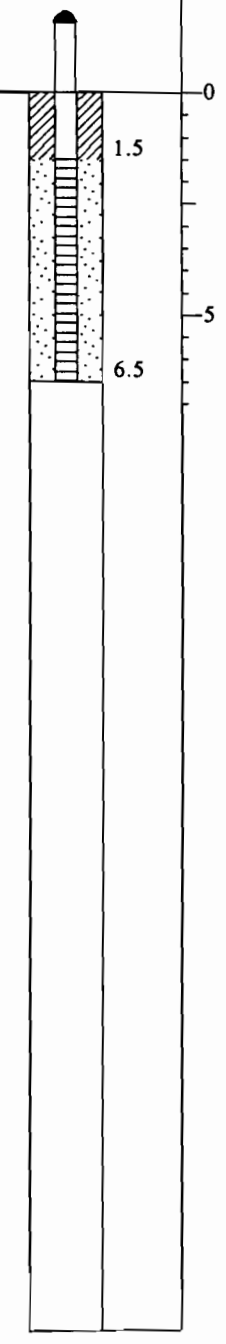
Piezometer Installation Log

Casing elevation=557.71

Granular bentonite seal

Silica sand

1" dia. PVC machine slotted screen, 0.010" slots



NOTES

RADIAN INTERNATIONAL

Piezometer #: CB-4

LOG OF DRILLING OPERATIONS

PROJECT	2-PHASE Extraction IRM	LOCATION	Erdle Facility
TOTAL DEPTH	7.00	START DATE	10/9/97
FINISH DATE	10/9/97		
GEOLOGIST	Baxter	APPROVED BY	N/A
R.G.#	N/A		
DRILLING COMPANY	Marcor	DRILLER	Marcor
DRILLING METHOD	Direct Push (Geoprobe)	EQUIPMENT	Geoprobe
DRILL BIT TYPE AND SIZE			
BORING LOCATION (ST. ADDRESS OR DESCRIPTION)			

Depth Below Surface (ft)	Sample Interval	Blow Count	Recovery(Soil) Rec./RQD(Rock)	Hdsp.Screening (ppm)	Lithologic Description (Color, Texture, Moisture, etc.)	Graphic Log	Elevation (ft MSL)	Piezometer Installation Log
0					**STRATIFIED GLACIAL DRIFT** Grey and brown silty sand, wet.		556.10	Casing elevation=557.18
							555	Granular bentonite seal 1.5
								Silica sand
					WEATHERED GLACIAL TILL Greyish red lean clay, stiff, slightly mottled.			
5				500				1" dia. PVC machine slotted screen, 0.010" slots
							550	6.5
					Boring Terminated at 7.0 feet.			

NOTES

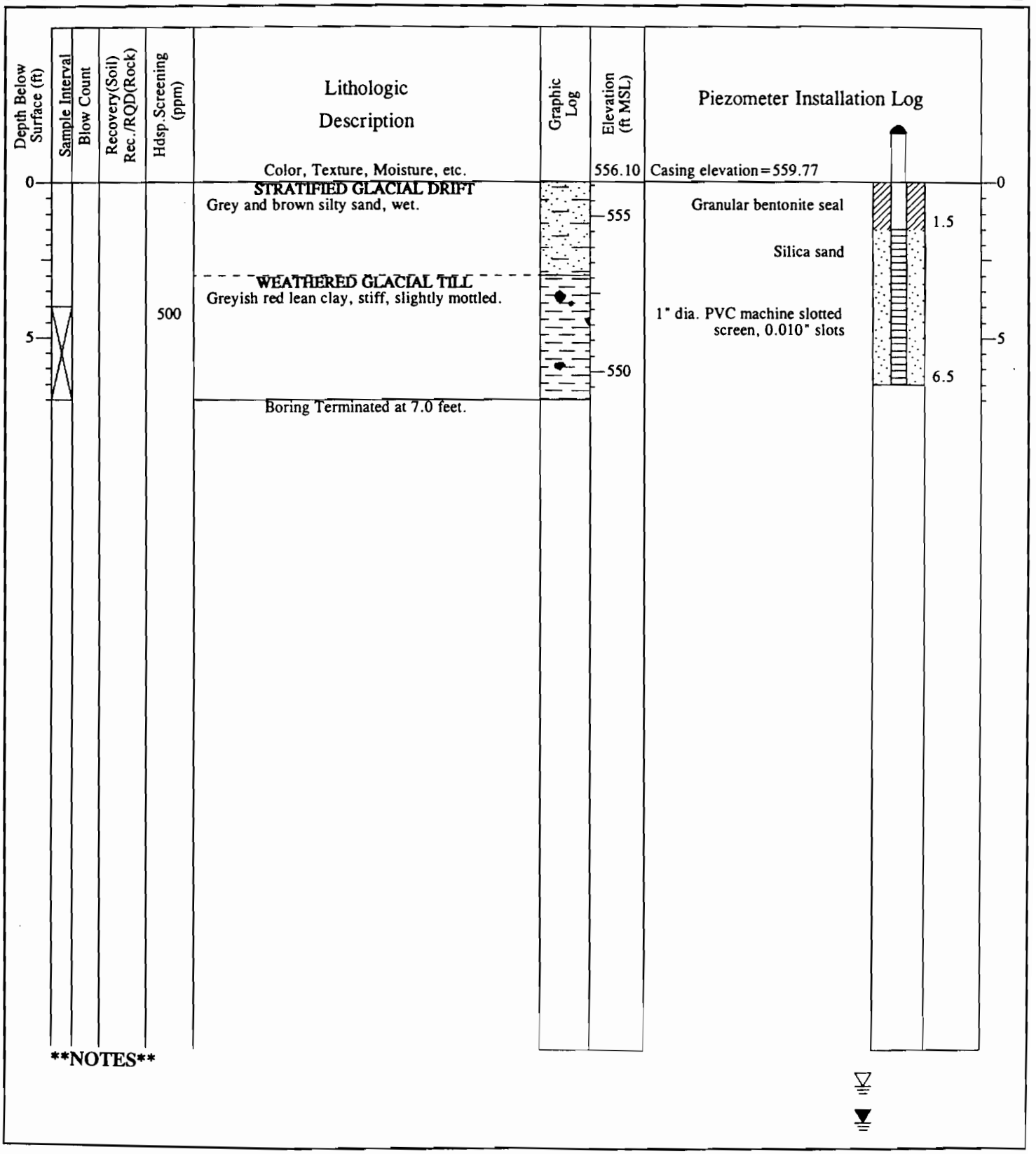
RADIAN INTERNATIONAL

Piezometer #: CB-5

Page 1 of 1

LOG OF DRILLING OPERATIONS

PROJECT	2-PHASE Extraction IRM	LOCATION	Erdle Facility
TOTAL DEPTH	7.00	START DATE	10/9/97
FINISH DATE	10/9/97		
GEOLOGIST	Baxter	APPROVED BY	N/A
R.G.#	N/A		
DRILLING COMPANY	Marcor	DRILLER	Marcor
DRILLING METHOD	Direct Push (Geoprobe)	EQUIPMENT	Geoprobe
DRILL BIT TYPE AND SIZE			
BORING LOCATION (ST. ADDRESS OR DESCRIPTION)			



NOTES

Appendix F: Quarterly Groundwater Analytical Results

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000008

Client No.

MW-1

b Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A8029401

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B15246.TX0

Level: (low/med) Low Date Samp/Recv: 01/29/98 01/30/98

Moisture: not dec. _____ Date Analyzed: 02/03/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 100.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	20	U
75-25-2	Bromoform	80	U
74-83-9	Bromomethane	80	U
56-23-5	Carbon Tetrachloride	20	U
108-90-7	Chlorobenzene	40	U
75-00-3	Chloroethane	80	U
110-75-8	2-Chloroethylvinyl ether	50	U
67-66-3	Chloroform	20	U
74-87-3	Chloromethane	50	U
124-48-1	Dibromochloromethane	20	U
95-50-1	1,2-Dichlorobenzene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
75-34-3	1,1-Dichloroethane	20	U
107-06-2	1,2-Dichloroethane	20	U
75-35-4	1,1-Dichloroethene	20	U
156-60-5	trans-1,2-Dichloroethene	20	U
78-87-5	1,2-Dichloropropane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
75-09-2	Methylene chloride	60	
79-34-5	1,1,2,2-Tetrachloroethane	20	U
127-18-4	Tetrachloroethene	20	U
71-55-6	1,1,1-Trichloroethane	20	U
79-00-5	1,1,2-Trichloroethane	20	U
79-01-6	Trichloroethene	64	
75-69-4	Trichlorofluoromethane	20	U
75-01-4	Vinyl chloride	610	

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000009

Client No.

MW-1D

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8029402

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B15249.TX0

Level: (low/med) Low Date Samp/Recv: 01/29/98 01/30/98

% Moisture: not dec. _____ Date Analyzed: 02/04/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 50.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	10	U
75-25-2	Bromoform	40	U
74-83-9	Bromomethane	40	U
56-23-5	Carbon Tetrachloride	10	U
108-90-7	Chlorobenzene	20	U
75-00-3	Chloroethane	40	U
110-75-8	2-Chloroethylvinyl ether	25	U
67-66-3	Chloroform	10	U
74-87-3	Chloromethane	25	U
124-48-1	Dibromochloromethane	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
75-34-3	1,1-Dichloroethane	10	U
107-06-2	1,2-Dichloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-09-2	Methylene chloride	37	
79-34-5	1,1,2,2-Tetrachloroethane	10	U
127-18-4	Tetrachloroethene	10	U
71-55-6	1,1,1-Trichloroethane	22	
79-00-5	1,1,2-Trichloroethane	10	U
79-01-6	Trichloroethene	1300	
75-69-4	Trichlorofluoromethane	10	U
75-01-4	Vinyl chloride	40	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000010

Client No.

MW-2

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8029409

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B15251.TX0

Level: (low/med) Low Date Samp/Recv: 01/29/98 01/30/98

% Moisture: not dec. _____ Date Analyzed: 02/04/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 80.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	16	U
75-25-2	Bromoform	64	U
74-83-9	Bromomethane	64	U
56-23-5	Carbon Tetrachloride	16	U
108-90-7	Chlorobenzene	32	U
75-00-3	Chloroethane	64	U
110-75-8	2-Chloroethylvinyl ether	40	U
67-66-3	Chloroform	16	U
74-87-3	Chloromethane	40	U
124-48-1	Dibromochloromethane	16	U
95-50-1	1,2-Dichlorobenzene	16	U
541-73-1	1,3-Dichlorobenzene	16	U
106-46-7	1,4-Dichlorobenzene	16	U
75-34-3	1,1-Dichloroethane	16	U
107-06-2	1,2-Dichloroethane	16	U
75-35-4	1,1-Dichloroethene	16	U
156-60-5	trans-1,2-Dichloroethene	16	U
78-87-5	1,2-Dichloropropane	16	U
10061-01-5	cis-1,3-Dichloropropene	16	U
10061-02-6	trans-1,3-Dichloropropene	16	U
75-09-2	Methylene chloride	64	
79-34-5	1,1,2,2-Tetrachloroethane	16	U
127-18-4	Tetrachloroethene	16	U
71-55-6	1,1,1-Trichloroethane	16	U
79-00-5	1,1,2-Trichloroethane	16	U
79-01-6	Trichloroethene	940	
75-69-4	Trichlorofluoromethane	16	U
75-01-4	Vinyl chloride	77	

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000011

Client No.

MW-2D

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8029410

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B15252.TX0

Level: (low/med) Low Date Samp/Recv: 01/29/98 01/30/98

% Moisture: not dec. _____ Date Analyzed: 02/04/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	0.20	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	0.20	U
108-90-7	Chlorobenzene	0.40	U
75-00-3	Chloroethane	1.0	U
110-75-8	2-Chloroethylvinyl ether	1.0	U
67-66-3	Chloroform	0.20	U
74-87-3	Chloromethane	1.0	U
124-48-1	Dibromochloromethane	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
75-34-3	1,1-Dichloroethane	1.8	
107-06-2	1,2-Dichloroethane	0.20	U
75-35-4	1,1-Dichloroethene	0.20	
156-60-5	trans-1,2-Dichloroethene	0.35	
78-87-5	1,2-Dichloropropane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
75-09-2	Methylene chloride	0.24	
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
127-18-4	Tetrachloroethene	0.23	
71-55-6	1,1,1-Trichloroethane	2.7	
79-00-5	1,1,2-Trichloroethane	0.20	U
79-01-6	Trichloroethene	1.0	
75-69-4	Trichlorofluoromethane	0.20	U
75-01-4	Vinyl chloride	0.94	J

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000012

Client No.

MW-3

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8029403

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B15260.TX0

Level: (low/med) Low Date Samp/Recv: 01/29/98 01/30/98

% Moisture: not dec. _____ Date Analyzed: 02/04/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 20000.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	4000	U
75-25-2	Bromoform	16000	U
74-83-9	Bromomethane	16000	U
56-23-5	Carbon Tetrachloride	4000	U
108-90-7	Chlorobenzene	8000	U
75-00-3	Chloroethane	16000	U
110-75-8	2-Chloroethylvinyl ether	10000	U
67-66-3	Chloroform	4000	U
74-87-3	Chloromethane	10000	U
124-48-1	Dibromochloromethane	4000	U
95-50-1	1,2-Dichlorobenzene	4000	U
541-73-1	1,3-Dichlorobenzene	4000	U
106-46-7	1,4-Dichlorobenzene	4000	U
75-34-3	1,1-Dichloroethane	4000	U
107-06-2	1,2-Dichloroethane	4000	U
75-35-4	1,1-Dichloroethene	4000	U
156-60-5	trans-1,2-Dichloroethene	4000	U
78-87-5	1,2-Dichloropropane	4000	U
10061-01-5	cis-1,3-Dichloropropene	4000	U
10061-02-6	trans-1,3-Dichloropropene	4000	U
75-09-2	Methylene chloride	4000	U
79-34-5	1,1,2,2-Tetrachloroethane	4000	U
127-18-4	Tetrachloroethene	4000	U
71-55-6	1,1,1-Trichloroethane	4000	U
79-00-5	1,1,2-Trichloroethane	4000	U
79-01-6	Trichloroethene	510000	
75-69-4	Trichlorofluoromethane	4000	U
75-01-4	Vinyl chloride	16000	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000013

Client No.

MW-3D

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8029404

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B15261.TX0

Level: (low/med) Low Date Samp/Recv: 01/29/98 01/30/98

% Moisture: not dec. _____ Date Analyzed: 02/04/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 8.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	1.6	U
75-25-2	Bromoform	6.4	U
74-83-9	Bromomethane	6.4	U
56-23-5	Carbon Tetrachloride	1.6	U
108-90-7	Chlorobenzene	3.2	U
75-00-3	Chloroethane	6.4	U
110-75-8	2-Chloroethylvinyl ether	4.0	U
67-66-3	Chloroform	1.6	U
74-87-3	Chloromethane	4.0	U
124-48-1	Dibromochloromethane	1.6	U
95-50-1	1,2-Dichlorobenzene	1.6	U
541-73-1	1,3-Dichlorobenzene	1.6	U
106-46-7	1,4-Dichlorobenzene	1.6	U
75-34-3	1,1-Dichloroethane	1.9	
107-06-2	1,2-Dichloroethane	1.6	U
75-35-4	1,1-Dichloroethene	1.6	U
156-60-5	trans-1,2-Dichloroethene	1.6	U
78-87-5	1,2-Dichloropropane	1.6	U
10061-01-5	cis-1,3-Dichloropropene	1.6	U
10061-02-6	trans-1,3-Dichloropropene	1.6	U
75-09-2	Methylene chloride	1.6	U
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U
127-18-4	Tetrachloroethene	1.6	U
71-55-6	1,1,1-Trichloroethane	1.7	
79-00-5	1,1,2-Trichloroethane	1.6	U
79-01-6	Trichloroethene	60	
75-69-4	Trichlorofluoromethane	1.6	U
75-01-4	Vinyl chloride	6.4	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000014

Client No.

MW-4

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8029411

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B15253.TX0

Level: (low/med) Low Date Samp/Recv: 01/29/98 01/30/98

% Moisture: not dec. _____ Date Analyzed: 02/04/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 2.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	0.40	U
75-25-2	Bromoform	1.6	U
74-83-9	Bromomethane	1.6	U
56-23-5	Carbon Tetrachloride	0.40	U
108-90-7	Chlorobenzene	0.80	U
75-00-3	Chloroethane	1.6	U
110-75-8	2-Chloroethylvinyl ether	1.0	U
67-66-3	Chloroform	0.40	U
74-87-3	Chloromethane	1.0	U
124-48-1	Dibromochloromethane	0.40	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
75-34-3	1,1-Dichloroethane	0.40	U
107-06-2	1,2-Dichloroethane	0.40	U
75-35-4	1,1-Dichloroethene	0.40	U
156-60-5	trans-1,2-Dichloroethene	2.4	
78-87-5	1,2-Dichloropropane	0.40	U
10061-01-5	cis-1,3-Dichloropropene	0.40	U
10061-02-6	trans-1,3-Dichloropropene	0.40	U
75-09-2	Methylene chloride	0.51	
79-34-5	1,1,2,2-Tetrachloroethane	0.40	U
127-18-4	Tetrachloroethene	0.40	U
71-55-6	1,1,1-Trichloroethane	0.40	U
79-00-5	1,1,2-Trichloroethane	0.40	U
79-01-6	Trichloroethene	1.1	
75-69-4	Trichlorofluoromethane	0.40	U
75-01-4	Vinyl chloride	8.0	

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000015

Client No.

MW-4D

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8029412

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B15265.TX0

Level: (low/med) Low Date Samp/Recv: 01/29/98 01/30/98

% Moisture: not dec. _____ Date Analyzed: 02/04/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	0.20	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	0.20	U
108-90-7	Chlorobenzene	0.40	U
75-00-3	Chloroethane	1.0	U
110-75-8	2-Chloroethylvinyl ether	1.0	U
67-66-3	Chloroform	0.20	U
74-87-3	Chloromethane	1.0	U
124-48-1	Dibromochloromethane	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
75-34-3	1,1-Dichloroethane	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
75-35-4	1,1-Dichloroethene	0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
75-09-2	Methylene chloride	0.27	
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
71-55-6	1,1,1-Trichloroethane	0.64	
79-00-5	1,1,2-Trichloroethane	0.20	U
79-01-6	Trichloroethene	5.1	
75-69-4	Trichlorofluoromethane	0.20	U
75-01-4	Vinyl chloride	1.0	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000016

Client No.

MW-6

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8029406

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B15262.TX0

Level: (low/med) Low Date Samp/Recv: 01/29/98 01/30/98

% Moisture: not dec. _____ Date Analyzed: 02/04/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	0.20	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	0.20	U
108-90-7	Chlorobenzene	0.40	U
75-00-3	Chloroethane	1.0	U
110-75-8	2-Chloroethylvinyl ether	1.0	U
67-66-3	Chloroform	0.20	U
74-87-3	Chloromethane	1.0	U
124-48-1	Dibromochloromethane	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
75-34-3	1,1-Dichloroethane	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
75-35-4	1,1-Dichloroethene	0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
75-09-2	Methylene chloride	0.29	
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
79-01-6	Trichloroethene	0.20	U
75-69-4	Trichlorofluoromethane	0.20	U
75-01-4	Vinyl chloride	1.5	

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000017

Client No.

MW-6D

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8029405

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B15250.TX0

Level: (low/med) Low Date Samp/Recv: 01/29/98 01/30/98

% Moisture: not dec. _____ Date Analyzed: 02/04/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 40.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	8.0	U
75-25-2	Bromoform	32	U
74-83-9	Bromomethane	32	U
56-23-5	Carbon Tetrachloride	8.0	U
108-90-7	Chlorobenzene	16	U
75-00-3	Chloroethane	32	U
110-75-8	2-Chloroethylvinyl ether	20	U
67-66-3	Chloroform	8.0	U
74-87-3	Chloromethane	20	U
124-48-1	Dibromochloromethane	8.0	U
95-50-1	1,2-Dichlorobenzene	8.0	U
541-73-1	1,3-Dichlorobenzene	8.0	U
106-46-7	1,4-Dichlorobenzene	8.0	U
75-34-3	1,1-Dichloroethane	8.0	U
107-06-2	1,2-Dichloroethane	8.0	U
75-35-4	1,1-Dichloroethene	8.0	U
156-60-5	trans-1,2-Dichloroethene	8.0	U
78-87-5	1,2-Dichloropropane	8.0	U
10061-01-5	cis-1,3-Dichloropropene	8.0	U
10061-02-6	trans-1,3-Dichloropropene	8.0	U
75-09-2	Methylene chloride	27	
79-34-5	1,1,2,2-Tetrachloroethane	8.0	U
127-18-4	Tetrachloroethene	8.0	U
71-55-6	1,1,1-Trichloroethane	8.0	U
79-00-5	1,1,2-Trichloroethane	8.0	U
79-01-6	Trichloroethene	1000	
75-69-4	Trichlorofluoromethane	8.0	U
75-01-4	Vinyl chloride	32	U

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ERDLE SITE
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000018

Client No.

MW-7

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8029407

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B15263.TX0

Level: (low/med) Low Date Samp/Recv: 01/29/98 01/30/98

% Moisture: not dec. _____ Date Analyzed: 02/04/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 40.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	8.0	U
75-25-2	Bromoform	32	U
74-83-9	Bromomethane	32	U
56-23-5	Carbon Tetrachloride	8.0	U
108-90-7	Chlorobenzene	16	U
75-00-3	Chloroethane	32	U
110-75-8	2-Chloroethylvinyl ether	20	U
67-66-3	Chloroform	8.0	U
74-87-3	Chloromethane	20	U
124-48-1	Dibromochloromethane	8.0	U
95-50-1	1,2-Dichlorobenzene	8.0	U
541-73-1	1,3-Dichlorobenzene	8.0	U
106-46-7	1,4-Dichlorobenzene	8.0	U
75-34-3	1,1-Dichloroethane	8.0	U
107-06-2	1,2-Dichloroethane	8.0	U
75-35-4	1,1-Dichloroethene	8.0	U
156-60-5	trans-1,2-Dichloroethene	8.0	U
78-87-5	1,2-Dichloropropane	8.0	U
10061-01-5	cis-1,3-Dichloropropene	8.0	U
10061-02-6	trans-1,3-Dichloropropene	8.0	U
75-09-2	Methylene chloride	8.0	U
79-34-5	1,1,2,2-Tetrachloroethane	8.0	U
127-18-4	Tetrachloroethene	8.0	U
71-55-6	1,1,1-Trichloroethane	8.0	U
79-00-5	1,1,2-Trichloroethane	8.0	U
79-01-6	Trichloroethene	730	
75-69-4	Trichlorofluoromethane	8.0	U
75-01-4	Vinyl chloride	59	

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METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

000019

Client No.

TB-1

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8029408

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0B15264.TX0

Level: (low/med) Low Date Samp/Recv: 01/29/98 01/30/98

% Moisture: not dec. _____ Date Analyzed: 02/04/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-27-4	Bromodichloromethane	0.20	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	0.20	U
108-90-7	Chlorobenzene	0.40	U
75-00-3	Chloroethane	1.0	U
110-75-8	2-Chloroethylvinyl ether	1.0	U
67-66-3	Chloroform	0.20	U
74-87-3	Chloromethane	1.0	U
124-48-1	Dibromochloromethane	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
75-34-3	1,1-Dichloroethane	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
75-35-4	1,1-Dichloroethene	0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
75-09-2	Methylene chloride	0.64	
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
79-01-6	Trichloroethene	0.20	U
75-69-4	Trichlorofluoromethane	0.20	U
75-01-4	Vinyl chloride	1.0	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

CB-1-2

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8017501DL

Sample wt/vol: 5.08 (g/mL) G Lab File ID: 0B15187.TX0

Level: (low/med) Med Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. 17.8 Date Analyzed: 01/30/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 10.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-27-4	Bromodichloromethane	120	U
75-25-2	Bromoform	480	U
74-83-9	Bromomethane	480	U
56-23-5	Carbon Tetrachloride	120	U
108-90-7	Chlorobenzene	240	U
75-00-3	Chloroethane	480	U
110-75-8	2-Chloroethylvinyl ether	300	U
67-66-3	Chloroform	120	U
74-87-3	Chloromethane	300	U
124-48-1	Dibromochloromethane	120	U
95-50-1	1,2-Dichlorobenzene	120	U
541-73-1	1,3-Dichlorobenzene	120	U
106-46-7	1,4-Dichlorobenzene	120	U
75-34-3	1,1-Dichloroethane	120	U
107-06-2	1,2-Dichloroethane	120	U
75-35-4	1,1-Dichloroethene	120	U
156-60-5	trans-1,2-Dichloroethene	120	U
78-87-5	1,2-Dichloropropane	120	U
10061-01-5	cis-1,3-Dichloropropene	120	U
10061-02-6	trans-1,3-Dichloropropene	120	U
75-09-2	Methylene chloride	140	
79-34-5	1,1,2,2-Tetrachloroethane	120	U
127-18-4	Tetrachloroethene	120	U
71-55-6	1,1,1-Trichloroethane	120	U
79-00-5	1,1,2-Trichloroethane	120	U
79-01-6	Trichloroethene	830	
75-69-4	Trichlorofluoromethane	120	U
75-01-4	Vinyl chloride	1700	

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

CB-3-2

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8017503

Sample wt/vol: 5.11 (g/mL) G Lab File ID: 0B15111.TX0

Level: (low/med) Med Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. 15.9 Date Analyzed: 01/23/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-27-4	Bromodichloromethane	12	U
75-25-2	Bromoform	50	U
74-83-9	Bromomethane	50	U
56-23-5	Carbon Tetrachloride	12	U
108-90-7	Chlorobenzene	23	U
75-00-3	Chloroethane	50	U
110-75-8	2-Chloroethylvinyl ether	50	U
67-66-3	Chloroform	12	U
74-87-3	Chloromethane	50	U
124-48-1	Dibromochloromethane	12	U
95-50-1	1,2-Dichlorobenzene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
75-34-3	1,1-Dichloroethane	12	U
107-06-2	1,2-Dichloroethane	12	U
75-35-4	1,1-Dichloroethene	12	U
156-60-5	trans-1,2-Dichloroethene	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-09-2	Methylene chloride	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
127-18-4	Tetrachloroethene	12	U
71-55-6	1,1,1-Trichloroethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
79-01-6	Trichloroethene	130	
75-69-4	Trichlorofluoromethane	12	U
75-01-4	Vinyl chloride	50	U

000012

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: CB-4-2

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8017504

Sample wt/vol: 5.04 (g/mL) G Lab File ID: 0B15193.TX0

Level: (low/med) Med Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. 16.1 Date Analyzed: 01/30/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 200.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-27-4	Bromodichloromethane	2400	U
75-25-2	Bromoform	9400	U
74-83-9	Bromomethane	9400	U
56-23-5	Carbon Tetrachloride	2400	U
108-90-7	Chlorobenzene	4700	U
75-00-3	Chloroethane	9400	U
110-75-8	2-Chloroethylvinyl ether	5900	U
67-66-3	Chloroform	2400	U
74-87-3	Chloromethane	5900	U
124-48-1	Dibromochloromethane	2400	U
95-50-1	1,2-Dichlorobenzene	2400	U
541-73-1	1,3-Dichlorobenzene	2400	U
106-46-7	1,4-Dichlorobenzene	2400	U
75-34-3	1,1-Dichloroethane	2400	U
107-06-2	1,2-Dichloroethane	2400	U
75-35-4	1,1-Dichloroethene	2400	U
156-60-5	trans-1,2-Dichloroethene	2400	U
78-87-5	1,2-Dichloropropane	2400	U
10061-01-5	cis-1,3-Dichloropropene	2400	U
10061-02-6	trans-1,3-Dichloropropene	2400	U
75-09-2	Methylene chloride	2400	U
79-34-5	1,1,2,2-Tetrachloroethane	2400	U
127-18-4	Tetrachloroethene	2400	U
71-55-6	1,1,1-Trichloroethane	2400	U
79-00-5	1,1,2-Trichloroethane	2400	U
79-01-6	Trichloroethene	140000	
75-69-4	Trichlorofluoromethane	2400	U
75-01-4	Vinyl chloride	9400	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

000008

Client No.

MW-1

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8029501

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0A15246.TX0

Level: (low/med) Low Date Samp/Recv: 01/29/98 01/30/98

% Moisture: not dec. _____ Date Analyzed: 02/03/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 100.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	4.0	U
108-90-7	Chlorobenzene	4.0	U
95-50-1	1,2-Dichlorobenzene	4.0	U
541-73-1	1,3-Dichlorobenzene	4.0	U
106-46-7	1,4-Dichlorobenzene	4.0	U
100-41-4	Ethylbenzene	4.0	U
108-88-3	Toluene	4.0	U
108-38-3	m-Xylene	4.0	U
95-47-6	o-Xylene	4.0	U
106-42-3	p-Xylene	4.0	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

000009

Client No.

MW-1D

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8029502

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0A15249.TX0

Level: (low/med) Low Date Samp/Recv: 01/29/98 01/30/98

% Moisture: not dec. _____ Date Analyzed: 02/04/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 50.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	2.0	U
108-90-7	Chlorobenzene	2.0	U
95-50-1	1,2-Dichlorobenzene	2.0	U
541-73-1	1,3-Dichlorobenzene	2.0	U
106-46-7	1,4-Dichlorobenzene	2.0	U
100-41-4	Ethylbenzene	2.0	U
108-88-3	Toluene	2.0	U
108-38-3	m-Xylene	2.0	U
95-47-6	o-Xylene	2.0	U
106-42-3	p-Xylene	2.0	U

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ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

000010

Client No.o

MW-2

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8029509

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0A15251.TX0

Level: (low/med) Low Date Samp/Recv: 01/29/98 01/30/98

% Moisture: not dec. _____ Date Analyzed: 02/04/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 80.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL))

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	3.2	U
108-90-7	Chlorobenzene	3.2	U
95-50-1	1,2-Dichlorobenzene	3.2	U
541-73-1	1,3-Dichlorobenzene	3.2	U
106-46-7	1,4-Dichlorobenzene	3.2	U
100-41-4	Ethylbenzene	3.2	U
108-88-3	Toluene	3.2	U
108-38-3	m-Xylene	3.2	U
95-47-6	o-Xylene	3.2	U
106-42-3	p-Xylene	3.2	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

000012

Client No.: MW-3

Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8029503

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0A15260.TX0

Level: (low/med) Low Date Samp/Recv: 01/29/98 01/30/988

Moisture: not dec. _____ Date Analyzed: 02/04/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 20000.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	800	U
108-90-7	Chlorobenzene	800	U
95-50-1	1,2-Dichlorobenzene	800	U
541-73-1	1,3-Dichlorobenzene	800	U
106-46-7	1,4-Dichlorobenzene	800	U
100-41-4	Ethylbenzene	800	U
108-88-3	Toluene	800	U
108-38-3	m-Xylene	800	U
95-47-6	o-Xylene	800	U
106-42-3	p-Xylene	800	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: TB-1

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A8029508

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0A15264.TX0

Level: (low/med) Low Date Samp/Recv: 01/29/98 01/30/98

% Moisture: not dec. _____ Date Analyzed: 02/04/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	0.20	U
108-90-7	Chlorobenzene	0.20	U
95-50-1	1,2-Dichlorobenzene	0.40	U
541-73-1	1,3-Dichlorobenzene	0.40	U
106-46-7	1,4-Dichlorobenzene	0.40	U
100-41-4	Ethylbenzene	0.20	U
108-88-3	Toluene	0.20	U
108-38-3	m-Xylene	0.20	U
95-47-6	o-Xylene	0.20	U
106-42-3	p-Xylene	0.20	U

Appendix G: Quarterly Soil Boring Analytical Results

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: CB-1-2

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8017501

Sample wt/vol: 5.08 (g/mL) G Lab File ID: 0B15109.TX0

Level: (low/med) Med Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. 17.8 Date Analyzed: 01/23/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-27-4	Bromodichloromethane	12	U
75-25-2	Bromoform	50	U
74-83-9	Bromomethane	50	U
56-23-5	Carbon Tetrachloride	12	U
108-90-7	Chlorobenzene	24	U
75-00-3	Chloroethane	50	U
110-75-8	2-Chloroethylvinyl ether	50	U
67-66-3	Chloroform	12	U
74-87-3	Chloromethane	50	U
124-48-1	Dibromochloromethane	12	U
95-50-1	1,2-Dichlorobenzene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
75-34-3	1,1-Dichloroethane	12	U
107-06-2	1,2-Dichloroethane	12	U
75-35-4	1,1-Dichloroethene	42	
156-60-5	trans-1,2-Dichloroethene	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-09-2	Methylene chloride	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
127-18-4	Tetrachloroethene	12	U
71-55-6	1,1,1-Trichloroethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
79-01-6	Trichloroethene	790	
75-69-4	Trichlorofluoromethane	12	U
75-01-4	Vinyl chloride	2200	E

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RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

CB-6-2

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8017506

Sample wt/vol: 5.13 (g/mL) G Lab File ID: 0B15116.TX0

Level: (low/med) Med Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. 22.1 Date Analyzed: 01/23/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-27-4	Bromodichloromethane	12	U
75-25-2	Bromoform	50	U
74-83-9	Bromomethane	50	U
56-23-5	Carbon Tetrachloride	12	U
108-90-7	Chlorobenzene	25	U
75-00-3	Chloroethane	50	U
110-75-8	2-Chloroethylvinyl ether	50	U
67-66-3	Chloroform	12	U
74-87-3	Chloromethane	50	U
124-48-1	Dibromochloromethane	12	U
95-50-1	1,2-Dichlorobenzene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
75-34-3	1,1-Dichloroethane	12	U
107-06-2	1,2-Dichloroethane	12	U
75-35-4	1,1-Dichloroethene	12	U
156-60-5	trans-1,2-Dichloroethene	12	U
78-87-5	1,2-Dichloropropane	160	
10061-01-5	cis-1,3-Dichloropropene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-09-2	Methylene chloride	27	
79-34-5	1,1,2,2-Tetrachloroethane	12	U
127-18-4	Tetrachloroethene	12	U
71-55-6	1,1,1-Trichloroethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
79-01-6	Trichloroethene	770	
75-69-4	Trichlorofluoromethane	12	U
75-01-4	Vinyl chloride	1400	

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

CB-2-2

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8017502

Sample wt/vol: 5.15 (g/mL) G Lab File ID: 0B15110.TX0

Level: (low/med) Med Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. 17.4 Date Analyzed: 01/23/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-27-4	Bromodichloromethane	12	U
75-25-2	Bromoform	50	U
74-83-9	Bromomethane	50	U
56-23-5	Carbon Tetrachloride	12	U
108-90-7	Chlorobenzene	24	U
75-00-3	Chloroethane	50	U
110-75-8	2-Chloroethylvinyl ether	50	U
67-66-3	Chloroform	12	U
74-87-3	Chloromethane	50	U
124-48-1	Dibromochloromethane	12	U
95-50-1	1,2-Dichlorobenzene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
75-34-3	1,1-Dichloroethane	12	U
107-06-2	1,2-Dichloroethane	12	U
75-35-4	1,1-Dichloroethene	12	U
156-60-5	trans-1,2-Dichloroethene	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-09-2	Methylene chloride	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
127-18-4	Tetrachloroethene	12	U
71-55-6	1,1,1-Trichloroethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
79-01-6	Trichloroethene	1300	
75-69-4	Trichlorofluoromethane	12	U
75-01-4	Vinyl chloride	81	

RADIAN CORPORATION
ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

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Client No.

CB-4A-2

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8017505

Sample wt/vol: 5.03 (g/mL) G Lab File ID: 0B15194.TX0

Level: (low/med) Med Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. 19.4 Date Analyzed: 01/30/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 400.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-27-4	Bromodichloromethane	4900	U
75-25-2	Bromoform	20000	U
74-83-9	Bromomethane	20000	U
56-23-5	Carbon Tetrachloride	4900	U
108-90-7	Chlorobenzene	9900	U
75-00-3	Chloroethane	20000	U
110-75-8	2-Chloroethylvinyl ether	12000	U
67-66-3	Chloroform	4900	U
74-87-3	Chloromethane	12000	U
124-48-1	Dibromochloromethane	4900	U
95-50-1	1,2-Dichlorobenzene	4900	U
541-73-1	1,3-Dichlorobenzene	4900	U
106-46-7	1,4-Dichlorobenzene	4900	U
75-34-3	1,1-Dichloroethane	4900	U
107-06-2	1,2-Dichloroethane	4900	U
75-35-4	1,1-Dichloroethene	4900	U
156-60-5	trans-1,2-Dichloroethene	4900	U
78-87-5	1,2-Dichloropropane	4900	U
10061-01-5	cis-1,3-Dichloropropene	4900	U
10061-02-6	trans-1,3-Dichloropropene	4900	U
75-09-2	Methylene chloride	4900	U
79-34-5	1,1,2,2-Tetrachloroethane	4900	U
127-18-4	Tetrachloroethene	4900	U
71-55-6	1,1,1-Trichloroethane	4900	U
79-00-5	1,1,2-Trichloroethane	4900	U
79-01-6	Trichloroethene	500000	
75-69-4	Trichlorofluoromethane	4900	U
75-01-4	Vinyl chloride	20000	U

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ERDLE SITE
METHOD 8010 - HALOGENATED VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: CB-6-2

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8017506DL

Sample wt/vol: 5.13 (g/mL) G Lab File ID: 0B15190.TX0

Level: (low/med) Med Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. 22.1 Date Analyzed: 01/30/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 10.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-27-4	Bromodichloromethane	120	U
75-25-2	Bromoform	500	U
74-83-9	Bromomethane	500	U
56-23-5	Carbon Tetrachloride	120	U
108-90-7	Chlorobenzene	250	U
75-00-3	Chloroethane	500	U
110-75-8	2-Chloroethylvinyl ether	310	U
67-66-3	Chloroform	120	U
74-87-3	Chloromethane	310	U
124-48-1	Dibromochloromethane	120	U
95-50-1	1,2-Dichlorobenzene	120	U
541-73-1	1,3-Dichlorobenzene	120	U
106-46-7	1,4-Dichlorobenzene	120	U
75-34-3	1,1-Dichloroethane	120	U
107-06-2	1,2-Dichloroethane	120	U
75-35-4	1,1-Dichloroethene	120	U
156-60-5	trans-1,2-Dichloroethene	120	U
78-87-5	1,2-Dichloropropane	120	U
10061-01-5	cis-1,3-Dichloropropene	120	U
10061-02-6	trans-1,3-Dichloropropene	120	U
75-09-2	Methylene chloride	120	U
79-34-5	1,1,2,2-Tetrachloroethane	120	U
127-18-4	Tetrachloroethene	120	U
71-55-6	1,1,1-Trichloroethane	120	U
79-00-5	1,1,2-Trichloroethane	120	U
79-01-6	Trichloroethene	630	
75-69-4	Trichlorofluoromethane	120	U
75-01-4	Vinyl chloride	950	

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RADIAN CORPORATION
ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

CB-1-2

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8017501

Sample wt/vol: 5.08 (g/mL) G Lab File ID: 0A15109.TX0

Level: (low/med) Med Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. 17.8 Date Analyzed: 01/23/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	Benzene	12	U
108-90-7	Chlorobenzene	12	U
95-50-1	1,2-Dichlorobenzene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
100-41-4	Ethylbenzene	12	U
108-88-3	Toluene	12	U
108-38-3	m-Xylene	12	U
95-47-6	o-Xylene	12	U
106-42-3	p-Xylene	12	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

CB-2-2

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8017502

Sample wt/vol: 5.15 (g/mL) G Lab File ID: 0A15110.TX0

Level: (low/med) Med Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. 17.4 Date Analyzed: 01/23/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	Benzene	12	U
108-90-7	Chlorobenzene	12	U
95-50-1	1,2-Dichlorobenzene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
100-41-4	Ethylbenzene	12	U
108-88-3	Toluene	12	U
108-38-3	m-Xylene	12	U
95-47-6	o-Xylene	12	U
106-42-3	p-Xylene	12	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: CB-3-2

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8017503

Sample wt/vol: 5.11 (g/mL) G Lab File ID: 0A15111.TX0

Level: (low/med) Med Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. 15.9 Date Analyzed: 01/23/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	Benzene	12	U
108-90-7	Chlorobenzene	12	U
95-50-1	1,2-Dichlorobenzene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
100-41-4	Ethylbenzene	12	U
108-88-3	Toluene	12	U
108-38-3	m-Xylene	12	U
95-47-6	o-Xylene	12	U
106-42-3	p-Xylene	12	U

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RADIAN CORPORATION
ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

CB-4-2

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8017504

Sample wt/vol: 5.04 (g/mL) G Lab File ID: 0A15188.TX0

Level: (low/med) Med Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. 16.1 Date Analyzed: 01/30/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 50.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	Benzene	590	U
108-90-7	Chlorobenzene	590	U
95-50-1	1,2-Dichlorobenzene	590	U
541-73-1	1,3-Dichlorobenzene	590	U
106-46-7	1,4-Dichlorobenzene	590	U
100-41-4	Ethylbenzene	590	U
108-88-3	Toluene	590	U
108-38-3	m-Xylene	590	U
95-47-6	o-Xylene	590	U
106-42-3	p-Xylene	590	U

RADIAN CORPORATION
ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

CB-4A-2

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8017505

Sample wt/vol: 5.03 (g/mL) G Lab File ID: 0A15194.TX0

Level: (low/med) Med Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. 19.4 Date Analyzed: 01/30/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 400.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	Benzene	4900	U
108-90-7	Chlorobenzene	4900	U
95-50-1	1,2-Dichlorobenzene	4900	U
541-73-1	1,3-Dichlorobenzene	4900	U
106-46-7	1,4-Dichlorobenzene	4900	U
100-41-4	Ethylbenzene	4900	U
108-88-3	Toluene	4900	U
108-38-3	m-Xylene	4900	U
95-47-6	o-Xylene	4900	U
106-42-3	p-Xylene	4900	U

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ERDLE SITE
METHOD 8020 - AROMATIC VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: CB-6-2

Lab Name: Recra LabNet Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8017506

Sample wt/vol: 5.13 (g/mL) G Lab File ID: 0A15116.TX0

Level: (low/med) Med Date Samp/Recv: 01/19/98 01/21/98

% Moisture: not dec. 22.1 Date Analyzed: 01/23/98

GC Column: DB624 Dia: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 5000(uL) Soil Aliquot Volume: 100.00(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	Benzene	12	U
108-90-7	Chlorobenzene	12	U
95-50-1	1,2-Dichlorobenzene	41	
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
100-41-4	Ethylbenzene	12	U
108-88-3	Toluene	12	U
108-38-3	m-Xylene	12	U
95-47-6	o-Xylene	12	U
106-42-3	p-Xylene	12	U