

## New York State Department of Environmental Conservation

Department of Environmental Remediation • 625 Broadway • Albany, New York 12233

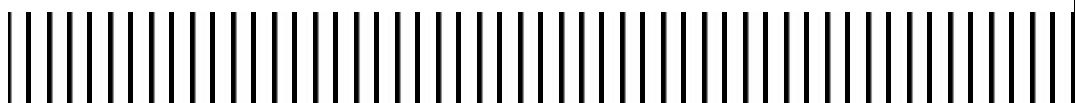
Site Number 7-09-009

# Gladding Cordage Site Quarterly Report and Annual Groundwater Monitoring Summary

First Quarter 2010

July 2010

New York State Department of Environmental  
Conservation Work Assignment D004443-5



Report Prepared By:

**Malcolm Pirnie, Inc.**

855 Route 146, Suite 210  
Clifton Park, New York 12065  
518-250-7300

0266365

**MALCOLM  
PIRNIE**

## Contents

---

<b>1. Introduction</b>	<b>1-1</b>
<b>2. Site Activities</b>	<b>2-1</b>
2.1. SITE DESCRIPTION .....	2-1
2.2. OPERATION AND MAINTENANCE .....	2-1
2.2.1. Treatment System Operation .....	2-1
2.2.2. Treatment System Sampling .....	2-1
2.2.2.1. Influent Sample Results .....	2-2
2.2.2.2. Effluent Sample Results .....	2-2
2.2.3 General Operation and Maintenance .....	2-3
2.3. GROUNDWATER MONITORING PROGRAM.....	2-3
2.3.1. Well Inspection .....	2-3
2.3.2. Water Level Survey .....	2-3
2.3.3. Groundwater Sampling.....	2-4
2.4. Groundwater Sampling Results .....	2-5
2.4.1. Shallow Groundwater Monitoring Zone .....	2-5
2.4.2. Intermediate Groundwater Monitoring Zone .....	2-5
2.4.3. Deep Groundwater Monitoring Zone.....	2-6
<b>3. Recommendations</b>	<b>3-1</b>
<b>4. Summary</b>	<b>4-1</b>

## Figures

---

2-1	Site Location
2-2	Treatment System Influent Sample Concentrations (1,1,1-TCA)
2-3	Monitoring Well Location Map
2-4	Shallow Potentiometric Map
2-5	Intermediate Potentiometric Map
2-6	Deep Potentiometric Map



## Tables

---

- 2-1 Treatment System Status and Flow Summary
- 2-2 Summary of Groundwater Treatment System VOCs - Influent
- 2-3 Summary of Groundwater Treatment System VOCs – Effluent
- 2-4 Summary of Groundwater Monitoring Well Water Level Data
- 2-5 Summary of Groundwater Analytical Results (VOCs)

## Appendices

---

- A. Operation and Maintenance Logs
- B. Analytical Reporting Forms
- C. Generally Acceptable Procedure for Passive Diffusion Bag Samplers
- D. Well Inspection Logs
- E. Groundwater Level Data Form



## **1. Introduction**

---

The New York State Department of Environmental Conservation (NYSDEC) has issued a Work Assignment (# D004443-5) to Malcolm Pirnie, Inc. (Malcolm Pirnie) for Operation, Maintenance, and Monitoring at the Gladding Cordage Site in New York State (Site # 7-09-009). Malcolm Pirnie has prepared this Quarterly Report in accordance with the NYSDEC-approved Work Plan to summarize site activities.



## **2. Site Activities**

---

### **2.1. SITE DESCRIPTION**

The Gladding Cordage Site is located on Ridge Road, South Otselic, Chenango County, New York (Figure 2-1), along the western bank of the Otselic River.

### **2.2. OPERATION AND MAINTENANCE**

On August 23, 2007, NYSDEC provided a training session to Malcolm Pirnie personnel on the operation and maintenance (O&M) of the groundwater treatment plant at the Gladding Cordage Site. Since then, Malcolm Pirnie has maintained operation of the groundwater treatment plant. This includes the operation, maintenance, and influent/effluent sampling in accordance with the NYSDEC O&M manual (Operation and Maintenance Manual, Volume I, Gladding Cordage Site, Site 7-09-009, TAMS Consultants, Inc., 1996) (O&M Manual).

#### **2.2.1. Treatment System Operation**

As shown on the O&M Check Lists and Daily Phone Logs (Appendix A), the Gladding Cordage groundwater treatment system operated without interruption during the first quarter, 2010.

The monthly flow rates and total flow volumes for the first quarter 2010 operating period are summarized in Table 2-1. As shown in Table 2-1, the average groundwater treatment system pumping rate for RW-1 was approximately 32 GPM. The flow meter for RW-2 was removed for repairs in November 2007 and has not been replaced; no flow measurements are currently reported for this recovery well. The flow rate for RW-2 is estimated (24.9 GPM) based on previously reported values. Table 2-1 shows that approximately 7.5 million gallons of water were treated between January and March, 2010.

#### **2.2.2. Treatment System Sampling**

Influent and effluent groundwater samples were collected from the Gladding Cordage treatment system in accordance with the Work Plan and submitted to Chemtech Laboratories following chain-of-custody protocols for analysis of target compound list (TCL) volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260B. Analytical Reporting Forms are provided in Appendix B.



### 2.2.2.1. Influent Sample Results

Table 2-2 and Table 2-3 summarize the VOC influent and effluent sample results, respectfully. Figure 2-2 provides a summary of 1,1,1- trichloroethane (1,1,1-TCA) concentrations in samples from recovery wells RW-1 and RW-2 since September 2007. Table 2-2 and Figure 2-2 show that the first quarter 2010 concentrations of 1,1,1-TCA in the samples from recovery well RW-1 ranged from 53 micrograms per liter (ug/L) to 66 ug/L and ranged from 43 ug/L to 49 ug/L in the samples from RW-2. These results exceed the corresponding NYSDEC Class GA Standard of 5 ug/L; however, Figure 2-2 shows that the concentrations of 1,1,1-TCA in the samples from RW- 1 and RW-2 are consistent with previous results. As shown in Table 2-2, the concentrations of 1,1-dichloroethane in the samples from RW-1 ranged from 2.6 ug/L to 3.2 ug/L and the concentrations of 1,1-dichloroethene ranged from 2.5 ug/L to 3.2 ug/L. These results are less than the applicable NYSDEC Class GA Standard of 5 ug/L. 1,1-dichloroethane and 1,1-dichloroethene were detected in the January (0.9 and 1.7 ug/L, respectively), February (1.1 and 1.9 ug/L, respectively), and March (1 and 1.7 ug/L, respectively) samples from RW-2; however, as indicated in Table 2-2, these results are less than the corresponding NYSDEC Class GA Standards of 5 ug/L.

### 2.2.2.2. Effluent Sample Results

Table 2-3 summarizes laboratory analytical data for effluent samples collected from the treatment system. A variable frequency drive (VFD) was installed on the blower motor on January 9, 2008. Following the installation of the VFD, effluent samples were collected at various blower motor frequencies (speeds) including 40 HZ, 50 HZ, and 60 HZ. The analyte 1,1,1-TCA was detected at 6 ug/l in the 40 HZ effluent sample but was not detected in the 50 HZ and 60 HZ samples. Following the completion of the January 9, 2008 sampling event the VFD was set to 50 HZ. Additional sampling was conducted in February 2008 to optimize the treatment system blower speed. Effluent samples were collected at 42 HZ, 44 HZ, and 46 HZ, respectively. No VOCs were detected in any of these effluent samples. Based on the results, the VFD setting was reduced to 42 HZ beginning in March 2008.

The April 2008 and June 2008 effluent samples contained 1,1,1-TCA at estimated (based on “J” qualifier) concentrations of 2.2ug/L and 1.9 ug/L, respectively, which is less than the corresponding NYSDEC Class GA Standard of 5 ug/L. In response to the detections, however, the blower frequency was increased from 42 HZ to 43 HZ in June 2008 and from 43HZ to 44HZ in July 2009, which is the current setting.

As shown in Table 2-3, only one of the effluent samples contained a concentration of VOCs greater than the indicated quantitation limit during the first quarter operating period. Table 2-3 shows that the March 2010 effluent sample contained 1,1,1-TCA at a concentration of 2.6 ug/L. This result is less than the corresponding NYSDEC Class GA Standard of 5ug/L. No other VOCs were detected in any of the first quarter 2010 effluent samples from the treatment system.



Based on influent sample concentrations and total flow volumes from the Gladding Cordage treatment system, approximately 3.6 pounds of VOCs were removed by the treatment system during the first quarter, 2010.

### **2.2.3 General Operation and Maintenance**

No significant repairs were performed at the Gladding Cordage site during the first quarter 2010 operating period.

## **2.3. GROUNDWATER MONITORING PROGRAM**

The NYSDEC-approved Work Plan stated that groundwater samples would be collected using low-flow sampling techniques and analyzed for VOCs and metals (Figure 2-3 shows the location of the groundwater monitoring wells). However, NYSDEC later requested to have groundwater collected using passive diffusion bags (PDBs). On July 24, 2007, NYSDEC and Malcolm Pirnie conducted a conference call regarding groundwater sampling protocols and analysis for the site. Since metals data analysis is not possible from PDB samples, NYSDEC authorized groundwater samples to be analyzed for VOCs only.

Passive diffusion bags were placed in groundwater monitoring wells on March 9, 2010 in accordance with the Generally Acceptable Procedures (GAP) for PDB Samplers (Appendix C). Samples were collected from the PDBs on March 23, 2010 to provide information on groundwater quality and to monitor contaminant migration in the groundwater at the site.

### **2.3.1. Well Inspection**

Existing on-site groundwater monitoring wells were evaluated for integrity and suitability for groundwater monitoring and water levels. The condition of each well was recorded on a well inspection form, provided in Appendix D. As shown on the well inspection forms, the integrity of the wells is generally acceptable and no repair or maintenance is required at this time.

### **2.3.2. Water Level Survey**

Prior to collecting samples, water levels were measured to the nearest hundredth of a foot and recorded on a groundwater level data form (Appendix E). Table 2-4 summarizes the groundwater levels and elevations from the site. As shown in Table 2-4, groundwater elevations in groundwater monitoring wells screened in the shallow groundwater monitoring zone ranged from 1203.12-feet above mean sea level (amsl) to 1205.38-feet amsl; groundwater elevations in monitoring wells screened in the intermediate groundwater monitoring zone ranged from 1202.76-feet amsl to 1206.88-feet amsl; and groundwater elevations in monitoring wells screened in the deep groundwater monitoring zone ranged from 1202.74-feet amsl to 1203.93-feet amsl.



As shown in the groundwater elevation data presented in Table 2-4, groundwater elevations in monitoring well cluster TW-3 were higher in the deep monitoring zone than the shallow monitoring zone (indicating an upward hydraulic gradient), while monitoring well clusters TW-5, TW-6, TW-7, and TW-9 had higher groundwater elevations in the shallow monitoring zones (indicating a downward hydraulic gradient). The groundwater elevations in monitoring well cluster TW-2 diverge from the intermediate zone toward the shallow and deep groundwater monitoring zones, respectively. The groundwater elevations in monitoring well cluster TW-14 converge at the intermediate zone. The difference in the hydraulic gradients in the groundwater monitoring locations is likely due to the proximity of the well clusters to the Otselic River and the influence of the groundwater recovery wells.

Shallow, intermediate, and deep potentiometric surfaces map are provided on Figure 2-4, Figure 2-5, and Figure 2-6, respectfully. As shown on Figure 2-4, the direction of groundwater flow in the shallow groundwater monitoring zone is generally south toward groundwater recovery wells RW-1 and RW-2. Figures 2-5 and 2-6 show that groundwater flow in the intermediate and deep groundwater monitoring zones is generally southwest, toward the confluence of Ashbell Brook and the Otselic River.

### 2.3.3. Groundwater Sampling

Groundwater samples are generally collected from 19 groundwater monitoring wells in accordance with the Work Plan. However, in consultation with NYSDEC, and based on the recommendations provided in the draft Periodic Review Report (Malcolm Pirnie, 2010), groundwater monitoring wells TW-9I and TW-9D were added to the recommended sampling list due the presence of VOCs above the NYSDEC Class GA Standards in these wells during the 2009 groundwater monitoring event.

Groundwater samples were collected from the monitoring well network using PDBs as requested by NYSDEC and in accordance with the procedure presented in Appendix C. Groundwater monitoring wells sampled during the monitoring event are listed below:

- TW-3S
- TW-3I
- TW-3D
- TW-4I
- TW-5S
- TW-5I
- TW-5D
- TW-6S
- TW-6I
- TW-6D
- TW-7S
- TW-7I
- TW-7D
- TW-9I
- TW-9D
- TW-12I
- TW-12D
- TW-14S
- TW-14I
- TW-14D
- TW-15



Groundwater samples collected during the groundwater monitoring program were sent to Chemtech Laboratories by chain-of-custody procedures and analyzed for TCL VOCs by USEPA Method 8260B. Analytical data packages are provided in Appendix B.

## 2.4. Groundwater Sampling Results

Groundwater sampling results from the first quarter 2010 sampling event are summarized in Table 2-5. As shown in Table 2-5, acetone was reported in all of the groundwater samples collected during the first quarter 2010 groundwater sampling event. Table 2-5 also shows that with the exception of two samples collected in 2008 that contained estimated (based on "J" qualifier) concentrations of acetone, this compound has not been detected in any other groundwater sample collected from the site as of 2007. Therefore, the acetone detections in the samples from the 2009 and 2010 sampling event are expected to be the result of laboratory contamination. Since acetone was not detected in the associated 2009 or 2010 Trip Blanks, the acetone contamination is expected to have originated in the laboratory where the de-ionized water was placed in the PDBs.

### 2.4.1. Shallow Groundwater Monitoring Zone

As shown in Table 2-5, VOCs were detected at concentrations greater than the corresponding NYSDEC Class GA Standards in four of the five groundwater samples collected from the shallow groundwater monitoring network. Table 2-5 shows that 1,1,1-TCA (6.2 ug/L) and benzene (1.1 ug/L) were detected in the sample from TW-3S and exceeded the applicable NYSDEC Class GA Standards of 5ug/L and 1 ug/L, respectively. These were the first VOCs detected in this well above the NYSDEC Class GA Standard since 2007. As shown in Table 2-5 the concentrations of 1,1,1-TCA in the samples from TW-14S increased from not detected in June 2009 to 16 ug/L in March 2010, which exceeds the NYSDEC Class GA Standard of 5 ug/L. The concentrations of 1,1,1-TCA in the groundwater samples from TW-5S (7.4 ug/L) and TW-7S (6.8 ug/L) decreased compared to the June 2009 results of 13 ug/L and 7.8 ug/L, respectively.

VOCs were not detected in any other samples collected from the shallow monitoring network at concentrations greater than the applicable NYSDEC Class GA Standards.

### 2.4.2. Intermediate Groundwater Monitoring Zone

Table 2-5 shows that the concentrations of 1,1,1-TCA in samples collected from intermediate groundwater monitoring wells TW-4I (23 ug/L), TW-5I (8.6 ug/L), TW-14I (82 ug/L), and TW-15(97 ug/L) were greater than the applicable NYSDEC Class GA Standard of 5 ug/L. As shown in Table 2-5, the concentrations of 1,1,1-TCA in the samples from TW-4I and TW-15 are greater than previously reported results from these wells. The groundwater sample from TW-5I decreased from the maximum reported result from this well in 2009 of 90 ug/L to 8.6 ug/L in 2010.

Benzene was detected in the samples from TW-5I (and duplicate MW-X) at concentrations of 32 ug/L and 28 ug/L, respectively. These results are greater than



the corresponding NYSDEC Class GA Standard of 1 ug/L. Table 2-5 shows that these results are greater than previous reported benzene results from this well and are the maximum benzene concentrations reported in samples collected during the 2010 sampling event.

No other VOCs were detected in samples from intermediate groundwater monitoring wells at concentrations greater than the applicable NYSDEC Class GA Standards.

As indicated above, the sample MW-X was collected from monitoring well TW-5I and submitted as a field duplicate. As shown in Table 2-5, the results from these samples correlate well.

#### **2.4.3. Deep Groundwater Monitoring Zone**

As shown in Table 2-5, the concentrations of 1,1,1-TCA exceeded the corresponding NYSDEC Class GA Standard of 5 ug/L in the samples from deep groundwater monitoring wells TW-5D (28 ug/L), TW-7D (5.2 ug/L), and TW-14D (9.1 ug/L).

Table 2-5 shows that these concentrations are consistent with previous samples from these wells. No other VOCs were detected in samples from the deep monitoring network at concentrations greater than the applicable NYSDEC Class GA Standard.



### **3. Recommendations**

---

A field blank should be prepared and submitted for analysis of TCL VOCs on an annual basis to assess if acetone is a laboratory contaminant. The field blank would be prepared by collecting a sample from a PDB that was held aside during the typical 14 day PDB deployment period. The sample would then be collected from the PDB in accordance with the sampling protocol for PDB samplers (Appendix C).



## 4. Summary

---

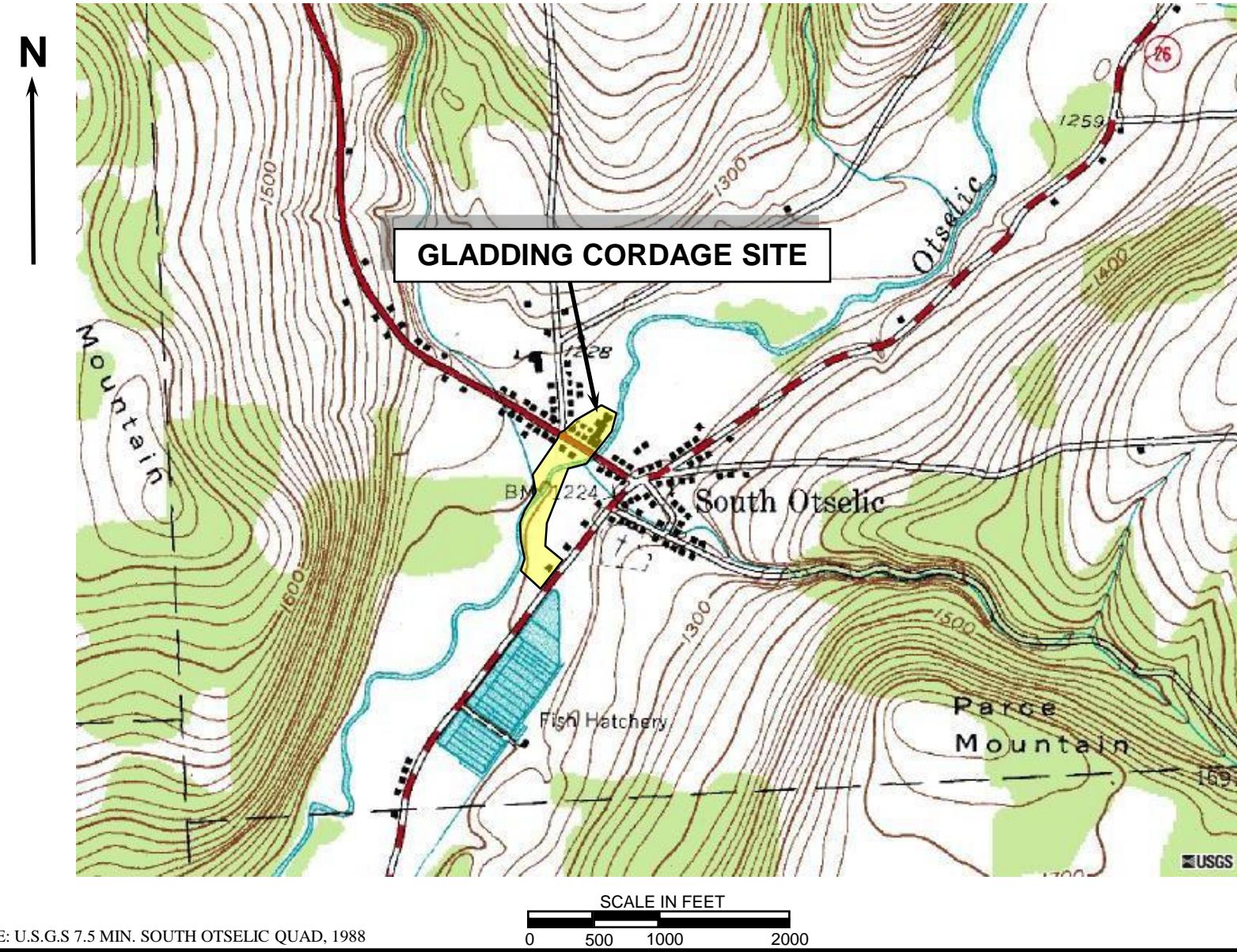
The Gladding Cordage groundwater treatment system operated continuously during the first quarter, 2010. The average total flow rate through the treatment system during this period was approximately 57 GPM. Total flow through the treatment system during the first quarter operational period was approximately 7.5 million gallons. 1,1,1-TCA was detected in the March 2010 effluent sample from the treatment system but at a concentration less than the applicable NYSDEC Class GA Standard. Based on monthly influent and effluent sampling, the treatment system successfully removes VOCs from groundwater extracted from the capture zone at the current VFD setting of 44HZ. The VFD setting will continue to be evaluated based on system monitoring results. Approximately 3.6 pounds of VOCs were removed by the treatment system during the second quarter, 2009.

Based on the well assessment, the conditions of the wells in the groundwater monitoring network were acceptable. Evaluations of groundwater flow indicate that the direction of groundwater flow in the shallow groundwater monitoring zone is generally toward the south; groundwater flow in the intermediate and deep groundwater monitoring zones is generally toward the southwest.

Groundwater samples were collected from 22 of the 26 groundwater monitoring wells at the Gladding Cordage site in 2010. Acetone was reported in all of the groundwater samples collected in 2010 but is considered to be a laboratory contaminant. The concentrations of VOCs in samples collected from the shallow, intermediate, and deep groundwater monitoring zones were generally consistent compared to results from the 2009 monitoring event. Groundwater samples collected from four shallow, four intermediate, and three deep groundwater monitoring wells contained concentrations of VOCs greater than the applicable NYSDEC Class GA Standard. The maximum concentration of total VOCs (103.8 ug/L, excluding acetone) was in the sample from intermediate groundwater monitoring well TW-15.

In general, groundwater samples collected from monitoring wells in the immediate vicinity of groundwater recovery wells RW-1 and RW-2 contained the greatest concentrations of VOCs. No VOCs were detected in the sample collected from the intermediate or deep groundwater monitoring wells (TW-12I and TW-12D) located adjacent to the South Otselic NYSDEC Fish Hatchery.





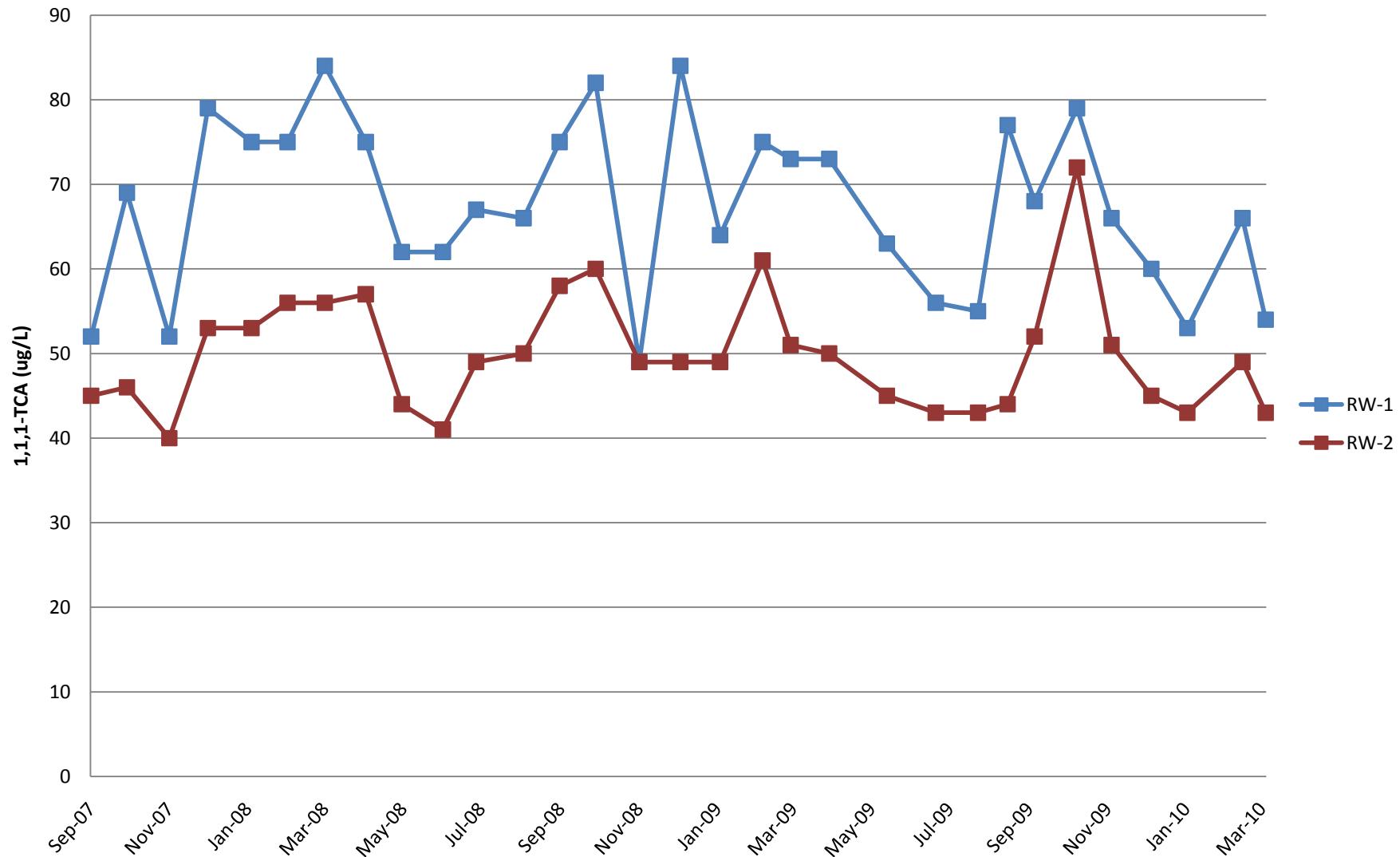
SOURCE: U.S.G.S 7.5 MIN. SOUTH OTSELIC QUAD, 1988

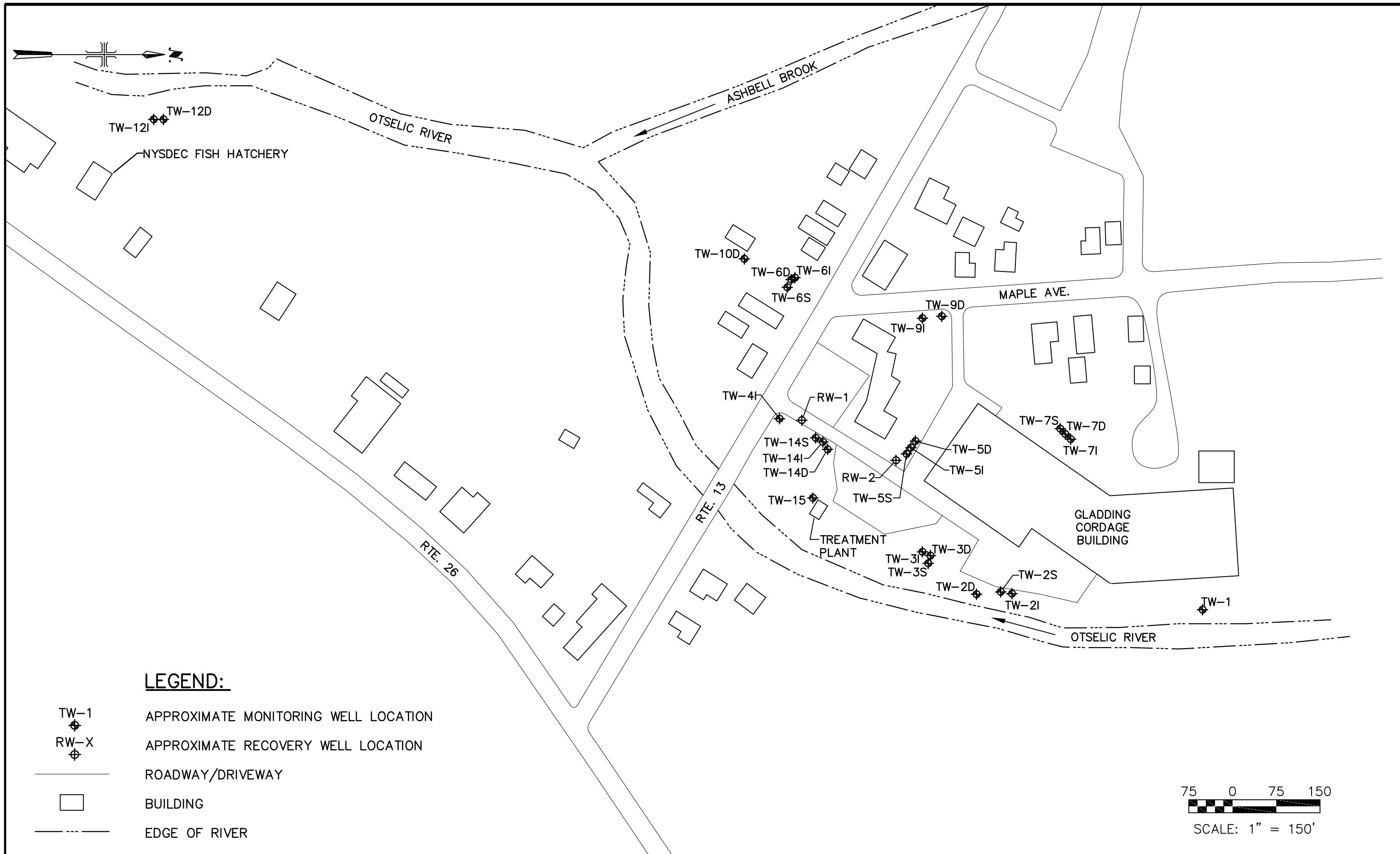
NYSDEC STANDBY CONTRACT NO. D004443-5  
GLADDING CORDAGE – SITE NUMBER 7-09-009  
SOUTH OTSELIC, NEW YORK  
GLADDING CORDAGE SITE LOCATION

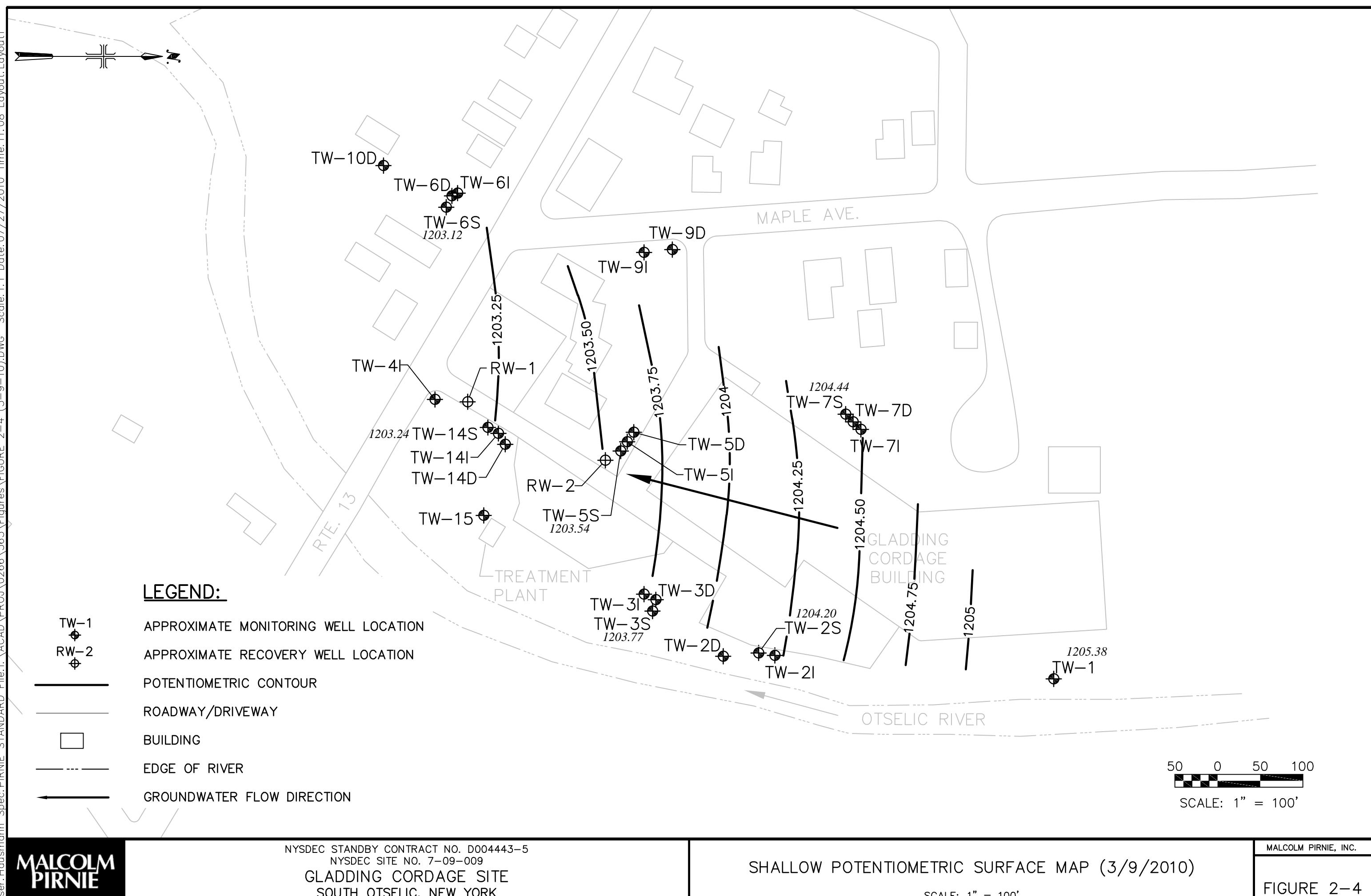
MALCOLM  
PIRNIE

FIGURE 2-1

**Figure 2-2**  
Treatment System Influent Sample Concentrations (1,1,1-TCA)  
Gladding Cordage Site  
NYSDEC Site Number 7-09-009

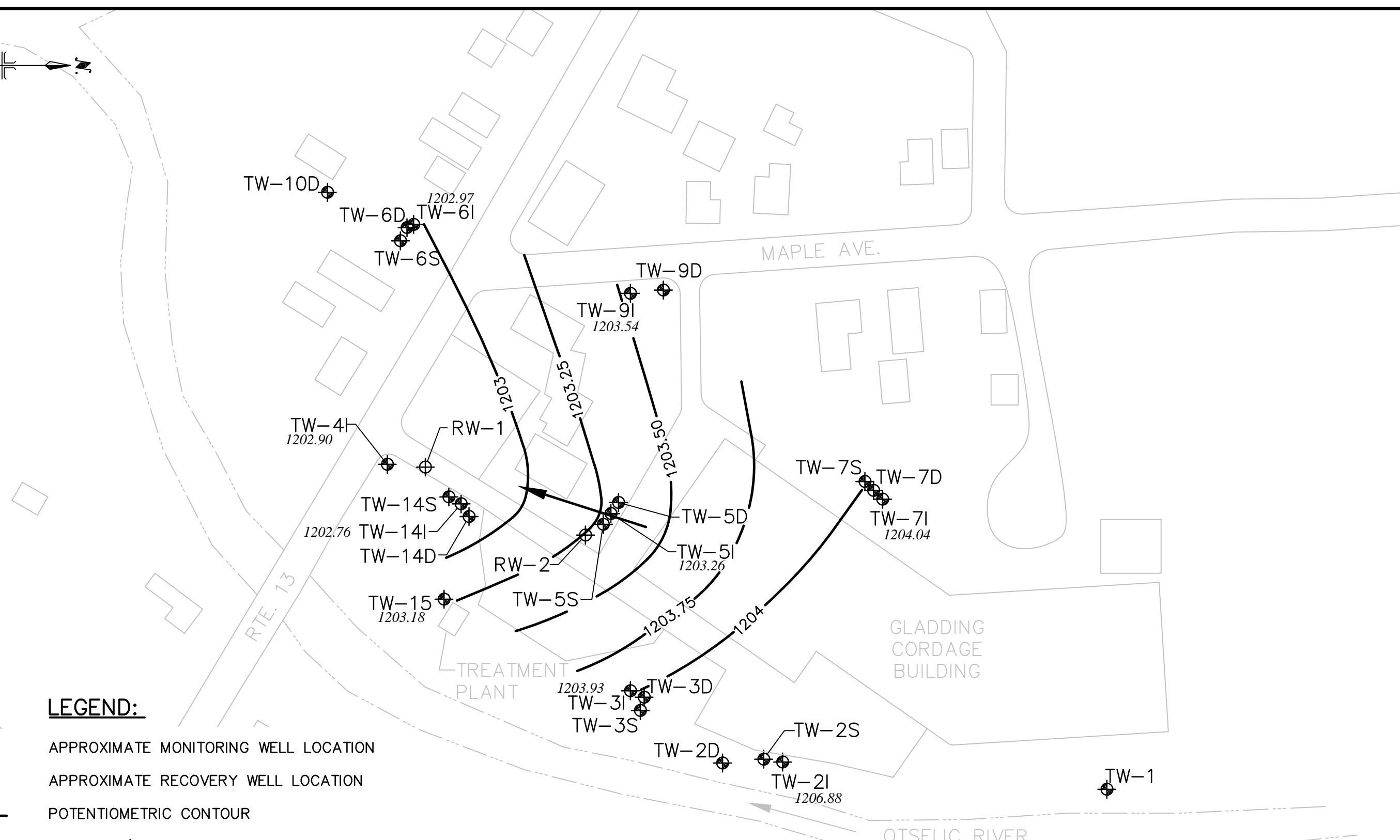




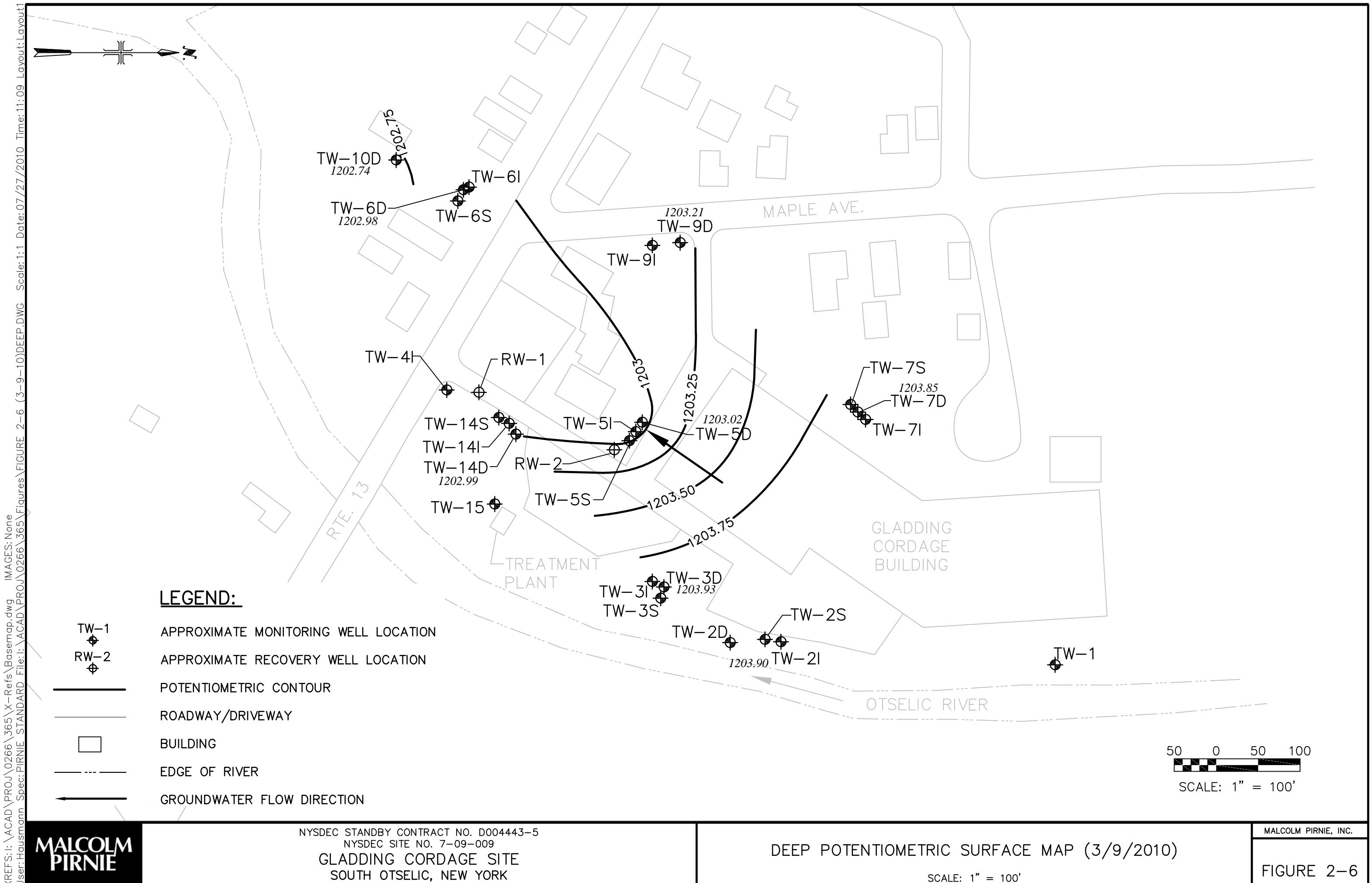


LEGEND:

- TW-1 APPROXIMATE MONITORING WELL LOCATION
- RW-2 APPROXIMATE RECOVERY WELL LOCATION
- POTENIOMETRIC CONTOUR
- ROADWAY/DRIVEWAY
- BUILDING
- EDGE OF RIVER
- GROUNDWATER FLOW DIRECTION



50 0 50 100  
SCALE: 1" = 100'



**TABLE 2-1**  
**TREATMENT SYSTEM STATUS AND FLOW SUMMARY**  
**GLADDING CORDAGE SITE**  
**SOUTH OTSELIC, NEW YORK**  
**NYSDEC SITE NO. 7-04-009A**

Month	System Operation (days)	System On-time (% of possible days)	Well On-time		Flow Rates		Totalizer	Recovery Well Total Flows		Total System Flow (gallons)	Quarterly Totals (gallons)
			RW-1 (% possible )	RW-2 (% possible )	RW-1 (gpm)	RW-2 (gpm)		RW-1 (gallons)	RW-2 (gallons)		
August-07	8 <sup>(1)</sup>	100%	100%	100%	38	24	-	437,760 <sup>(3)</sup>	276,480 <sup>(3)</sup>	714,240	
September-07	30	100%	100%	100%	38	25	-	1,641,600 <sup>(3)</sup>	1,080,000 <sup>(3)</sup>	2,721,600	3,435,840
October-07	20	65%	100%	100%	38.2	25.7	2,276,270	1,100,160 <sup>(3)</sup>	740,160 <sup>(3)</sup>	1,840,320	
November-07	30	100%	67%	100%	39.9	24.9 <sup>(2)</sup>	3,235,110	958,840 <sup>(4)</sup>	1,075,680 <sup>(3)</sup>	2,034,520	
December-07	31	100%	39%	100%	31.8	24.9 <sup>(2)</sup>	4,421,380	1,186,270 <sup>(4)</sup>	1,111,536 <sup>(3)</sup>	2,297,806	6,172,646
January-08	31	100%	100%	100%	31.8	24.9 <sup>(2)</sup>	5,278,000	856,620 <sup>(4)</sup>	1,111,536 <sup>(3)</sup>	1,968,156	
February-08	26	90%	69%	88%	32	24.9 <sup>(2)</sup>	6,457,610	1,179,610 <sup>(4)</sup>	820,385 <sup>(3)</sup>	1,999,995	5,503,499
March-08	23	74%	100%	100%	32.9	24.9 <sup>(2)</sup>	7,168,270	710,660 <sup>(4)</sup>	824,688 <sup>(3)</sup>	1,535,348	
April-08	30	100%	100%	100%	30.8	24.9 <sup>(2)</sup>	8,219,790	1,051,520 <sup>(4)</sup>	1,075,680 <sup>(3)</sup>	2,127,200	
May-08	31	100%	100%	100%	31.3	24.9 <sup>(2)</sup>	9,458,370	1,238,580 <sup>(4)</sup>	1,111,536 <sup>(3)</sup>	2,350,116	6,846,908
June-08	27	90%	100%	100%	30.5	24.9 <sup>(2)</sup>	10,859,850	1,401,480 <sup>(4)</sup>	968,112 <sup>(3)</sup>	2,369,592	
July-08	28	90%	68%	100%	30.1	24.9 <sup>(2)</sup>	11,889,440	1,029,590 <sup>(4)</sup>	1,003,968 <sup>(3)</sup>	2,033,558	
August-08	28	90%	100%	100%	30	24.9 <sup>(2)</sup>	12,832,500	943,060 <sup>(4)</sup>	1,003,968 <sup>(3)</sup>	1,947,028	6,201,456
September-08	30	100%	100%	100%	29.8	24.9 <sup>(2)</sup>	13,977,690	1,145,190 <sup>(4)</sup>	1,075,680 <sup>(3)</sup>	2,220,870	
October-08	31	100%	100%	100%	30	24.9 <sup>(2)</sup>	15,190,100	1,212,410 <sup>(4)</sup>	1,111,536 <sup>(3)</sup>	2,323,946	
November-08	30	100%	100%	100%	31.7	24.9 <sup>(2)</sup>	16,722,470	1,532,370 <sup>(4)</sup>	1,075,680 <sup>(3)</sup>	2,608,050	
December-08	31	100%	100%	100%	31.3	24.9 <sup>(2)</sup>	18,173,490	1,451,020 <sup>(4)</sup>	1,111,536 <sup>(3)</sup>	2,562,556	7,494,552
<b>Total Flow 2007</b>								<b>5,324,630</b>	<b>4,283,856</b>	<b>9,608,486</b>	
<b>Total Flow 2008</b>								<b>13,752,110</b>	<b>12,294,305</b>	<b>26,046,415</b>	

Notes:

1 - System started on 8/23/07.

2 - Flow meter inoperative. Flow based on average flow from August, September, and October 2008.

3 - Calculated based on percentage of system on-time, flow rate, and percentage of recovery well on-time.

4 - Calculated from totalizer values.

gpm - Gallons per minute

**TABLE 2-1**  
**TREATMENT SYSTEM STATUS AND FLOW SUMMARY**  
**GLADDING CORDAGE SITE**  
**SOUTH OTSELIC, NEW YORK**  
**NYSDEC SITE NO. 7-04-009A**

Month	System Operation (days)	System On-time (% of possible days)	Well On-time		Flow Rates		Totalizer RW-1 (gallons)	Recovery Well Total Flows		Total System Flow (gallons)	Quarterly Totals (gallons)
			RW-1 (% possible )	RW-2 (% possible )	RW-1 (gpm)	RW-2 (gpm)		RW-1 (gallons)	RW-2 (gallons)		
January-09	31	100%	100%	100%	31.3	24.9 <sup>(2)</sup>	19,566,200	1,392,710 <sup>(4)</sup>	1,111,536 <sup>(3)</sup>	2,504,246	
February-09	28	100%	100%	100%	30.8	24.9 <sup>(2)</sup>	20,929,320	1,363,120 <sup>(4)</sup>	1,003,968 <sup>(3)</sup>	2,367,088	6,931,910
March-09	31	100%	100%	100%	30.8	24.9 <sup>(2)</sup>	21,878,360	949,040 <sup>(4)</sup>	1,111,536 <sup>(3)</sup>	2,060,576	
April-09	30	100%	100%	100%	31.2	24.9 <sup>(2)</sup>	23,159,480	1,281,120 <sup>(4)</sup>	1,075,680 <sup>(3)</sup>	2,356,800	
May-09	31	100%	100%	100%	31.5	24.9 <sup>(2)</sup>	25,128,390	1,968,910 <sup>(4)</sup>	1,111,536 <sup>(3)</sup>	3,080,446	8,217,156
June-09	30	100%	100%	100%	31.1	24.9 <sup>(2)</sup>	26,832,620	1,704,230 <sup>(4)</sup>	1,075,680 <sup>(3)</sup>	2,779,910	
July-09	28	90%	100%	100%	30.4	24.9 <sup>(2)</sup>	27,568,640	736,020 <sup>(4)</sup>	1,003,968 <sup>(3)</sup>	1,739,988	
August-09	29	94%	100%	100%	30.6	24.9 <sup>(2)</sup>	28,551,120	982,480 <sup>(4)</sup>	1,039,824 <sup>(3)</sup>	2,022,304	5,833,432
September-09	30	100%	100%	100%	30.3	24.9 <sup>(2)</sup>	29,546,580	995,460 <sup>(4)</sup>	1,075,680 <sup>(3)</sup>	2,071,140	
October-09	20	65%	100%	100%	34.1	24.9 <sup>(2)</sup>	30,909,620	1,363,040 <sup>(4)</sup>	717,120 <sup>(3)</sup>	2,080,160	
November-09	29	97%	100%	100%	31.7	24.9 <sup>(2)</sup>	31,775,760	866,140 <sup>(4)</sup>	1,039,824 <sup>(3)</sup>	1,905,964	6,228,096
December-09	27	87%	100%	100%	33.7	24.9 <sup>(2)</sup>	33,049,620	1,273,860 <sup>(4)</sup>	968,112 <sup>(3)</sup>	2,241,972	
January-10	31	100%	100%	100%	29.2	24.9 <sup>(2)</sup>	34,376,810	1,327,190 <sup>(4)</sup>	1,111,536 <sup>(3)</sup>	2,438,726	
February-10	28	100%	100%	100%	34.8	24.9 <sup>(2)</sup>	36,406,400	2,029,590 <sup>(4)</sup>	1,003,968 <sup>(3)</sup>	3,033,558	7,478,090
March-10	31	100%	100%	100%	33	24.9 <sup>(2)</sup>	37,300,670	894,270 <sup>(4)</sup>	1,111,536 <sup>(3)</sup>	2,005,806	
<b>Total Flow 2009</b>							<b>14,876,130</b>	<b>12,334,464</b>	<b>27,210,594</b>		
<b>Total Flow 2010</b>							<b>4,251,050</b>	<b>3,227,040</b>	<b>7,478,090</b>		

Notes:

1 - System started on 8/23/07.

2 - Flow meter inoperative. Flow based on average flow from August, September, and October 2008.

3 - Calculated based on percentage of system on-time, flow rate, and percentage of recovery well on-time.

4 - Calculated from totalizer values.

gpm - Gallons per minute

TABLE 2-2

## SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCs (INFLUENT)

GLADDING CORDAGE

SOUTH OTSELIC, NEW YORK

NYSDEC Site No. 7-09-009

Sample ID Sampling Date	NYSDEC GA Standard ug/L	RW-1 9/6/2007 WATER ug/L	RW-2 9/6/2007 WATER ug/L	RW-1 10/4/2007 WATER ug/L	RW-2 10/4/2007 WATER ug/L	RW-1 11/6/2007 WATER ug/L	RW-2 11/6/2007 WATER ug/L	RW-1 12/6/2007 WATER ug/L	RW-2 12/6/2007 WATER ug/L	RW-1 1/9/2008 WATER ug/L	RW-2 1/9/2008 WATER ug/L	RW-1 2/6/2008 WATER ug/L
<b>VOCs</b>												
1,1,1-Trichloroethane	5	52	45	69	46	52	40	79	53	75	53	75
1,1,2,2-Tetrachloroethane	5	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.49 U	0.49 U	0.37 U	0.37 U	0.37 U
1,1,2-Trichloroethane	1	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.52 U	0.52 U	0.32 U	0.32 U	0.32 U
1,1,2-Trichlorotrifluoroethane	5	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.35 U	0.35 U	0.61 U	0.61 U	0.61 U
1,1-Dichloroethane	5	0.38 U	0.38 U	0.38 U	0.38 U	2.4 J	0.38 U	3.4	1.2	2.6	0.98 J	3.4 J
1,1-Dichloroethene	5	12	7.9	4.0 J	5.4	1.3 J	1.1 J	6.0	4.1	1.6	1.0	2.6 J
1,2,4-Trichlorobenzene		0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.41 U	0.41 U	0.39 U	0.39 U	0.39 U
1,2-Dibromo-3-Chloropropane	0.04	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.45 U	0.45 U	0.58 U	0.58 U	0.58 U
1,2-Dibromoethane	5	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.56 U	0.56 U	0.26 U	0.26 U	0.26 U
1,2-Dichlorobenzene	3	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.48 U	0.48 U	0.40 U	0.40 U	0.40 U
1,2-Dichloroethane	0.6	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.38 U	0.38 U	0.41 U	0.41 U	0.41 U
1,2-Dichloropropane	1	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.56 U	0.56 U	0.46 U	0.46 U	0.46 U
1,3-Dichlorobenzene	3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.45 U	0.45 U	0.28 U	0.28 U	0.28 U
1,4-Dichlorobenzene	3	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.43 U	0.43 U	0.22 U	0.22 U	0.22 U
2-Butanone	50	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	4.6 U	4.6 U	1.9 U	1.9 U	1.9 U
2-Hexanone	50	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	2.9 U	2.9 U	1.8 U	1.8 U	1.8 U
4-Methyl-2-Pentanone		1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	2.7 U	2.7 U	1.8 U	1.8 U	1.8 U
Acetone	50	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.7	2.7	2.2 U	2.2 U	2.2 U
Benzene	1	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.52 U	0.52 U	0.35 U	0.35 U	0.35 U
Bromodichloromethane	50	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.59 U	0.59 U	0.23 U	0.23 U	0.23 U
Bromoform	50	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.42 U	0.42 U	0.44 U	0.44 U	0.44 U
Bromomethane	5	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.63 U	0.63 U	1.4 U	1.4 U	1.4 U
Carbon Disulfide		0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.51 U	0.51 U	0.20 U	0.20 U	0.20 U
Carbon Tetrachloride	5	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.49 U	0.49 U	0.27 U	0.27 U	0.27 U
Chlorobenzene	5	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.50 U	0.50 U	0.28 U	0.28 U	0.28 U
Chloroethane	5	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.49 U	0.49 U	0.80 U	0.80 U	0.80 U
Chloroform	7	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.46 U	0.46 U	0.45 U	0.45 U	0.45 U
Chlormethane		0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.38 U	0.38 U	0.37 U	0.37 U	0.37 U
cis-1,2-Dichloroethene	5	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.53 U	0.53 U	0.72 U	0.72 U	0.72 U
cis-1,3-Dichloropropene	0.4	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.54 U	0.54 U	0.29 U	0.29 U	0.29 U
Cyclohexane		0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.37 U	0.37 U	0.57 U	0.57 U	0.57 U
Dibromochloromethane	50	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.45 U	0.45 U	0.23 U	0.23 U	0.23 U
Dichlorodifluoromethane	5	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.43 U	0.43 U	0.88 U	0.88 U	0.88 U
Ethyl Benzene	5	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.50 U	0.50 U	0.05 U	0.05 U	0.05 U
Isopropylbenzene	5	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.37 U	0.37 U	0.37 U
m/p-Xylenes	5	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.97 U	0.97 U	0.47 U	0.47 U	0.47 U
Methyl Acetate		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.92 U	0.92 U	0.45 U	0.45 U	0.45 U
Methyl tert-butyl Ether		0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.50 U	0.50 U	0.23 U	0.23 U	0.23 U
Methylcyclohexane		0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.43 U	0.43 U	0.47 U	0.47 U	0.47 U
Methylene Chloride	5	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.52 U	0.52 U	0.38 U	0.38 U	0.38 U
o-Xylene		0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.51 U	0.51 U	0.16 U	0.16 U	0.16 U
Styrene	5	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.48 U	0.48 U	0.19 U	0.19 U	0.19 U
t-1,3-Dichloropropene	0.4	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.44 U	0.44 U	0.31 U	0.31 U	0.31 U
Tetrachloroethene	5	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.68 U	0.68 U	0.97 U	0.97 U	0.97 U
Toluene	5	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.51 U	0.51 U	0.16 U	0.16 U	0.16 U
trans-1,2-Dichloroethene	5	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.57 U	0.57 U	0.44 U	0.44 U	0.44 U
Trichloroethene	5	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.56 U	0.56 U	0.34 U	0.34 U	0.34 U
Trichlorofluoromethane	5	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.40 U	0.40 U	0.53 U	0.53 U	0.53 U
Vinyl Chloride	2	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.46 U	0.46 U	0.30 U	0.30 U	0.30 U
Total VOCs		64	53	73	51	55.7	41	88.4	58	79.2	55.0	81

- Concentration exceeds corresponding NYSDEC

Class GA Standard.

U - Not detected at the indicated concentration

J - Estimated concentration.

TABLE 2-2

## SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCs (INFLUENT)

GLADDING CORDAGE

SOUTH OTSELIC, NEW YORK

NYSDEC Site No. 7-09-009

Sample ID	NYSDEC GA Standard ug/L	RW-2 2/6/2008 WATER ug/L	RW-1 3/6/2008 WATER ug/L	RW-2 3/6/2008 WATER ug/L	RW-1 4/7/2008 WATER ug/L	RW-2 4/7/2008 WATER ug/L	RW-1 5/5/2008 WATER ug/L	RW-2 5/5/2008 WATER ug/L	RW-1 6/6/2008 WATER ug/L	RW-2 6/6/2008 WATER ug/L	RW-1 7/2/2008 WATER ug/L	RW-2 7/2/2008 WATER ug/L
VOCs												
1,1,1-Trichloroethane	5	56	84	56	75	57	62	44	62	41	67	49
1,1,2,2-Tetrachloroethane	5	0.37 U										
1,1,2-Trichloroethane	1	0.32 U										
1,1,2-Trichlorotrifluoroethane	5	0.61 U										
1,1-Dichloroethane	5	1.2 J	3.8 J	1.3 J	3.2 J	0.67 U	0.67 U	0.67 U	2 J	0.92 J	2.8 J	1 J
1,1-Dichloroethene	5	1.7 J	6.9	3.8 J	2.2 J	2.1 J	5.5	4.2 J	4.8 J	3 J	5.5	4.6 J
1,2,4-Trichlorobenzene		0.39 U										
1,2-Dibromo-3-Chloropropane	0.04	0.58 U										
1,2-Dibromoethane	5	0.26 U										
1,2-Dichlorobenzene	3	0.40 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
1,2-Dichloroethane	0.6	0.41 U										
1,2-Dichloropropane	1	0.46 U										
1,3-Dichlorobenzene	3	0.28 U										
1,4-Dichlorobenzene	3	0.22 U										
2-Butanone	50	1.9 U										
2-Hexanone	50	1.8 U										
4-Methyl-2-Pentanone		1.8 U										
Acetone	50	2.2 U										
Benzene	1	0.35 U										
Bromodichloromethane	50	0.23 U										
Bromoform	50	0.44 U										
Bromomethane	5	1.4 U										
Carbon Disulfide		0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	5	0.27 U										
Chlorobenzene	5	0.28 U										
Chloroethane	5	0.80 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloroform	7	0.45 U										
Chlormethane		0.37 U										
cis-1,2-Dichloroethene	5	0.72 U										
cis-1,3-Dichloropropene	0.4	0.29 U										
Cyclohexane		0.57 U										
Dibromochloromethane	50	0.23 U										
Dichlorodifluoromethane	5	0.88 U										
Ethyl Benzene	5	0.05 U										
Isopropylbenzene	5	0.37 U										
m/p-Xylenes	5	0.47 U	1.4 J	1.2 J	0.47 U							
Methyl Acetate		0.45 U										
Methyl tert-butyl Ether		0.23 U										
Methylcyclohexane		0.47 U										
Methylene Chloride	5	0.38 U										
o-Xylene		0.16 U										
Styrene	5	0.19 U										
t-1,3-Dichloropropene	0.4	0.31 U										
Tetrachloroethene	5	0.97 U										
Toluene	5	0.16 U										
trans-1,2-Dichloroethene	5	0.44 U										
Trichloroethene	5	0.34 U										
Trichlorofluoromethane	5	0.53 U										
Vinyl Chloride	2	0.30 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Total VOCs		58.9	96.1	62.3	80.4	59.1	67.5	48.2	66.8	44.0	75.3	54.6

- Concentration exceeds corresponding NYSDEC

Class GA Standard.

U - Not detected at the indicated concentration

J - Estimated concentration.

TABLE 2-2

## SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCs (INFLUENT)

GLADDING CORDAGE

SOUTH OTSELIC, NEW YORK

NYSDEC Site No. 7-09-009

Sample ID	NYSDEC GA Standard ug/L	RW-1 8/8/2008 WATER ug/L	RW-2 8/8/2008 WATER ug/L	RW-1 9/5/2008 WATER ug/L	RW-2 9/5/2008 WATER ug/L	RW-1 10/3/2008 WATER ug/L	RW-2 10/3/2008 WATER ug/L	RW-1 11/6/2008 WATER ug/L	RW-2 11/6/2008 WATER ug/L	RW-1 12/8/2008 WATER ug/L	RW-2 12/8/2008 WATER ug/L	RW-1 1/8/2009 WATER ug/L
VOCs												
1,1,1-Trichloroethane	5	66	50	75	58	82	60	49	49	84	49	64
1,1,2,2-Tetrachloroethane	5	0.37 U	0.37 U	1 U	1 U	1 U	1 U	1 U				
1,1,2-Trichloroethane	1	0.32 U	0.32 U	1 U	1 U	1 U	1 U	1 U				
1,1,2-Trichlorotrifluoroethane	5	0.61 U	0.61 U	1 U	1 U	1 U	1 U	1 U				
1,1-Dichloroethane	5	2.6 J	0.67 U	0.67 U	0.67 U	3.1 J	0.67 U	2	1 U	6.4	4.3	2
1,1-Dichloroethene	5	3.3 J	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	3.2	1 U	7.8	5.2	2.1
1,2,4-Trichlorobenzene		0.39 U	0.39 U	1 U	1 U	1 U	1 U	1 U				
1,2-Dibromo-3-Chloropropane	0.04	0.58 U	0.58 U	1 U	1 U	1 U	1 U	1 U				
1,2-Dibromoethane	5	0.26 U	0.26 U	1 U	1 U	1 U	1 U	1 U				
1,2-Dichlorobenzene	3	0.4 U	0.4 U	1 U	1 U	1 U	1 U	1 U				
1,2-Dichloroethane	0.6	0.41 U	0.41 U	1 U	1 U	1 U	1 U	1 U				
1,2-Dichloropropane	1	0.46 U	0.46 U	1 U	1 U	1 U	1 U	1 U				
1,3-Dichlorobenzene	3	0.28 U	0.28 U	1 U	1 U	1 U	1 U	1 U				
1,4-Dichlorobenzene	3	0.22 U	0.22 U	1 U	1 U	1 U	1 U	1 U				
2-Butanone	50	1.9 U	1.9 U	5 U	5 U	5 U	5 U	5 U				
2-Hexanone	50	1.8 U	1.8 U	5 U	5 U	5 U	5 U	5 U				
4-Methyl-2-Pentanone		1.8 U	1.8 U	5 U	5 U	5 U	5 U	5 U				
Acetone	50	2.2 U	2.2 U	5 U	5 U	5 U	5 U	5 U				
Benzene	1	0.35 U	0.35 U	1 U	1 U	1 U	1 U	1 U				
Bromodichloromethane	50	0.23 U	0.23 U	1 U	1 U	1 U	1 U	1 U				
Bromoform	50	0.44 U	0.44 U	1 U	1 U	1 U	1 U	1 U				
Bromomethane	5	1.4 U	1.4 U	1 U	1 U	1 U	1 U	1 U				
Carbon Disulfide		0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U				
Carbon Tetrachloride	5	0.27 U	0.27 U	1 U	1 U	1 U	1 U	7.8				
Chlorobenzene	5	0.28 U	0.28 U	1 U	1 U	1 U	1 U	1 U				
Chloroethane	5	0.8 U	0.8 U	1 U	1 U	1 U	1 U	1 U				
Chloroform	7	0.45 U	0.45 U	1 U	1 U	1 U	1 U	1 U				
Chlormethane		0.37 U	0.37 U	1 U	1 U	1 U	1 U	1 U				
cis-1,2-Dichloroethene	5	0.72 U	0.72 U	1 U	0.82 J	1 U	1 U	1 U				
cis-1,3-Dichloropropene	0.4	0.29 U	0.29 U	1 U	1 U	1 U	1 U	1 U				
Cyclohexane		0.57 U	0.57 U	1 U	2.8	1 U	1 U	1 U				
Dibromochloromethane	50	0.23 U	0.23 U	1 U	1 U	1 U	1 U	1 U				
Dichlorodifluoromethane	5	0.88 U	0.88 U	1 U	1 U	1 U	1 U	1 U				
Ethyl Benzene	5	0.05 U	0.05 U	1 U	1 U	1 U	1 U	1 U				
Isopropylbenzene	5	0.37 U	0.37 U	1 U	1 U	1 U	1 U	1 U				
m/p-Xylenes	5	0.47 U	0.47 U	2 U	2 U	2 U	2 U	2 U				
Methyl Acetate		0.45 U	0.45 U	1 U	1 U	1 U	1 U	1 U				
Methyl tert-butyl Ether		0.23 U	0.23 U	1 U	1 U	1 U	1 U	1 U				
Methylcyclohexane		0.47 U	0.47 U	1 U	1 U	1 U	1 U	1 U				
Methylene Chloride	5	0.38 U	0.38 U	1 U	1 U	1 U	1 U	1 U				
o-Xylene		0.16 U	0.16 U	1 U	1 U	1 U	1 U	1 U				
Styrene	5	0.19 U	0.19 U	1 U	1 U	1 U	1 U	1 U				
t-1,3-Dichloropropene	0.4	0.31 U	0.31 U	1 U	1 U	1 U	1 U	1 U				
Tetrachloroethene	5	0.97 U	0.97 U	1 U	1 U	1 U	1 U	1 U				
Toluene	5	0.16 U	0.16 U	1 U	1 U	1 U	1 U	1 U				
trans-1,2-Dichloroethene	5	0.44 U	0.44 U	1 U	1 U	1 U	1 U	1 U				
Trichloroethene	5	0.34 U	0.34 U	1 U	1 U	1 U	1 U	1 U				
Trichlorofluoromethane	5	0.53 U	0.53 U	1 U	1 U	1 U	1 U	1 U				
Vinyl Chloride	2	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U				

Total VOCs

71.9 50.0 75 58.0 85.1 60.0 54.2 52.6 98.2 58.5 75.9

- Concentration exceeds corresponding NYSDEC

Class GA Standard.

U - Not detected at the indicated concentration

J - Estimated concentration.

TABLE 2-2

## SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCs (INFLUENT)

GLADDING CORDAGE

SOUTH OTSELIC, NEW YORK

NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units VOCs	NYSDEC GA Standard ug/L	RW-2 1/8/2009 WATER ug/L	RW-1 2/10/2009 WATER ug/L	RW-2 2/10/2009 WATER ug/L	RW-1 3/4/2009 WATER ug/L	RW-2 3/4/2009 WATER ug/L	RW-1 4/3/2009 WATER ug/L	RW-2 4/3/2009 WATER ug/L	RW-1 5/18/2009 WATER ug/L	RW-2 5/18/2009 WATER ug/L	RW-1 6/25/2009 WATER ug/L	RW-2 6/25/2009 WATER ug/L
1,1,1-Trichloroethane	5	49	75	61	73	51	73	50	63	45	56	43
1,1,2,2-Tetrachloroethane	5	1 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
1,1,2-Trichloroethane	1	1 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,1,2-Trichlorotrifluoroethane	5	1 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
1,1-Dichloroethane	5	1 U	3.2	1.2	3	1.2	2.6	0.36 U	2.8	1.1	2.4	0.94 J
1,1-Dichloroethene	5	1 U	2.4	1.8	0.47 U	0.47 U	2.8	0.47 U	1.3	0.73 J	1.6	0.87 J
1,2,4-Trichlorobenzene		1 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U
1,2-Dibromo-3-Chloropropane	0.04	1 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
1,2-Dibromoethane	5	1 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
1,2-Dichlorobenzene	3	1 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
1,2-Dichloroethane	0.6	1 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
1,2-Dichloropropane	1	1 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
1,3-Dichlorobenzene	3	1 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,4-Dichlorobenzene	3	1 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
2-Butanone	50	5 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
2-Hexanone	50	5 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Methyl-2-Pentanone		5 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Acetone	50	5 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Benzene	1	1 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Bromodichloromethane	50	1 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Bromoform	50	1 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
Bromomethane	5	1 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U
Carbon Disulfide		1 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
Carbon Tetrachloride	5	5.9	8	6.4	0.62 U	0.62 U	0.62 U	0.62 U				
Chlorobenzene	5	1 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
Chloroethane	5	1 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U
Chloroform	7	1 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Chlormethane		1 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
cis-1,2-Dichloroethene	5	1 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
cis-1,3-Dichloropropene	0.4	1 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Cyclohexane		1 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
Dibromochloromethane	50	1 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
Dichlorodifluoromethane	5	1 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
Ethyl Benzene	5	1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Isopropylbenzene	5	1 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
m/p-Xylenes	5	2 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
Methyl Acetate		1 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U
Methyl tert-butyl Ether		1 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Methylcyclohexane		1 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
Methylene Chloride	5	1 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
o-Xylene		1 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Styrene	5	1 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
t-1,3-Dichloropropene	0.4	1 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Tetrachloroethene	5	1 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Toluene	5	1 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
trans-1,2-Dichloroethene	5	1 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Trichloroethene	5	1 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Trichlorofluoromethane	5	1 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Vinyl Chloride	2	1 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U

Total VOCs

54.9 88.6 70.4 76.0 52.2 78.4 50.0 67.1 46.8 60.0 44.8

- Concentration exceeds corresponding NYSDEC

Class GA Standard.

U - Not detected at the indicated concentration

J - Estimated concentration.

TABLE 2-2

## SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCs (INFLUENT)

GLADDING CORDAGE

SOUTH OTSELIC, NEW YORK

NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units VOCs	NYSDEC GA Standard ug/L	RW-1 7/28/2009 WATER ug/L	RW-2 7/28/2009 WATER ug/L	RW-1 8/20/2009 WATER ug/L	RW-2 8/20/2009 WATER ug/L	RW-1 9/10/2009 WATER ug/L	RW-2 9/10/2009 WATER ug/L	RW-1 10/13/2009 WATER ug/L	RW-2 10/13/2009 WATER ug/L	RW-1 11/9/2009 WATER ug/L	RW-2 11/9/2009 WATER ug/L	RW-1 12/10/2009 WATER ug/L
1,1,1-Trichloroethane	5	55	43	77	44	68	52	79	72	66	51	60
1,1,2,2-Tetrachloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichlorotrifluoroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	2.5	0.85 J	3.4	0.95 J	3.2	1.1	4.1	1.8	3.8	1.3	2.9
1,1-Dichloroethene	5	3.2	1.9	3.4	1.7	3.4	2	3.1	2.5	3.9	2.2	2.5
1,2,4-Trichlorobenzene		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	0.04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.2
Bromomethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlormethane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	0.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.2
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethyl Benzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m/p-Xylenes	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Methyl Acetate		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl tert-butyl Ether		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylcyclohexane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.61 J
o-Xylene		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
t-1,3-Dichloropropene	0.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Total VOCs

60.7 45.8 83.8 46.7 74.6 55.1 86.2 76.3 73.7 54.5 71.4

- Concentration exceeds corresponding NYSDEC

Class GA Standard.

U - Not detected at the indicated concentration

J - Estimated concentration.

TABLE 2-2

## SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCs (INFLUENT)

GLADDING CORDAGE

SOUTH OTSELIC, NEW YORK

NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	RW-2 12/10/2009 WATER ug/L	RW-1 1/7/2010 WATER ug/L	RW-2 1/7/2010 WATER ug/L	RW-1 2/19/2010 WATER ug/L	RW-2 2/19/2010 WATER ug/L	RW-1 3/9/2010 WATER ug/L	RW-2 3/9/2010 WATER ug/L
<b>VOCs</b>								
1,1,1-Trichloroethane	5	45	53	43	66	49	54	43
1,1,2,2-Tetrachloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichlorotrifluoroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1.1	2.6	0.9 J	3.2	1.1	2.7	1
1,1-Dichloroethene	5	1.6	2.5	1.7	3.2	1.9	2.6	1.7
1,2,4-Trichlorobenzene		1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	0.04	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone		5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50	1.3	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlormethane		1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	0.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	50	0.78 J	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethyl Benzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m/p-Xylenes	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Methyl Acetate		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl tert-butyl Ether		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylcyclohexane		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	2.1	1 U	1 U	1 U	1 U	1 U	1 U
o-Xylene		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
t-1,3-Dichloropropene	0.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U
<b>Total VOCs</b>		51.9	58.1	45.6	72.4	52.0	59.3	45.7

- Concentration exceeds corresponding NYSDEC

Class GA Standard.

U - Not detected at the indicated concentration

J - Estimated concentration.

TABLE 2-3

## SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCs (EFFLUENT)

GLADDING CORDAGE

SOUTH OTSELIC, NEW YORK

NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	EFF 9/6/2007 WATER ug/L	EFF 10/4/2007 WATER ug/L	EFF 11/6/2007 WATER ug/L	EFF 12/6/2007 WATER ug/L	EFF(40HZ) 1/9/2008 WATER ug/L	EFF(50HZ) 1/9/2008 WATER ug/L	EFF(60HZ) 1/9/2008 WATER ug/L	EFF(42HZ) 2/6/2008 WATER ug/L	EFF(44HZ) 2/6/2008 WATER ug/L	Duplicate	EFF(46HZ) 2/6/2008 WATER ug/L	EFF(42HZ) 3/6/2008 WATER ug/L
<b>VOCs</b>													
1,1,1-Trichloroethane	5	0.32 U	0.32 U	0.32 U	0.46 U	6.0	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
1,1,2,2-Tetrachloroethane	5	0.30 U	0.30 U	0.30 U	0.49 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,1,2-Trichloroethane	1	0.41 U	0.41 U	0.41 U	0.52 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,1,2-Trichlorotrifluoroethane	5	1.3 U	1.3 U	1.3 U	0.35 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U
1,1-Dichloroethane	5	0.38 U	0.38 U	0.38 U	0.55 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
1,1-Dichloroethene	5	0.42 U	0.42 U	0.42 U	0.55 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
1,2,4-Trichlorobenzene		0.46 U	0.46 U	0.46 U	0.41 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
1,2-Dibromo-3-Chloropropane	0.04	0.38 U	0.38 U	0.38 U	0.45 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
1,2-Dibromoethane	5	0.32 U	0.32 U	0.32 U	0.56 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
1,2-Dichlorobenzene	3	0.44 U	0.44 U	0.44 U	0.48 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
1,2-Dichloroethane	0.6	0.34 U	0.34 U	0.34 U	0.38 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
1,2-Dichloropropane	1	0.40 U	0.40 U	0.40 U	0.56 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
1,3-Dichlorobenzene	3	0.50 U	0.50 U	0.50 U	0.45 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,4-Dichlorobenzene	3	0.54 U	0.54 U	0.54 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
2-Butanone	50	1.1 U	1.1 U	43	4.6 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Hexanone	50	1.7 U	1.7 U	1.7 U	2.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
4-Methyl-2-Pentanone		1.6 U	1.6 U	1.6 U	2.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Acetone	50	2.3 U	2.3 U	2.3 U	2.7 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
Benzene	1	0.39 U	0.39 U	0.39 U	0.52 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Bromodichloromethane	50	0.33 U	0.33 U	0.33 U	0.59 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Bromoform	50	0.32 U	0.32 U	0.32 U	0.42 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
Bromomethane	5	0.41 U	0.41 U	0.41 U	0.63 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Carbon Disulfide		0.40 U	0.40 U	0.40 U	0.51 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Carbon Tetrachloride	5	1.1 U	1.1 U	1.1 U	0.49 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Chlorobenzene	5	0.47 U	0.47 U	0.47 U	0.50 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chloroethane	5	0.83 U	0.83 U	0.83 U	0.49 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U
Chloroform	7	0.33 U	0.33 U	0.33 U	0.46 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
Chloromethane		0.34 U	0.34 U	0.34 U	0.38 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
cis-1,2-Dichloroethene	5	0.29 U	0.29 U	0.29 U	0.53 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U
cis-1,3-Dichloropropene	0.4	0.36 U	0.36 U	0.36 U	0.54 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Cyclohexane		0.36 U	0.36 U	0.36 U	0.37 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U
Dibromochloromethane	50	0.26 U	0.26 U	0.26 U	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Dichlorodifluoromethane	5	0.17 U	0.17 U	0.17 U	0.43 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U
Ethyl Benzene	5	0.45 U	0.45 U	0.45 U	0.50 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Isopropylbenzene	5	0.44 U	0.44 U	0.44 U	0.44 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
m/p-Xylenes	5	1.2 U	1.2 U	1.2 U	0.97 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	1.2 J
Methyl Acetate		0.20 U	0.20 U	0.20 U	0.92 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
Methyl tert-butyl Ether		0.28 U	0.28 U	0.28 U	0.50 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Methylcyclohexane		0.34 U	0.34 U	0.34 U	0.43 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
Methylene Chloride	5	0.43 U	0.43 U	0.43 U	0.52 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
o-Xylene		0.46 U	0.46 U	0.46 U	0.51 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Styrene	5	0.41 U	0.41 U	0.41 U	0.48 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
t-1,3-Dichloropropene	0.4	0.32 U	0.32 U	0.32 U	0.44 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Tetrachloroethene	5	0.48 U	0.48 U	0.48 U	0.68 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U
Toluene	5	0.36 U	0.36 U	0.36 U	0.51 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
trans-1,2-Dichloroethene	5	0.40 U	0.40 U	0.40 U	0.57 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
Trichloroethene	5	0.46 U	0.46 U	0.46 U	0.56 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorofluoromethane	5	0.22 U	0.22 U	0.22 U	0.40 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Vinyl Chloride	2	0.33 U	0.33 U	0.33 U	0.46 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.3 U

## Notes

U - Not detected at the indicated concentration.

J - Estimated concentration.

TABLE 2-3

## SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCs (EFFLUENT)

GLADDING CORDAGE

SOUTH OTSELIC, NEW YORK

NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	EFF(42HZ) 4/7/2008 WATER ug/L	EFF(42HZ) 5/5/2008 WATER ug/L	EFF(43HZ) 6/6/2008 WATER ug/L	EFF(44HZ) 7/2/2008 WATER ug/L	EFF(44HZ) 8/8/2008 WATER ug/L	EFF(44HZ) 9/5/2008 WATER ug/L	EFF(44HZ) 10/3/2008 WATER ug/L	EFF(44HZ) 11/6/2008 WATER ug/L	EFF(44HZ) 12/8/2008 WATER ug/L	EFF(44HZ) 1/8/09 WATER ug/L	EFF(44HZ) 2/10/2009 WATER ug/L	EFF(44HZ) 3/4/2009 WATER ug/L
<b>VOCs</b>													
1,1,1-Trichloroethane	5	2.2 J	0.39 U	1.9 J	0.39 U	0.39 U	0.39 U	0.39 U	1 U	1 U	1 U	0.4 U	0.4 U
1,1,2,2-Tetrachloroethane	5	0.37 U	1 U	1 U	1 U	0.31 U	0.31 U						
1,1,2-Trichloroethane	1	0.32 U	1 U	1 U	1 U	0.38 U	0.38 U						
1,1,2-Trichlorotrifluoroethane	5	0.61 U	1 U	1 U	1 U	0.45 U	0.45 U						
1,1-Dichloroethane	5	0.67 U	1 U	1 U	1 U	0.36 U	0.36 U						
1,1-Dichloroethene	5	0.67 U	1 U	1 U	1 U	0.47 U	0.47 U						
1,2,4-Trichlorobenzene		0.39 U	1 U	2.2	1 U	0.62 U	0.62 U						
1,2-Dibromo-3-Chloropropane	0.04	0.58 U	1 U	1 U	1 U	0.46 U	0.46 U						
1,2-Dibromoethane	5	0.26 U	1 U	1 U	1 U	0.41 U	0.41 U						
1,2-Dichlorobenzene	3	0.4 U	1 U	1 U	1 U	0.45 U	0.45 U						
1,2-Dichloroethane	0.6	0.41 U	1 U	1 U	1 U	0.48 U	0.48 U						
1,2-Dichloropropane	1	0.46 U	1 U	1 U	1 U	0.46 U	0.46 U						
1,3-Dichlorobenzene	3	0.28 U	1 U	1 U	1 U	0.43 U	0.43 U						
1,4-Dichlorobenzene	3	0.22 U	1 U	1 U	1 U	0.32 U	0.32 U						
2-Butanone	50	1.9 U	5 U	5 U	5 U	1.3 U	1.3 U						
2-Hexanone	50	1.8 U	5 U	5 U	5 U	1.9 U	1.9 U						
4-Methyl-2-Pentanone		1.8 U	5 U	5 U	5 U	2.1 U	2.1 U						
Acetone	50	2.2 U	5 U	5 U	5 U	2.8 U	2.8 U						
Benzene	1	0.35 U	1 U	1 U	1 U	0.32 U	0.32 U						
Bromodichloromethane	50	0.23 U	1 U	1 U	1 U	0.36 U	0.36 U						
Bromoform	50	0.44 U	1 U	1 U	1 U	0.47 U	0.47 U						
Bromomethane	5	1.4 U	1 U	1 U	1 U	0.62 U	0.62 U						
Carbon Disulfide		0.2 U	1 U	1 U	1 U	0.54 U	0.54 U						
Carbon Tetrachloride	5	0.27 U	1 U	1 U	1 U	0.62 U	0.62 U						
Chlorobenzene	5	0.28 U	1 U	1 U	1 U	0.49 U	0.49 U						
Chloroethane	5	0.8 U	1 U	1 U	1 U	0.66 U	0.66 U						
Chloroform	7	0.45 U	1 U	1 U	1 U	0.34 U	0.34 U						
Chloromethane		0.37 U	1 U	1 U	1 U	0.54 U	0.54 U						
cis-1,2-Dichloroethene	5	0.72 U	1 U	1 U	1 U	0.35 U	0.35 U						
cis-1,3-Dichloropropene	0.4	0.29 U	1 U	1 U	1 U	0.31 U	0.31 U						
Cyclohexane		0.57 U	1.9	1 U	1 U	0.55 U	0.55 U						
Dibromochloromethane	50	0.23 U	1 U	1 U	1 U	0.52 U	0.52 U						
Dichlorodifluoromethane	5	0.88 U	1 U	1 U	1 U	0.55 U	0.55 U						
Ethyl Benzene	5	0.05 U	1 U	1 U	1 U	0.53 U	0.53 U						
Isopropylbenzene	5	0.37 U	1 U	1 U	1 U	0.45 U	0.45 U						
m/p-Xylenes	5	0.47 U	2 U	2 U	2 U	0.95 U	0.95 U						
Methyl Acetate		0.45 U	1 U	1 U	1 U	0.83 U	0.83 U						
Methyl tert-butyl Ether		0.23 U	1 U	1 U	1 U	0.35 U	0.35 U						
Methylcyclohexane		0.47 U	1 U	1 U	1 U	0.68 U	0.68 U						
Methylene Chloride	5	0.38 U	1 U	1 U	1 U	0.41 U	0.41 U						
o-Xylene		0.16 U	1 U	1 U	1 U	0.43 U	0.43 U						
Styrene	5	0.19 U	1 U	1 U	1 U	0.36 U	0.36 U						
t-1,3-Dichloropropene	0.4	0.31 U	1 U	1 U	1 U	0.29 U	0.29 U						
Tetrachloroethene	5	0.97 U	1 U	1 U	1 U	0.27 U	0.27 U						
Toluene	5	0.16 U	1 U	1 U	1 U	0.37 U	0.37 U						
trans-1,2-Dichloroethene	5	0.44 U	1 U	1 U	1 U	0.41 U	0.41 U						
Trichloroethene	5	0.34 U	1 U	1 U	1 U	0.28 U	0.28 U						
Trichlorofluoromethane	5	0.53 U	1 U	1 U	1 U	0.35 U	0.35 U						
Vinyl Chloride	2	0.3 U	0.53 U	1 U	1 U	0.34 U	0.34 U						

## Notes

U - Not detected at the indicated concentration.

J - Estimated concentration.

TABLE 2-3

## SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCs (EFFLUENT)

GLADDING CORDAGE

SOUTH OTSELIC, NEW YORK

NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	EFF(44HZ) 4/3/2009 WATER ug/L	EFF(44HZ) 5/18/2009 WATER ug/L	EFF(44HZ) 6/25/2009 WATER ug/L	EFF(44HZ) 7/28/2009 WATER ug/L	EFF(44HZ) 8/20/2009 WATER ug/L	EFF(44HZ) 9/10/2009 WATER ug/L	EFF(44HZ) 10/13/2009 WATER ug/L	EFF(44HZ) 11/9/2009 WATER ug/L	EFF(44HZ) 12/10/2009 WATER ug/L	EFF(44HZ) 1/7/2010 WATER ug/L	EFF(44HZ) 2/19/2010 WATER ug/L	EFF(44HZ) 3/9/2010 WATER ug/L
<b>VOCs</b>													
1,1,1-Trichloroethane	5	0.4 U	0.4 U	2.1	2.2	2.7	1.3	1 U	1 U	1 U	1 U	1 U	2.6
1,1,2,2-Tetrachloroethane	5	0.31 U	0.31 U	0.31 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1	0.38 U	0.38 U	0.38 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichlorotrifluoroethane	5	0.45 U	0.45 U	0.45 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	0.36 U	0.36 U	0.36 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	0.47 U	0.47 U	0.47 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene		0.62 U	0.62 U	0.62 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	0.04	0.46 U	0.46 U	0.46 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	5	0.41 U	0.41 U	0.41 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	0.45 U	0.45 U	0.45 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	0.48 U	0.48 U	0.48 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	0.46 U	0.46 U	0.46 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	0.43 U	0.43 U	0.43 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	0.32 U	0.32 U	0.32 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	50	1.3 U	1.3 U	1.3 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	50	1.9 U	1.9 U	1.9 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone		2.1 U	2.1 U	2.1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50	2.8 U	2.8 U	2.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	1	0.32 U	0.32 U	0.32 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50	0.36 U	0.36 U	0.36 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50	0.47 U	0.47 U	0.47 U	1 U	1 U	1 U	1 U	1 U	1.7	1 U	1 U	1 U
Bromomethane	5	0.62 U	0.62 U	0.62 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide		0.54 U	0.54 U	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	0.62 U	0.62 U	0.62 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	0.49 U	0.49 U	0.49 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	0.66 U	0.66 U	0.66 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	0.34 U	0.34 U	0.34 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane		0.54 U	0.54 U	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5	0.35 U	0.35 U	0.35 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	0.4	0.31 U	0.31 U	0.31 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane		0.55 U	0.55 U	0.55 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	50	0.52 U	0.52 U	0.52 U	1 U	1 U	1 U	1 U	1 U	1.1	1 U	1 U	1 U
Dichlorodifluoromethane	5	0.55 U	0.55 U	0.55 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethyl Benzene	5	0.53 U	0.53 U	0.53 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	5	0.45 U	0.45 U	0.45 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m/p-Xylenes	5	0.95 U	0.95 U	0.95 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Methyl Acetate		0.83 U	0.83 U	0.83 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl tert-butyl Ether		0.35 U	0.35 U	0.35 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylcyclohexane		0.68 U	0.68 U	0.68 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	0.41 U	0.41 U	0.41 U	1 U	1 U	1 U	1 U	1 U	2.4	1 U	1 U	1 U
o-Xylene		0.43 U	0.43 U	0.43 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	5	0.36 U	0.36 U	0.36 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
t-1,3-Dichloropropene	0.4	0.29 U	0.29 U	0.29 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	0.27 U	0.27 U	0.27 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	0.37 U	0.37 U	0.37 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5	0.41 U	0.41 U	0.41 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	0.28 U	0.28 U	0.28 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5	0.35 U	0.35 U	0.35 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2	0.34 U	0.34 U	0.34 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

## Notes

U - Not detected at the indicated concentration.

J - Estimated concentration.

**Table 2-4**  
**GROUNDWATER MONITORING WELL WATER LEVEL DATA**  
**GLADDING CORDAGE**  
**SOUTH OTSELIC, NEW YORK**  
**NYSDEC SITE No. 7-09-009**

Well ID	Monitored Interval	Measuring Point Elevation <sup>(1)</sup> (feet)	3/9/2010	
			DTW (feet)	Elevation (feet amsl)
TW-1	Shallow	1212.71 <sup>(4)</sup>	7.33	1205.38
TW-2S	Shallow	1212.57 <sup>(4)</sup>	8.37	1204.20
TW-2I	Intermediate	1212.16 <sup>(4)</sup>	5.28	1206.88
TW-2D	Deep	1212.26 <sup>(4)</sup>	8.36	1203.90
TW-3S	Shallow	1213.60	9.83	1203.77
TW-3I	Intermediate	1213.19	9.26	1203.93
TW-3D	Deep	1213.47	9.54	1203.93
TW-4I	Intermediate	1209.96 <sup>(2)</sup>	7.06	1202.90
TW-5S	Shallow	1211.78	8.24	1203.54
TW-5I	Intermediate	1211.89	8.63	1203.26
TW-5D	Deep	1212.55	9.53	1203.02
TW-6S	Shallow	1210.08 <sup>(5)</sup>	6.96	1203.12
TW-6I	Intermediate	1210.61 <sup>(5)</sup>	7.64	1202.97
TW-6D	Deep	1210.36 <sup>(5)</sup>	7.38	1202.98
TW-7S	Shallow	1213.48	9.04	1204.44
TW-7I	Intermediate	1213.60	9.56	1204.04
TW-7D	Deep	1213.25	9.40	1203.85
TW-9I	Intermediate	1213.75 <sup>(4)</sup>	10.21	1203.54
TW-9D	Deep	1213.84 <sup>(4)</sup>	10.63	1203.21
TW-10D	Deep	1209.58 <sup>(5)</sup>	6.84	1202.74
TW-12I	Intermediate	-	8.24	
TW-12D	Deep	-	6.25	
TW-14S	Shallow	1210.05 <sup>(2)</sup>	6.81	1203.24
TW-14I	Intermediate	1210.17 <sup>(2)</sup>	7.41	1202.76
TW-14D	Deep	1209.98 <sup>(2)</sup>	6.99	1202.99
TW-15	Intermediate	1212.94 <sup>(2)</sup>	9.76	1203.18
RW-1	Recovery Well	1169.98 <sup>(2,3)</sup>	30.6	1200.58
RW-2	Recovery Well	-	26.5	.

Notes:

- 1 - Measuring point elevations from: Operation and Maintenance Manual,
- 2 - Based on December 2007 survey referenced from TW-5D.
- 3 - RW-1 water elevation calculated from water level pressure transducer reading.
- 4 - Based on June 2009 survey referenced from TW-3S, 5D, and 6D.
- 5 - Based on September 2010 survey referenced from TW-4I.

**TABLE 2-5**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCS)**  
**GLADDING CORDAGE**  
**SOUTH OTSELIC, NEW YORK**  
**NYSDEC Site No. 7-09-009**

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-1 6/25/2009 WATER ug/L	TW-2S 6/25/2009 WATER ug/L	TW-2I 6/25/2009 WATER ug/L	TW-2D 6/25/2009 WATER ug/L	TW-3S 9/6/2007 WATER ug/L	TW-3S 10/17/2008 WATER ug/L	TW-3S 6/25/2009 WATER ug/L	TW-3S 3/23/2010 WATER ug/L	TW-3I 9/6/2007 WATER ug/L	TW-3I 10/17/2008 WATER ug/L	TW-3I 6/25/2009 WATER ug/L	TW-3I 3/23/2010 WATER ug/L
<b>VOCs</b>													
1,1,1-Trichloroethane	5	0.4 U	0.4 U	1.4	0.4 U	0.32 U	3.4	0.4 U	6.2	9.1	6.7	0.4 U	1 U
1,1-Dichloroethane	*	0.36 U	0.36 U	0.36 U	0.36 U	0.38 U	1 U	0.36 U	1 U	0.38 U	1 U	0.36 U	1 U
1,1-Dichloroethene	5	0.47 U	0.47 U	0.47 U	0.47 U	0.42 U	1 U	0.47 U	1 U	0.42 U	1 U	0.47 U	1 U
Acetone	50	10	11	9.5	19	2.3 U	5 U	13	14	2.3 U	5 U	16	13
Benzene	1	0.32 U	0.32 U	0.32 U	0.32 U	0.39 U	1 U	0.32 U	1.1	0.39 U	1 U	0.32 U	1 U
Carbon Tetrachloride	5	0.62 U	0.62 U	0.62 U	0.62 U	1.1 U	1 U	0.62 U	1 U	1.1 U	1 U	0.62 U	1 U
Chloroform	7	0.34 U	0.34 U	0.34 U	0.34 U	0.33 U	1 U	0.34 U	1 U	0.33 U	1 U	0.34 U	1 U
cis-1,2-Dichloroethene	5	0.35 U	0.35 U	0.35 U	0.35 U	0.29 U	1 U	0.35 U	1 U	0.29 U	1 U	0.35 U	1 U
Tetrachloroethene	5	0.27 U	0.27 U	0.27 U	0.27 U	0.48 U	1 U	0.27 U	1 U	0.48 U	1 U	0.27 U	1 U
Toluene	5	0.37 U	0.37 U	0.37 U	0.37 U	0.36 U	1 U	0.37 U	1 U	0.36 U	1 U	0.37 U	1 U
Trichloroethene	5	0.28 U	0.28 U	0.28 U	0.28 U	0.46 U	1 U	0.28 U	1 U	0.46 U	1 U	0.28 U	1 U
Total VOCs		10	11	10.9	19	0	3.4	13	21.3	9.1	6.7	16	13

Notes

- Concentration exceeds corresponding NYSDEC

Class GA Standard.

\* - NYSDEC Principal Organic Contaminant Standard

of 5 ug/l applies to this compound.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit or  
Concentration is estimated for TICS.

D - Sample diluted

1 - TW-11 is a duplicate sample collected at TW-6S

**TABLE 2-5**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCs)**  
**GLADDING CORDAGE**  
**SOUTH OTSELIC, NEW YORK**  
**NYSDEC Site No. 7-09-009**

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-3D 9/6/2007 WATER ug/L	TW-3D 10/17/2008 WATER ug/L	TW-3D 6/25/2009 WATER ug/L	TW-3D 3/23/2010 WATER ug/L	TW-4I 9/6/2007 WATER ug/L	TW-4I 10/17/2008 WATER ug/L	TW-4I 6/25/2009 WATER ug/L	TW-4I 3/23/2010 WATER ug/L	TW-5S 9/6/2007 WATER ug/L	TW-5S 10/17/2008 WATER ug/L	TW-5S 6/25/2009 WATER ug/L	TW-5S 3/23/2010 WATER ug/L
<b>VOCs</b>													
1,1,1-Trichloroethane	5	0.32 U	1.3	1.4	1 U	6.6	1.1	0.4 U	23	0.32 U	11	13	7.4
1,1-Dichloroethane	*	0.38 U	1 U	0.36 U	1 U	0.38 U	3.8	3.8	2.5	0.38 U	1 U	0.48 J	1 U
1,1-Dichloroethene	5	0.42 U	1 U	0.47 U	1 U	0.42 U	1 U	0.47 U	1 U	0.42 U	1 U	0.47 U	1 U
Acetone	50	2.3 U	5 U	11	13	2.3 U	5 U	16	18	2.3 U	5 U	9.2	18
Benzene	1	0.39 U	1 U	0.32 U	0.76 J	0.39 U	1 U	0.32 U	1 U	0.39 U	1 U	0.32 U	1 U
Carbon Tetrachloride	5	1.1 U	1 U	0.62 U	1 U	1.1 U	1 U	0.62 U	1 U	1.1 U	1 U	0.62 U	1 U
Chloroform	7	0.33 U	1 U	0.34 U	1 U	0.33 U	1 U	0.34 U	1 U	0.33 U	1 U	0.34 U	1 U
cis-1,2-Dichloroethene	5	0.29 U	1 U	0.35 U	1 U	0.29 U	1 U	0.35 U	1 U	0.29 U	1 U	0.35 U	1 U
Tetrachloroethene	5	0.48 U	1 U	0.27 U	1 U	0.48 U	1 U	0.27 U	1 U	0.48 U	1 U	0.27 U	1 U
Toluene	5	0.36 U	1 U	0.37 U	1 U	0.36 U	1 U	0.37 U	1 U	0.36 U	1 U	0.37 U	1 U
Trichloroethene	5	0.46 U	1 U	0.28 U	1 U	0.46 U	1 U	0.28 U	1 U	0.46 U	1 U	0.28 U	1 U
Total VOCs		0	1.3	12.4	13.76	6.6	4.9	19.8	43.5	0	11	22.68	25.4

Notes

- Concentration exceeds corresponding NYSDEC

Class GA Standard.

\* - NYSDEC Principal Organic Contaminant Standard

of 5 ug/l applies to this compound.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit or  
Concentration is estimated for TICS.

D - Sample diluted

1 - TW-11 is a duplicate sample collected at TW-6S

**TABLE 2-5**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCS)**  
**GLADDING CORDAGE**  
**SOUTH OTSELIC, NEW YORK**  
**NYSDEC Site No. 7-09-009**

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-5I 9/6/2007 WATER ug/L	TW-5I 10/17/2008 WATER ug/L	TW-5I 6/25/2009 WATER ug/L	TW-5I 3/23/2010 WATER ug/L	MW-X (TW-5I DUP) 3/23/2010 WATER ug/L	TW-5D 9/6/2007 WATER ug/L	TW-5D 10/17/2008 WATER ug/L	TW-5D 6/25/2009 WATER ug/L	TW-5D 3/23/2010 WATER ug/L	TW-6S 9/6/2007 WATER ug/L	TW-6S 10/17/2008 WATER ug/L
<b>VOCs</b>												
1,1,1-Trichloroethane	5	4.8 J	8.8	90	8.6	7.8	41	28	32	28	0.32 U	0.53 J
1,1-Dichloroethane	*	0.38 U	1	3.5	2.3	2.1	0.38 U	1 U	0.36 U	1 U	0.38 U	1 U
1,1-Dichloroethene	5	0.42 U	1 U	0.47 U	1 U	1 U	0.42 U	1 U	0.47 U	1 U	0.42 U	1 U
Acetone	50	2.3 U	5 U	13	15	15	2.3 U	5 U	20	17	2.3 U	5 U
Benzene	1	6.2	3.5	0.32 U	32	28	0.39 U	1 U	0.32 U	1 U	0.39 U	1 U
Carbon Tetrachloride	5	1.1 U	1 U	0.62 U	1 U	1 U	1.1 U	1 U	0.62 U	1 U	1.1 U	1 U
Chloroform	7	0.33 U	1 U	0.34 U	1 U	1 U	0.33 U	1 U	0.34 U	1 U	0.33 U	1.6
cis-1,2-Dichloroethene	5	0.29 U	1 U	0.35 U	1 U	1 U	0.29 U	1 U	0.35 U	1 U	0.29 U	1 U
Tetrachloroethene	5	0.48 U	1 U	0.27 U	1 U	1 U	0.48 U	1 U	0.27 U	1 U	0.48 U	1 U
Toluene	5	0.36 U	1 U	0.37 U	0.63 J	0.65 J	0.36 U	1 U	0.37 U	1 U	0.36 U	1 U
Trichloroethene	5	0.46 U	1 U	0.28 U	1 U	1 U	0.46 U	1 U	0.28 U	1 U	0.46 U	1 U
Total VOCs		11.4	13.3	106.5	58.5	53.6	41	28	52	45	0	2.13

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

\* - NYSDEC Principal Organic Contaminant Standard of 5 ug/l applies to this compound.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit or Concentration is estimated for TICS.

D - Sample diluted

1 - TW-11 is a duplicate sample collected at TW-6S

**TABLE 2-5**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCS)**  
**GLADDING CORDAGE**  
**SOUTH OTSELIC, NEW YORK**  
**NYSDEC Site No. 7-09-009**

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-6S 6/25/2009 WATER ug/L	TW-11 <sup>(1)</sup> 6/25/2009 WATER ug/L	TW-6S 3/23/2010 WATER ug/L	TW-6I 9/6/2007 WATER ug/L	TW-6I 10/17/2008 WATER ug/L	TW-6I 6/25/2009 WATER ug/L	TW-6I 3/23/2010 WATER ug/L	TW-6D 9/6/2007 WATER ug/L	TW-6D 10/17/2008 WATER ug/L	TW-6D 6/25/2009 WATER ug/L	TW-6D 3/23/2010 WATER ug/L	TW-7S 9/6/2007 WATER ug/L
<b>VOCs</b>													
1,1,1-Trichloroethane	5	0.4 U	0.4 U	1 U	0.32 U	1.3	0.4 U	1 U	0.32 U	1 U	0.4 U	1 U	8.2
1,1-Dichloroethane	*	0.36 U	0.36 U	1 U	0.38 U	1 U	0.36 U	1 U	0.38 U	1 U	0.36 U	1 U	0.38 U
1,1-Dichloroethene	5	0.47 U	0.47 U	1 U	0.42 U	1 U	0.47 U	1 U	0.42 U	1 U	0.47 U	1 U	0.42 U
Acetone	50	11	11	15	2.3 U	4.4 J	11	18	2.3 U	5 U	21	9.5	2.3 U
Benzene	1	0.32 U	0.32 U	1 U	0.39 U	1 U	0.32 U	0.99 J	0.39 U	1 U	1	1 U	0.39 U
Carbon Tetrachloride	5	0.62 U	0.62 U	1 U	1.1 U	1 U	0.62 U	1 U	1.1 U	1 U	0.62 U	1 U	1.1 U
Chloroform	7	1	0.99 J	1.1	0.33 U	1 U	0.34 U	1 U	0.33 U	1 U	0.34 U	1 U	0.33 U
cis-1,2-Dichloroethene	5	0.35 U	0.35 U	1 U	0.29 U	4.1	0.35 U	1 U	0.29 U	1 U	0.35 U	1 U	0.29 U
Tetrachloroethene	5	0.27 U	0.27 U	1 U	0.48 U	2.4	0.27 U	1 U	0.48 U	1 U	0.27 U	1 U	0.48 U
Toluene	5	0.37 U	0.37 U	1 U	0.36 U	1 U	0.37 U	1 U	0.36 U	1 U	0.37 U	1 U	0.36 U
Trichloroethene	5	0.28 U	0.28 U	1 U	0.46 U	1.2	0.28 U	1 U	0.46 U	1 U	0.28 U	1 U	0.46 U
Total VOCs		12	11.99	16.1	0	13.4	11	18.99	0	0	22	9.5	8.2

Notes

  - Concentration exceeds corresponding NYSDEC

Class GA Standard.

\* - NYSDEC Principal Organic Contaminant Standard

of 5 ug/l applies to this compound.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit or  
Concentration is estimated for TICS.

D - Sample diluted

1 - TW-11 is a duplicate sample collected at TW-6S

**TABLE 2-5**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCS)**  
**GLADDING CORDAGE**  
**SOUTH OTSELIC, NEW YORK**  
**NYSDEC Site No. 7-09-009**

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-7S 10/17/2008 WATER ug/L	TW-7S 6/25/2009 WATER ug/L	TW-7S 3/23/2010 WATER ug/L	TW-7I 9/6/2007 WATER ug/L	TW-7I 10/17/2008 WATER ug/L	TW-7I 6/25/2009 WATER ug/L	TW-7I 3/23/2010 WATER ug/L	TW-7D 9/6/2007 WATER ug/L	TW-7D 10/17/2008 WATER ug/L	TW-7D 6/25/2009 WATER ug/L	TW-7D 3/23/2010 WATER ug/L	TW-9I 6/25/2009 WATER ug/L
<b>VOCs</b>													
1,1,1-Trichloroethane	5	18	7.8	6.8	0.32 U	1.5	0.4 U	2.2	21	3.8	9.1	5.2	5.5
1,1-Dichloroethane	*	1 U	0.36 U	1 U	0.38 U	1 U	0.36 U	1 U	0.38 U	1 U	0.36 U	1 U	0.36 U
1,1-Dichloroethene	5	1 U	0.47 U	1 U	0.42 U	1 U	0.47 U	1 U	4.8 J	1 U	0.47 U	1 U	0.47 U
Acetone	50	3.3 J	22	12	2.3 U	5 U	15	17	2.3 U	5 U	17	18	17
Benzene	1	1 U	0.32 U	1 U	0.39 U	1 U	0.32 U	1 U	0.39 U	1 U	0.32 U	1 U	0.32 U
Carbon Tetrachloride	5	2.6	0.62 U	1 U	1.1 U	1 U	0.62 U	1 U	1.1 U	1 U	0.62 U	1 U	0.62 U
Chloroform	7	1 U	0.34 U	1 U	0.33 U	1 U	0.34 U	1 U	0.33 U	1 U	0.34 U	1 U	0.34 U
cis-1,2-Dichloroethene	5	1 U	0.35 U	1 U	0.29 U	1 U	0.35 U	1 U	0.29 U	1 U	0.35 U	1 U	0.35 U
Tetrachloroethene	5	1 U	0.27 U	1 U	0.48 U	1 U	0.27 U	1 U	0.48 U	1 U	0.27 U	1 U	0.27 U
Toluene	5	1 U	0.37 U	1 U	0.36 U	1 U	0.37 U	1 U	0.36 U	1 U	0.37 U	1 U	0.37 U
Trichloroethene	5	1 U	0.28 U	1 U	0.46 U	1 U	0.28 U	1 U	0.46 U	1 U	0.28 U	1 U	0.28 U
Total VOCs		23.9	29.8	18.8	0	1.5	15	19.2	25.8	3.8	26.1	23.2	22.5

Notes

- Concentration exceeds corresponding NYSDEC

Class GA Standard.

\* - NYSDEC Principal Organic Contaminant Standard

of 5 ug/l applies to this compound.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit or  
Concentration is estimated for TICS.

D - Sample diluted

1 - TW-11 is a duplicate sample collected at TW-6S

**TABLE 2-5**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCS)**  
**GLADDING CORDAGE**  
**SOUTH OTSELIC, NEW YORK**  
**NYSDEC Site No. 7-09-009**

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-9I 3/23/2010 WATER ug/L	TW-9D 6/25/2009 WATER ug/L	TW-9D 3/23/2010 WATER ug/L	TW-10D 6/25/2009 WATER ug/L	TW-12I 9/6/2007 WATER ug/L	TW-12I 10/17/2008 WATER ug/L	TW-12I 6/25/2009 WATER ug/L	TW-12I 3/23/2010 WATER ug/L	TW-12D 9/6/2007 WATER ug/L	TW-12D 6/25/2009 WATER ug/L	TW-12D 3/23/2010 WATER ug/L	TW-14S 9/6/2007 WATER ug/L
<b>VOCs</b>													
1,1,1-Trichloroethane	5	4.3	0.4 U	1 U	0.53 J	0.32 U	1 U	0.4 U	1 U	0.32 U	0.4 U	1 U	0.32 U
1,1-Dichloroethane	*	1 U	0.36 U	1 U	0.36 U	0.38 U	1 U	0.36 U	1 U	0.38 U	0.36 U	1 U	0.38 U
1,1-Dichloroethene	5	1 U	0.47 U	1 U	0.47 U	0.42 U	1 U	0.47 U	1 U	0.42 U	0.47 U	1 U	0.42 U
Acetone	50	14	9.1	13	19	2.3 U	5 U	10	21	2.3 U	14	13	2.3 U
Benzene	1	1 U	0.32 U	1 U	0.32 U	0.39 U	1 U	0.32 U	1 U	0.39 U	0.32 U	1 U	0.39 U
Carbon Tetrachloride	5	1 U	0.62 U	1 U	0.62 U	1.1 U	1 U	0.62 U	1 U	1.1 U	0.62 U	1 U	1.1 U
Chloroform	7	1 U	0.34 U	1 U	0.34 U	0.33 U	1 U	0.34 U	1 U	0.33 U	0.34 U	1 U	0.33 U
cis-1,2-Dichloroethene	5	1 U	0.35 U	1 U	0.35 U	0.29 U	1 U	0.35 U	1 U	0.29 U	0.35 U	1 U	0.29 U
Tetrachloroethene	5	1 U	0.27 U	1 U	0.27 U	0.48 U	1 U	0.27 U	1 U	0.48 U	0.27 U	1 U	0.48 U
Toluene	5	1 U	0.37 U	1 U	0.37 U	0.36 U	1 U	0.37 U	1 U	0.36 U	0.37 U	1 U	0.36 U
Trichloroethene	5	1 U	0.28 U	1 U	0.28 U	0.46 U	1 U	0.28 U	1 U	0.46 U	0.28 U	1 U	0.46 U
Total VOCs		18.3	9.1	13	19.53	0	0	10	21	0	14	13	0

Notes

- Concentration exceeds corresponding NYSDEC

Class GA Standard.

\* - NYSDEC Principal Organic Contaminant Standard

of 5 ug/l applies to this compound.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit or  
Concentration is estimated for TICS.

D - Sample diluted

1 - TW-11 is a duplicate sample collected at TW-6S

**TABLE 2-5**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCS)**  
**GLADDING CORDAGE**  
**SOUTH OTSELIC, NEW YORK**  
**NYSDEC Site No. 7-09-009**

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-14S 10/17/2008 WATER ug/L	TW-14S 6/25/2009 WATER ug/L	TW-14S 3/23/2010 WATER ug/L	TW-14I 9/6/2007 WATER ug/L	TW-14I 10/17/2008 WATER ug/L	TW-14I 6/25/2009 WATER ug/L	TW-14I 3/23/2010 WATER ug/L	TW-14D 9/6/2007 WATER ug/L	TW-14D 10/17/2008 WATER ug/L	TW-14D 6/25/2009 WATER ug/L	TW-14D 3/23/2010 WATER ug/L	TW-15 9/6/2007 WATER ug/L
<b>VOCs</b>													
1,1,1-Trichloroethane	5	68	0.4 U	16	39	95	83	82	42	18	0.4 U	9.1	17
1,1-Dichloroethane	*	5.8	1.2	0.64 J	0.38 U	2.8	3.2	3.2	0.38 U	1 U	0.36 U	1 U	0.38 U
1,1-Dichloroethene	5	1 U	0.47 U	1 U	3.7 J	1.5	0.47 U	2.1	7.2	1 U	0.47 U	1 U	4.6 J
Acetone	50	5 U	14	16	2.3 U	5 U	13	17	2.3 U	5 U	15	18	2.3 U
Benzene	1	1 U	0.32 U	1 U	0.39 U	1 U	0.32 U	1 U	0.39 U	1 U	0.32 U	1 U	0.39 U
Carbon Tetrachloride	5	1 U	0.62 U	1 U	1.1 U	1 U	0.62 U	1 U	1.1 U	1 U	0.62 U	1 U	1.1 U
Chloroform	7	1 U	0.34 U	1 U	0.33 U	1 U	0.34 U	1 U	0.33 U	1 U	0.34 U	1 U	0.33 U
cis-1,2-Dichloroethene	5	1 U	0.35 U	1 U	0.29 U	1 U	0.35 U	1 U	0.29 U	1 U	0.35 U	1 U	0.29 U
Tetrachloroethene	5	1 U	0.27 U	1 U	0.48 U	1 U	0.27 U	1 U	0.48 U	1 U	0.27 U	1 U	0.48 U
Toluene	5	1 U	0.37 U	1 U	0.36 U	1 U	0.37 U	1 U	0.36 U	1 U	0.37 U	1 U	0.36 U
Trichloroethene	5	1 U	0.28 U	1 U	0.46 U	1 U	0.28 U	1 U	0.46 U	1 U	0.28 U	1 U	0.46 U
Total VOCs		73.8	15.2	32.64	42.7	99.3	99.2	104.3	49.2	18	15	27.1	21.6

Notes

  - Concentration exceeds corresponding NYSDEC

Class GA Standard.

\* - NYSDEC Principal Organic Contaminant Standard

of 5 ug/l applies to this compound.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit or  
Concentration is estimated for TICS.

D - Sample diluted

1 - TW-11 is a duplicate sample collected at TW-6S

**TABLE 2-5**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCS)**  
**GLADDING CORDAGE**  
**SOUTH OTSELIC, NEW YORK**  
**NYSDEC Site No. 7-09-009**

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-15 10/17/2008 WATER ug/L	TW-15 6/25/2009 WATER ug/L	TW-15 3/23/2010 WATER ug/L
<b>VOCs</b>				
1,1,1-Trichloroethane	5	84 D	95	97
1,1-Dichloroethane	*	3.3	3.4	4.1
1,1-Dichloroethene	5	2	1.8	2.7
Acetone	50	5 U	9.7	15
Benzene	1	1 U	0.32 U	1 U
Carbon Tetrachloride	5	1 U	0.62 U	1 U
Chloroform	7	1 U	0.34 U	1 U
cis-1,2-Dichloroethene	5	1 U	0.35 U	1 U
Tetrachloroethene	5	1 U	0.27 U	1 U
Toluene	5	1 U	0.37 U	1 U
Trichloroethene	5	1 U	0.28 U	1 U
Total VOCs		89.3	109.9	118.8

Notes

  - Concentration exceeds corresponding NYSDEC Class GA Standard.

\* - NYSDEC Principal Organic Contaminant Standard of 5 ug/l applies to this compound.

U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit or Concentration is estimated for TICS.

D - Sample diluted

1 - TW-11 is a duplicate sample collected at TW-6S

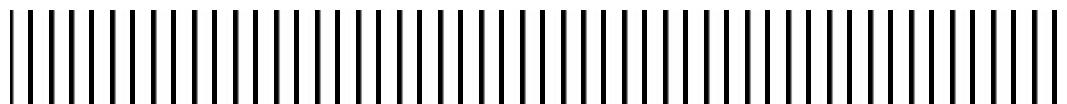


**New York State Department of Environmental Conservation**  
Gladding Cordage Site - Quarterly Report and Annual  
Groundwater Monitoring Summary

---

## **Appendix A**

## **Operation and Maintenance Logs**



**Gladding Cordage  
South Otselic, New York  
NYSDEC Site #709009**

Date 1/7/2010  
Inspector JW  
Time 09:15

<b>System Operation</b>	Initial	Final	<b>Alarms</b>	Initial	Final
System On (Y/N)	Y	Y	Blower Pressure (Y/N)	N	N
RW-1 On (Y/N)	Y	Y	Sump Level (Y/N)	N	N
RW-2 On (Y/N)	Y	Y	RW-1 (Y/N)	N	N
Blower On (Y/N)	Y	Y	RW-2 (Y/N)	N	N

Recovery Wells	Initial	Final	Initial	Final
	RW-1		RW-2	
Flow Rate (GPM)	-	29.2		Flow meter inop
Total Flow (Gallons)	-	34376810		Flow meter inop
Water Level (Feet)	-	30.8		- 27.6

Influent/Effluent Piping OK? (Y/N)  Y

<b>Air Stripper</b>	<u>Initial</u>	<u>Final</u>
Blower VFD Setting (Hertz)	<u>-</u>	<u>44</u>
System Pressure (inches water)	<u>-</u>	<u>9.8</u>
Intake/Exhaust Piping OK? (Y/N)	<u>Y</u>	
Water Leaks (Y/N)	<u>N</u>	
Water Temperature (F°)	<u>50</u>	

<b>General Building/Site</b>			
Building Condition OK? (Y/N)	Y	Sump Pump Operational? (Y/N)	Y
Heat (On/Off)	On	Sump High Level Switch OK? (Y/N)	Y
Grass Mowed (Y/N)	NA	Circuit Breakers Checked (Y/N)	Y
Monitoring Wells OK? (Y/N)	Y	Samples Collected (Y/N)	Y

### **Notes:**

**Gladding Cordage  
South Otselic, New York  
NYSDEC Site #709009**

Date 2/19/2010  
Inspector JW  
Time 07:45

<b>System Operation</b>	Initial	Final	<b>Alarms</b>	Initial	Final
System On (Y/N)	Y	Y	Blower Pressure (Y/N)	N	N
RW-1 On (Y/N)	Y	Y	Sump Level (Y/N)	N	N
RW-2 On (Y/N)	Y	Y	RW-1 (Y/N)	N	N
Blower On (Y/N)	Y	Y	RW-2 (Y/N)	N	N

Recovery Wells	Initial	Final	Initial	Final
	RW-1		RW-2	
Flow Rate (GPM)	-	34.8		Flow meter inop
Total Flow (Gallons)	-	36406400		Flow meter inop
Water Level (Feet)	-	30.4		- 26.5

Influent/Effluent Piping OK? (Y/N)  Y

<b>Air Stripper</b>	<u>Initial</u>	<u>Final</u>
Blower VFD Setting (Hertz)	<u>-</u>	<u>44</u>
System Pressure (inches water)	<u>-</u>	<u>9.7</u>
Intake/Exhaust Piping OK? (Y/N)	<u>Y</u>	
Water Leaks (Y/N)	<u>N</u>	
Water Temperature (F°)	<u>50</u>	

<b>General Building/Site</b>	
Building Condition OK? (Y/N)	Y
Heat (On/Off)	On
Grass Mowed (Y/N)	NA
Monitoring Wells OK? (Y/N)	NA*
Sump Pump Operational? (Y/N)	Y
Sump High Level Switch OK? (Y/N)	Y
Circuit Breakers Checked (Y/N)	Y
Samples Collected (Y/N)	Y

## Notes-

\*Wells covered with snow.

**Gladding Cordage  
South Otselic, New York  
NYSDEC Site #709009**

Date	3/9/2010
Inspector	JW
Time	09:20

<b>System Operation</b>	Initial	Final	<b>Alarms</b>	Initial	Final
System On (Y/N)	Y	Y	Blower Pressure (Y/N)	N	N
RW-1 On (Y/N)	Y	Y	Sump Level (Y/N)	N	N
RW-2 On (Y/N)	Y	Y	RW-1 (Y/N)	N	N
Blower On (Y/N)	Y	Y	RW-2 (Y/N)	N	N

Recovery Wells	Initial	Final	Initial	Final
	RW-1		RW-2	
Flow Rate (GPM)	-	33	Flow meter inop	
Total Flow (Gallons)	-	37300670	Flow meter inop	
Water Level (Feet)	-	30.6	-	26.5

Influent/Effluent Piping OK? (Y/N)  Y

<b>Air Stripper</b>	<u>Initial</u>	<u>Final</u>
Blower VFD Setting (Hertz)	-	44
System Pressure (inches water)	-	9.7
Intake/Exhaust Piping OK? (Y/N)	<u>Y</u>	
Water Leaks (Y/N)	<u>N</u>	
Water Temperature (F°)	50	

<b>General Building/Site</b>	
Building Condition OK? (Y/N)	Y
Heat (On/Off)	On
Grass Mowed (Y/N)	NA
Monitoring Wells OK? (Y/N)	Y
Sump Pump Operational? (Y/N)	Y
Sump High Level Switch OK? (Y/N)	Y
Circuit Breakers Checked (Y/N)	Y
Samples Collected (Y/N)	Y

## Notes-

Installed PDBs for annual groundwater monitoring event.

**Daily Phone Log****Gladding Cordage Groundwater Treatment System****South Otselic, New York****NYSDEC Site #709009****315-653-7234**

Date	System Information				
	Blower Pressure	Sump Level	Recovery Well 1	Recovery Well 2	Notes
1/1/2010	X	X	X	X	
1/2/2010	X	X	X	X	(1)
1/3/2010	X	X	X	X	(1)
1/4/2010	X	X	X	X	
1/5/2010	X	X	X	X	
1/6/2010	X	X	X	X	
1/7/2010	X	X	X	X	
1/8/2010	X	X	X	X	
1/9/2010	X	X	X	X	(1)
1/10/2010	X	X	X	X	(1)
1/11/2010	X	X	X	X	
1/12/2010	X	X	X	X	
1/13/2010	X	X	X	X	
1/14/2010	X	X	X	X	
1/15/2010	X	X	X	X	
1/16/2010	X	X	X	X	(1)
1/17/2010	X	X	X	X	(1)
1/18/2010	X	X	X	X	
1/19/2010	X	X	X	X	
1/20/2010	X	X	X	X	
1/21/2010	X	X	X	X	
1/22/2010	X	X	X	X	
1/23/2010	X	X	X	X	(1)
1/24/2010	X	X	X	X	(1)
1/25/2010	X	X	X	X	
1/26/2010	X	X	X	X	
1/27/2010	X	X	X	X	
1/28/2010	X	X	X	X	
1/29/2010	X	X	X	X	
1/30/2010	X	X	X	X	(1)
1/31/2010	X	X	X	X	(1)

**Notes:**

X - Indicates normal operation

1 - No data recorded. System operation based on previous and subsequent day's call log.

2 - System re-start by NYSDEC fish hatchery personnel.

**Daily Phone Log****Gladding Cordage Groundwater Treatment System****South Otselic, New York****NYSDEC Site #709009****315-653-7234**

Date	System Information				
	Blower Pressure	Sump Level	Recovery Well 1	Recovery Well 2	Notes
2/1/2010	X	X	X	X	
2/2/2010	X	X	X	X	
2/3/2010	X	X	X	X	
2/4/2010	X	X	X	X	
2/5/2010	X	X	X	X	
2/6/2010	X	X	X	X	(1)
2/7/2010	X	X	X	X	(1)
2/8/2010	X	X	X	X	
2/9/2010	X	X	X	X	
2/10/2010	X	X	X	X	
2/11/2010	X	X	X	X	
2/12/2010	X	X	X	X	
2/13/2010	X	X	X	X	(1)
2/14/2010	X	X	X	X	(1)
2/15/2010	X	X	X	X	
2/16/2010	X	X	X	X	
2/17/2010	X	X	X	X	
2/18/2010	X	X	X	X	
2/19/2010	X	X	X	X	
2/20/2010	X	X	X	X	(1)
2/21/2010	X	X	X	X	(1)
2/22/2010	X	X	X	X	
2/23/2010	X	X	X	X	
2/24/2010	X	X	X	X	
2/25/2010	X	X	X	X	
2/26/2010	X	X	X	X	
2/27/2010	X	X	X	X	(1)
2/28/2010	X	X	X	X	(1)

**Notes:**

X - Indicates normal operation

1 - No data recorded. System operation based on previous and subsequent day's call log.

2 - System re-start by NYSDEC fish hatchery personnel.

**Daily Phone Log****Gladding Cordage Groundwater Treatment System****South Otselic, New York****NYSDEC Site #709009****315-653-7234**

Date	System Information				
	Blower Pressure	Sump Level	Recovery Well 1	Recovery Well 2	Notes
3/1/2010	X	X	X	X	
3/2/2010	X	X	X	X	
3/3/2010	X	X	X	X	
3/4/2010	X	X	X	X	
3/5/2010	X	X	X	X	
3/6/2010	X	X	X	X	(1)
3/7/2010	X	X	X	X	(1)
3/8/2010	X	X	X	X	
3/9/2010	X	X	X	X	
3/10/2010	X	X	X	X	
3/11/2010	X	X	X	X	
3/12/2010	X	X	X	X	
3/13/2010	X	X	X	X	(1)
3/14/2010	X	X	X	X	(1)
3/15/2010	X	X	X	X	
3/16/2010	X	X	X	X	
3/17/2010	X	X	X	X	
3/18/2010	X	X	X	X	
3/19/2010	X	X	X	X	
3/20/2010	X	X	X	X	(1)
3/21/2010	X	X	X	X	(1)
3/22/2010	X	X	X	X	
3/23/2010	X	X	X	X	
3/24/2010	X	X	X	X	
3/25/2010	X	X	X	X	
3/26/2010	X	X	X	X	
3/27/2010	X	X	X	X	(1)
3/28/2010	X	X	X	X	(1)
3/29/2010	X	X	X	X	
3/30/2010	X	X	X	X	
3/31/2010	X	X	X	X	

**Notes:**

X - Indicates normal operation

1 - No data recorded. System operation based on previous and subsequent day's call log.

2 - System re-start by NYSDEC fish hatchery personnel.

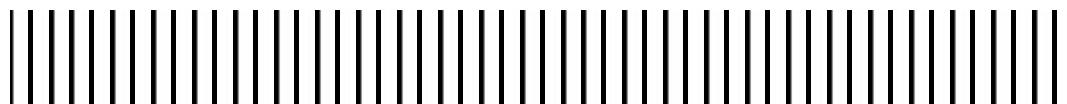


**New York State Department of Environmental Conservation**  
Gladding Cordage Site - Quarterly Report and Annual  
Groundwater Monitoring Summary

---

## **Appendix B**

## **Analytical Reporting Forms**



## **ANALYTICAL RESULTS SUMMARY**

**PROJECT NAME : DEC GLADDING CORDAGE**

**MALCOLM PIRNIE, INC.  
855 Route 146, Suite 210**

**Clifton Park , NY - 12065  
Phone No: 5182507300**

**ORDER ID : B1573**

**ATTENTION : Jeremy Wyckoff**



**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**FORM S-I**  
**SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY**

<b>NYSDEC Sample ID/Code</b>	<b>Laboratory Sample ID/Code</b>	<b>VOA GC/MS (Method #)</b>	<b>BNA GC/MS (Method #)</b>	<b>VOA GC (Method #)</b>	<b>Pest PCBs (Method #)</b>	<b>Metals (Method #)</b>	<b>Other (Method #)</b>
RW-1	B1573-01	8260B					
RW-2	B1573-02	8260B					
EFF-44HZ	B1573-03	8260B					
TRIPBLANK	B1573-04	8260B					

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION**

**FORM S-IIb**

**SAMPLE PREPARATION AND ANALYSIS SUMMARY  
VOLATILE (VOA) ANALYSES**

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
B1573-01	WATER	03/09/10	03/11/10		03/12/10
B1573-02	WATER	03/09/10	03/11/10		03/12/10
B1573-03	WATER	03/09/10	03/11/10		03/15/10
B1573-04	WATER	02/19/10	03/11/10		03/12/10

\* Details For Test :VOC-TCLVOA-10

---

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL**

**CONSERVATION**

**FORM S-III**

**SAMPLE PREPARATION AND ANALYSIS SUMMARY**

**MISCELLANEOUS ORGANIC ANALYSES**

<b>Laboratory Sample ID</b>	<b>Matrix</b>	<b>Analytical Protocol</b>	<b>Extraction Method</b>	<b>Auxiliary Cleanup</b>	<b>Dil/Conc Factor</b>
B1573-01	Water	8260B	5030		
B1573-02	Water	8260B	5030		
B1573-03	Water	8260B	5030		
B1573-04	Water	8260B	5030		

**Cover Page****Order ID :** B1573**Project ID :** DEC Gladding Cordage**Client :** Malcolm Pirnie, Inc.**Lab Sample Number**

B1573-01  
B1573-02  
B1573-03  
B1573-04

**Client Sample Number**

RW-1  
RW-2  
EFF-44HZ  
TRIPBLANK

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : \_\_\_\_\_



## CASE NARRATIVE

**Malcolm Pirnie, Inc.**

**Project Name: DEC Gladding Cordage**

**Project # N/A**

**Chemtech Project # B1573**

### **A. Number of Samples and Date of Receipt:**

4 Water samples were received on 3/11/10.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: and VOC-TCLVOA-10. This data package contains results for VOC-TCLVOA-10.

### **C. Analytical Techniques:**

The analysis performed on instrument MSVOA G were done using GC column RTX-VMS which is 20 meters, 0.18 ID, 1.0 df, Restek Cat. #49914. The Trap was supplied by OI Analytical, OI #10 Trap , OI Eclipse 4660 Concentrator.

The analysis of VOC-TCLVOA-10 was based on method 8260.

### **D. QA/ QC Samples:**

The Holding Times were met for all analysis except for TRIPBLANK.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds.

The MSD recoveries met the acceptable requirements.

The RPD recoveries met criteria.

The Blank Spike met requirements for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The %RSD is greater than 15% in the Initial Calibration (Method 82G031110W.M) for Chloroethane, Carbon Disulfide, Methyl Acetate, Methyl Tert-butyl Ether, Methylene Chloride, 1,1-Dichloroethane, 2-Butanone, Cyclohexane , Tetrachloroethene and Bromoform. These compounds are passing on linear regressions and quadratic regressions, however in this case they were left on average response factor.

The ICV (File ID:VG025892.D Method 82G031110W.M) met the requirements except for Acetone.

The Tuning criteria met requirements.

### **E. Additional Comments:**

Please use %D calculated based on AvgRF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration Curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature\_\_\_\_\_



1A

## VOLATILE ORGANICS ANALYSIS DATA SHEET

## EPA SAMPLE NO.

RW-1

Lab Name: Chemtech Contract: MALC02

Lab Code: CHEM Case No.: B1573 SAS No.: B1573 SDG No.: B1573

Matrix (soil/water): WATER Lab Sample ID: B1573-01

Sample wt/vol: 5 (g/mL) ml Lab File ID: VG025930.D

Level: (low/med) \_\_\_\_\_ Date Received: 03/11/10

% Moisture: not dec. 100 Date Analyzed: 03/12/10

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q
---------	----------	-----------------	------	---

75-71-8	Dichlorodifluoromethane	1		U
74-87-3	Chloromethane	1		U
75-01-4	Vinyl Chloride	1		U
74-83-9	Bromomethane	1		U
75-00-3	Chloroethane	1		U
75-69-4	Trichlorofluoromethane	1		U
76-13-1	1,1,2-Trichlorotrifluoroethane	1		U
75-35-4	1,1-Dichloroethene	2.6		
67-64-1	Acetone	5		U
75-15-0	Carbon Disulfide	1		U
1634-04-4	Methyl tert-butyl Ether	1		U
79-20-9	Methyl Acetate	1		U
75-09-2	Methylene Chloride	1		U
156-60-5	trans-1,2-Dichloroethene	1		U
75-34-3	1,1-Dichloroethane	2.7		
110-82-7	Cyclohexane	1		U
78-93-3	2-Butanone	5		U
56-23-5	Carbon Tetrachloride	1		U
156-59-2	cis-1,2-Dichloroethene	1		U
67-66-3	Chloroform	1		U
71-55-6	1,1,1-Trichloroethane	54		
108-87-2	Methylcyclohexane	1		U
71-43-2	Benzene	1		U
107-06-2	1,2-Dichloroethane	1		U
79-01-6	Trichloroethene	1		U
78-87-5	1,2-Dichloropropane	1		U
75-27-4	Bromodichloromethane	1		U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-1

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1573 SAS No.: B1573 SDG No.: B1573Matrix (soil/water): WATER Lab Sample ID: B1573-01Sample wt/vol: 5 (g/mL) ml Lab File ID: VG025930.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/11/10% Moisture: not dec. 100 Date Analyzed: 03/12/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U
10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-2

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1573 SAS No.: B1573 SDG No.: B1573Matrix (soil/water): WATER Lab Sample ID: B1573-02Sample wt/vol: 5 (g/mL) ml Lab File ID: VG025931.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/11/10% Moisture: not dec. 100 Date Analyzed: 03/12/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1.7	
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	43	
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-2

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1573 SAS No.: B1573 SDG No.: B1573Matrix (soil/water): WATER Lab Sample ID: B1573-02Sample wt/vol: 5 (g/mL) mlLab File ID: VG025931.D

Level: (low/med) \_\_\_\_\_

Date Received: 03/11/10% Moisture: not dec. 100Date Analyzed: 03/12/10GC Column: RTX-VMS ID: 0.18 (mm)Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFF-44HZ

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1573 SAS No.: B1573 SDG No.: B1573Matrix (soil/water): WATER Lab Sample ID: B1573-03Sample wt/vol: 5 (g/mL) ml Lab File ID: VG026004.DLevel: (low/med) Date Received: 03/11/10% Moisture: not dec. Date Analyzed: 03/15/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q
---------	----------	-----------------	------	---

75-71-8	Dichlorodifluoromethane	1		U
74-87-3	Chloromethane	1		U
75-01-4	Vinyl Chloride	1		U
74-83-9	Bromomethane	1		U
75-00-3	Chloroethane	1		U
75-69-4	Trichlorofluoromethane	1		U
76-13-1	1,1,2-Trichlorotrifluoroethane	1		U
75-35-4	1,1-Dichloroethene	1		U
67-64-1	Acetone	5		U
75-15-0	Carbon Disulfide	1		U
1634-04-4	Methyl tert-butyl Ether	1		U
79-20-9	Methyl Acetate	1		U
75-09-2	Methylene Chloride	1		U
156-60-5	trans-1,2-Dichloroethene	1		U
75-34-3	1,1-Dichloroethane	1		U
110-82-7	Cyclohexane	1		U
78-93-3	2-Butanone	5		U
56-23-5	Carbon Tetrachloride	1		U
156-59-2	cis-1,2-Dichloroethene	1		U
67-66-3	Chloroform	1		U
71-55-6	1,1,1-Trichloroethane	2.6		
108-87-2	Methylcyclohexane	1		U
71-43-2	Benzene	1		U
107-06-2	1,2-Dichloroethane	1		U
79-01-6	Trichloroethene	1		U
78-87-5	1,2-Dichloropropane	1		U
75-27-4	Bromodichloromethane	1		U
108-10-1	4-Methyl-2-Pentanone	5		U
108-88-3	Toluene	1		U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFF-44HZ

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1573 SAS No.: B1573 SDG No.: B1573Matrix (soil/water): WATER Lab Sample ID: B1573-03Sample wt/vol: 5 (g/mL) ml Lab File ID: VG026004.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/11/10% Moisture: not dec. 100 Date Analyzed: 03/15/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1573 SAS No.: B1573 SDG No.: B1573Matrix (soil/water): WATER Lab Sample ID: B1573-04Sample wt/vol: 5 (g/mL) ml Lab File ID: VG025929.DLevel: (low/med) Date Received: 03/11/10% Moisture: not dec. Date Analyzed: 03/12/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1573 SAS No.: B1573 SDG No.: B1573Matrix (soil/water): WATER Lab Sample ID: B1573-04Sample wt/vol: 5 (g/mL) mlLab File ID: VG025929.D

Level: (low/med) \_\_\_\_\_

Date Received: 03/11/10% Moisture: not dec. 100Date Analyzed: 03/12/10GC Column: RTX-VMS ID: 0.18 (mm)Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U



**Hit Summary Sheet**  
**SW-846**

SDG No.: B1573

Client: Malcolm Pirnie, Inc.

Sample ID	Client ID		Parameter	Concentration	C	RDL	MDL	Units
<b>Client ID:</b> B1573-03	<b>EFF-44HZ</b> EFF-44HZ		WATER    1,1,1-Trichloroethane	2.60		1.0	0.40	ug/L
				<b>Total Voc :</b>	<b>2.60</b>			
				<b>Total Concentration:</b>	<b>2.60</b>			
<b>Client ID:</b> B1573-01	<b>RW-1</b> RW-1		WATER    1,1-Dichloroethene	2.60		1.0	0.47	ug/L
B1573-01	RW-1		WATER    1,1-Dichloroethane	2.70		1.0	0.36	ug/L
B1573-01	RW-1		WATER    1,1,1-Trichloroethane	54.00		1.0	0.40	ug/L
				<b>Total Voc :</b>	<b>59.30</b>			
				<b>Total Concentration:</b>	<b>59.30</b>			
<b>Client ID:</b> B1573-02	<b>RW-2</b> RW-2		WATER    1,1-Dichloroethene	1.70		1.0	0.47	ug/L
B1573-02	RW-2		WATER    1,1-Dichloroethane	1.00		1.0	0.36	ug/L
B1573-02	RW-2		WATER    1,1,1-Trichloroethane	43.00		1.0	0.40	ug/L
				<b>Total Voc :</b>	<b>45.70</b>			
				<b>Total Concentration:</b>	<b>45.70</b>			

-2A-

**WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY**

Lab Name: **CHEMTECH**Contract: **MALC02**Lab Code: **CHEM**CASE No.: **B1573**SAS No.: **B1573**SDG NO.: **B1573**

	EPA Sample NO.	SMC1 (DCE) #	SMC2 (DBFM) #	SMC3 (TOL) #	SMC4 (BFB) #	TOT OUT
01	VBG0312W2	89	102	91	87	0
02	BSG0312W1	95	95	93	96	0
03	TRIPBLANK	90	102	89	87	0
04	RW-1	89	97	92	87	0
05	RW-2	93	100	92	90	0

	EPA Sample NO.	SMC1 (DCE) #	SMC2 (DBFM) #	SMC3 (TOL) #	SMC4 (BFB) #	TOT OUT
01	VBG0315W2	86	98	90	88	0
02	BSG0315W1	91	100	96	95	0
03	EFF-44HZ	87	96	90	90	0
04	MW-5AMS	105	102	102	104	0
05	MW-5AMSD	106	104	103	102	0

**QC LIMITS**

SMC1 (DCE) = 1,2-Dichloroethane-d4 (66-150)

SMC2 (DBFM) =Dibromofluoromethane (76-130)

SMC3 (TOL) =Toluene-d8 (78-121)

SMC4 (BFB) =4-Bromofluorobenzene (70-131)

# Column to be used to flag recovery values

\* Values outside of contract required QC Limits

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1573 SAS No : B1573 SDG No: B1573Matrix Spike - EPA Sample No : B1586-03

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC#	QC LIMITS REC
Dichlorodifluoromethane	50	0	46	92	(24-175)
Chloromethane	50	0	50	100	(29-190)
Vinyl Chloride	50	0	48	96	(39-171)
Bromomethane	50	0	46	92	(34-167)
Chloroethane	50	0	46	92	(38-170)
Trichlorofluoromethane	50	0	52	104	(38-171)
1,1,2-Trichlorotrifluoroethane	50	0	50	100	(47-152)
1,1-Dichloroethene	50	0	48	96	(47-149)
Acetone	250	0	170	68	(28-181)
Carbon Disulfide	50	0	38	76	(34-160)
Methyl tert-butyl Ether	50	0	48	96	(39-166)
Methyl Acetate	50	0	47	94	(29-176)
Methylene Chloride	50	0	48	96	(48-149)
trans-1,2-Dichloroethene	50	0	45	90	(53-143)
1,1-Dichloroethane	50	0	48	96	(57-150)
Cyclohexane	50	0	48	96	(42-159)
2-Butanone	250	0	210	84	(47-160)
Carbon Tetrachloride	50	0	44	88	(38-158)
cis-1,2-Dichloroethene	50	0	46	92	(41-160)
Chloroform	50	0	43	86	(56-152)
1,1,1-Trichloroethane	50	0	47	94	(57-148)
Methylecyclohexane	50	0	46	92	(41-152)
Benzene	50	0	46	92	(59-140)
1,2-Dichloroethane	50	0	48	96	(56-151)
Trichloroethene	50	0	45	90	(49-146)
1,2-Dichloropropane	50	0	47	94	(63-140)
Bromodichloromethane	50	0	47	94	(60-144)
4-Methyl-2-Pentanone	250	0	240	96	(51-160)
Toluene	50	0	48	96	(60-139)
t-1,3-Dichloropropene	50	0	44	88	(51-148)
cis-1,3-Dichloropropene	50	0	44	88	(53-143)
1,1,2-Trichloroethane	50	0	47	94	(65-138)
2-Hexanone	250	0	240	96	(44-170)

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

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 2 Out of 77 outside limits

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1573 SAS No : B1573 SDG No: B1573Matrix Spike - EPA Sample No : B1586-03

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC#	QC LIMITS REC
Dibromochloromethane	50	0	45	90	(56-146)
1,2-Dibromoethane	50	0	49	98	(63-142)
Tetrachloroethene	50	0	41	82	(23-148)
Chlorobenzene	50	0	48	96	(57-136)
Ethyl Benzene	50	0	47	94	(49-146)
m/p-Xylenes	100	0	92	92	(51-140)
o-Xylene	50	0	47	94	(54-139)
Styrene	50	0	34	68	(48-141)
Bromoform	50	0	42	84	(48-141)
Isopropylbenzene	50	0	48	96	(48-143)
1,1,2,2-Tetrachloroethane	50	0	50	100	(52-151)
1,3-Dichlorobenzene	50	0	47	94	(63-129)
1,4-Dichlorobenzene	50	0	46	92	(57-134)
1,2-Dichlorobenzene	50	0	48	96	(57-136)
1,2-Dibromo-3-Chloropropane	50	0	48	96	(46-157)
1,2,4-Trichlorobenzene	50	0	42	84	(53-137)

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

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 2 Out of 77 outside limits

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1573 SAS No : B1573 SDG No: B1573Matrix Spike - EPA Sample No : B1586-04

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %	MSD %	QC LIMITS RPD	QC LIMITS REC
Dichlorodifluoromethane	50	47	94	2	20	(24-175)
Chloromethane	50	50	100	0	20	(29-190)
Vinyl Chloride	50	50	100	4	20	(39-171)
Bromomethane	50	47	94	2	20	(34-167)
Chloroethane	50	47	94	2	20	(38-170)
Trichlorofluoromethane	50	55	110	6	20	(38-171)
1,1,2-Trichlorotrifluoroethane	50	52	104	4	20	(47-152)
1,1-Dichloroethene	50	50	100	4	20	(47-149)
Acetone	250	170	68	0	20	(28-181)
Carbon Disulfide	50	38	76	0	20	(34-160)
Methyl tert-butyl Ether	50	49	98	2	20	(39-166)
Methyl Acetate	50	47	94	0	20	(29-176)
Methylene Chloride	50	49	98	2	20	(48-149)
trans-1,2-Dichloroethene	50	48	96	6	20	(53-143)
1,1-Dichloroethane	50	49	98	2	20	(57-150)
Cyclohexane	50	49	98	2	20	(42-159)
2-Butanone	250	210	84	0	20	(47-160)
Carbon Tetrachloride	50	45	90	2	20	(38-158)
cis-1,2-Dichloroethene	50	48	96	4	20	(41-160)
Chloroform	50	47	94	9	20	(56-152)
1,1,1-Trichloroethane	50	48	96	2	20	(57-148)
Methylecyclohexane	50	48	96	4	20	(41-152)
Benzene	50	46	92	0	20	(59-140)
1,2-Dichloroethane	50	48	96	0	20	(56-151)
Trichloroethene	50	45	90	0	20	(49-146)
1,2-Dichloropropane	50	47	94	0	20	(63-140)
Bromodichloromethane	50	48	96	2	20	(60-144)
4-Methyl-2-Pentanone	250	240	96	0	20	(51-160)
Toluene	50	48	96	0	20	(60-139)
t-1,3-Dichloropropene	50	45	90	2	20	(51-148)
cis-1,3-Dichloropropene	50	46	92	4	20	(53-143)
1,1,2-Trichloroethane	50	49	98	4	20	(65-138)
2-Hexanone	250	230	92	4	20	(44-170)

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

\* Values outside of QC limits

RPD : 1 Out of 77 outside limits

Spike Recovery : 4 Out of 154 outside limits

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1573 SAS No : B1573 SDG No: B1573Matrix Spike - EPA Sample No : B1586-04

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %   % (ug/L)		QC LIMITS RPD   REC	
			%	%	RPD	REC
Dibromochloromethane	50	45	90	0	20	(56-146)
1,2-Dibromoethane	50	49	98	0	20	(63-142)
Tetrachloroethene	50	43	86	5	20	(23-148)
Chlorobenzene	50	47	94	2	20	(57-136)
Ethyl Benzene	50	48	96	2	20	(49-146)
m/p-Xylenes	100	96	96	4	20	(51-140)
o-Xylene	50	47	94	0	20	(54-139)
Styrene	50	33	66	3	20	(48-141)
Bromoform	50	43	86	2	20	(48-141)
Isopropylbenzene	50	48	96	0	20	(48-143)
1,1,2,2-Tetrachloroethane	50	50	100	0	20	(52-151)
1,3-Dichlorobenzene	50	48	96	2	20	(63-129)
1,4-Dichlorobenzene	50	47	94	2	20	(57-134)
1,2-Dichlorobenzene	50	46	92	4	20	(57-136)
1,2-Dibromo-3-Chloropropane	50	49	98	2	20	(46-157)
1,2,4-Trichlorobenzene	50	45	90	7	20	(53-137)

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

\* Values outside of QC limits

RPD : 1 Out of 77 outside limits

Spike Recovery : 4 Out of 154 outside limits

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1573 SAS No : B1573 SDG No: B1573Matrix Spike - EPA Sample No : BSG0312W1

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS QC % LIMITS REC# REC
Dichlorodifluoromethane	20		21	105 (35-124)
Chloromethane	20		25	125 (40-125)
Vinyl Chloride	20		24	120 (50-144)
Bromomethane	20		24	120 (44-145)
Chloroethane	20		25	125 (60-135)
Trichlorofluoromethane	20		23	115 (60-137)
1,1,2-Trichlorotrifluoroethane	20		22	110 (52-142)
1,1-Dichloroethene	20		23	115 (70-130)
Acetone	100		96	96 (50-140)
Carbon Disulfide	20		23	115 (36-155)
Methyl tert-butyl Ether	20		22	110 (65-125)
Methyl Acetate	20		20	100 (51-158)
Methylene Chloride	20		22	110 (61-138)
trans-1,2-Dichloroethene	20		21	105 (60-137)
1,1-Dichloroethane	20		22	110 (70-135)
Cyclohexane	20		21	105 (56-141)
2-Butanone	100		100	100 (56-150)
Carbon Tetrachloride	20		19	95 (65-138)
cis-1,2-Dichloroethene	20		21	105 (70-125)
Chloroform	20		22	110 (67-135)
1,1,1-Trichloroethane	20		21	105 (65-130)
Methylcyclohexane	20		19	95 (56-137)
Benzene	20		21	105 (80-120)
1,2-Dichloroethane	20		20	100 (70-130)
Trichloroethene	20		20	100 (70-125)
1,2-Dichloropropane	20		20	100 (75-125)
Bromodichloromethane	20		21	105 (75-120)
4-Methyl-2-Pentanone	100		94	94 (63-135)
Toluene	20		20	100 (75-120)
t-1,3-Dichloropropene	20		20	100 (66-135)
cis-1,3-Dichloropropene	20		19	95 (70-130)
1,1,2-Trichloroethane	20		19	95 (75-125)
2-Hexanone	100		99	99 (56-130)
Dibromochloromethane	20		20	100 (64-135)

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

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 0 Out of 77 outside limits

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

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1573 SAS No : B1573 SDG No: B1573Matrix Spike - EPA Sample No : BSG0312W1

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC LIMITS REC
1,2-Dibromoethane	20		20	100	(80-120)
Tetrachloroethene	20		20	100	(45-178)
Chlorobenzene	20		20	100	(80-120)
Ethyl Benzene	20		21	105	(75-125)
m/p-Xylenes	40		40	100	(75-130)
o-Xylene	20		20	100	(80-120)
Styrene	20		20	100	(65-135)
Bromoform	20		19	95	(70-130)
Isopropylbenzene	20		20	100	(75-125)
1,1,2,2-Tetrachloroethane	20		19	95	(65-130)
1,3-Dichlorobenzene	20		19	95	(75-125)
1,4-Dichlorobenzene	20		20	100	(75-125)
1,2-Dichlorobenzene	20		19	95	(70-120)
1,2-Dibromo-3-Chloropropane	20		18	90	(54-130)
1,2,4-Trichlorobenzene	20		19	95	(65-133)

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

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 0 Out of 77 outside limits

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

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1573 SAS No : B1573 SDG No: B1573Matrix Spike - EPA Sample No : BSG0315W1

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC REC
Dichlorodifluoromethane	20		19	95	(35-124)
Chloromethane	20		21	105	(37-148)
Vinyl Chloride	20		23	115	(45-144)
Bromomethane	20		21	105	(44-146)
Chloroethane	20		22	110	(46-148)
Trichlorofluoromethane	20		22	110	(56-137)
1,1,2-Trichlorotrifluoroethane	20		21	105	(52-142)
1,1-Dichloroethene	20		21	105	(57-135)
Acetone	100		120	120	(50-149)
Carbon Disulfide	20		23	115	(36-155)
Methyl tert-butyl Ether	20		21	105	(60-144)
Methyl Acetate	20		21	105	(51-158)
Methylene Chloride	20		21	105	(61-138)
trans-1,2-Dichloroethene	20		21	105	(59-137)
1,1-Dichloroethane	20		21	105	(64-142)
Cyclohexane	20		20	100	(56-141)
2-Butanone	100		120	120	(56-152)
Carbon Tetrachloride	20		20	100	(59-138)
cis-1,2-Dichloroethene	20		20	100	(64-137)
Chloroform	20		21	105	(67-138)
1,1,1-Trichloroethane	20		21	105	(65-132)
Methylcyclohexane	20		20	100	(56-137)
Benzene	20		21	105	(66-135)
1,2-Dichloroethane	20		21	105	(65-137)
Trichloroethene	20		20	100	(65-134)
1,2-Dichloropropane	20		21	105	(68-137)
Bromodichloromethane	20		21	105	(67-134)
4-Methyl-2-Pentanone	100		99	99	(63-146)
Toluene	20		20	100	(67-133)
t-1,3-Dichloropropene	20		21	105	(66-135)
cis-1,3-Dichloropropene	20		20	100	(66-132)
1,1,2-Trichloroethane	20		21	105	(67-136)
2-Hexanone	100		110	110	(56-153)
Dibromochloromethane	20		20	100	(64-137)

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

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 0 Out of 77 outside limits

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

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1573 SAS No : B1573 SDG No: B1573Matrix Spike - EPA Sample No : BSG0315W1

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC LIMITS REC
1,2-Dibromoethane	20		21	105	(66-137)
Tetrachloroethene	20		21	105	(37-178)
Chlorobenzene	20		20	100	(67-133)
Ethyl Benzene	20		21	105	(66-133)
m/p-Xylenes	40		40	100	(65-134)
o-Xylene	20		20	100	(65-134)
Styrene	20		20	100	(65-136)
Bromoform	20		21	105	(56-157)
Isopropylbenzene	20		21	105	(66-133)
1,1,2,2-Tetrachloroethane	20		20	100	(63-136)
1,3-Dichlorobenzene	20		20	100	(66-131)
1,4-Dichlorobenzene	20		20	100	(65-131)
1,2-Dichlorobenzene	20		20	100	(66-132)
1,2-Dibromo-3-Chloropropane	20		20	100	(54-141)
1,2,4-Trichlorobenzene	20		17	85	(61-133)

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

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 0 Out of 77 outside limits

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

4A

## VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBG0312W2

Lab Name: CHEMTECHContract: MALC02Lab Code: CHEM Case No.: B1573SAS No.: B1573 SDG NO.: B1573Lab File ID: VG025926.DLab Sample ID: VBG0312W2Date Analyzed: 03/12/2010Time Analyzed: 16:29GC Column: RTX-VMS ID: 0.18 (mm)Heated Purge: (Y/N) NInstrument ID: MSVOAG

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BSG0312W1	BSG0312W1	VG025927.D	03/12/2010
TRIPBLANK	B1573-04	VG025929.D	03/12/2010
RW-1	B1573-01	VG025930.D	03/12/2010
RW-2	B1573-02	VG025931.D	03/12/2010

COMMENTS:

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBG0312W2

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1573 SAS No.: B1573 SDG No.: B1573Matrix (soil/water): WATER Lab Sample ID: VBG0312W2Sample wt/vol: 5 (g/mL) ml Lab File ID: VG025926.D

Level: (low/med) \_\_\_\_\_ Date Received: \_\_\_\_\_

% Moisture: not dec. 100 Date Analyzed: 03/12/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

## EPA SAMPLE NO.

VBG0312W2

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1573 SAS No.: B1573 SDG No.: B1573Matrix (soil/water): WATER Lab Sample ID: VBG0312W2Sample wt/vol: 5 (g/mL) mlLab File ID: VG025926.D

Level: (low/med) \_\_\_\_\_

Date Received: \_\_\_\_\_

% Moisture: not dec. 100Date Analyzed: 03/12/10GC Column: RTX-VMS ID: 0.18 (mm)Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

4A

## VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBG0315W2

Lab Name: CHEMTECHContract: MALC02Lab Code: CHEM Case No.: B1573SAS No.: B1573 SDG NO.: B1573Lab File ID: VG025997.DLab Sample ID: VBG0315W2Date Analyzed: 03/15/2010Time Analyzed: 12:44GC Column: RTX-VMS ID: 0.18 (mm)Heated Purge: (Y/N) NInstrument ID: MSVOAG

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BSG0315W1	BSG0315W1	VG025998.D	03/15/2010
EFF-44HZ	B1573-03	VG026004.D	03/15/2010
MW-5AMS	B1586-03MS	VG026008.D	03/15/2010
MW-5AMSD	B1586-04MSD	VG026009.D	03/15/2010

COMMENTS:

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBG0315W2

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1573 SAS No.: B1573 SDG No.: B1573Matrix (soil/water): WATER Lab Sample ID: VBG0315W2Sample wt/vol: 5 (g/mL) mlLab File ID: VG025997.D

Level: (low/med) \_\_\_\_\_

Date Received: \_\_\_\_\_

% Moisture: not dec. 100Date Analyzed: 03/15/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

## EPA SAMPLE NO.

VBG0315W2

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1573 SAS No.: B1573 SDG No.: B1573Matrix (soil/water): WATER Lab Sample ID: VBG0315W2Sample wt/vol: 5 (g/mL) ml Lab File ID: VG025997.D

Level: (low/med) \_\_\_\_\_ Date Received: \_\_\_\_\_

% Moisture: not dec. 100 Date Analyzed: 03/15/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U



8A

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: MALC02  
Lab Code: CHEM Case No.: B1573 SAS No.: B1573 SDG NO.: B1573  
Lab File ID: VG025924.D Date Analyzed: 03/12/2010  
Instrument ID: MSVOAG Time Analyzed: 15:19  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	1322880	3.55	2620877	4.28	1981451	9.28
	2645760	4.05	5241754	4.78	3962902	9.78
	661440	3.05	1310439	3.78	990725.5	8.78
EPA SAMPLE NO.						
RW-1	1226943	3.56	2365647	4.28	1694012	9.28
RW-2	1158470	3.55	2231287	4.27	1613565	9.28
TRIPBLANK	1194083	3.56	2289705	4.28	1635764	9.27
BSG0312W1	1173292	3.56	2343414	4.28	1741988	9.28
VBG0312W2	1269637	3.55	2459480	4.28	1794443	9.28

IS1 = Pentafluorobenzene

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.



8A

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: MALC02  
Lab Code: CHEM Case No.: B1573 SAS No.: B1573 SDG NO.: B1573  
Lab File ID: VG025924.D Date Analyzed: 03/12/2010  
Instrument ID: MSVOAG Time Analyzed: 15:19  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	861617	13.01				
UPPER LIMIT	1723234	13.51				
LOWER LIMIT	430808.5	12.51				
EPA SAMPLE NO.						
RW-1	736233	13.01				
RW-2	688183	13.01				
TRIPBLANK	733213	13.01				
BSG0312W1	808118	13.01				
VBG0312W2	776025	13.01				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.



8A

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: MALC02  
Lab Code: CHEM Case No.: B1573 SAS No.: B1573 SDG NO.: B1573  
Lab File ID: VG025995.D Date Analyzed: 03/15/2010  
Instrument ID: MSVOAG Time Analyzed: 11:48  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	1347337	3.58	2573954	4.30	2048133	9.30
	2694674	4.08	5147908	4.8	4096266	9.8
	673668.5	3.08	1286977	3.8	1024067	8.8
EPA SAMPLE NO.						
EFF-44HZ	1216981	3.57	2291810	4.29	1698069	9.29
MW-5AMS	1176928	3.56	2254306	4.28	1748215	9.28
MW-5AMSD	1196652	3.56	2328815	4.28	1761036	9.29
BSG0315W1	1320526	3.58	2490935	4.30	1911976	9.29
VBG0315W2	1341073	3.56	2500960	4.30	1810962	9.29

IS1 = Pentafluorobenzene

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.



8A

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: MALC02  
Lab Code: CHEM Case No.: B1573 SAS No.: B1573 SDG NO.: B1573  
Lab File ID: VG025995.D Date Analyzed: 03/15/2010  
Instrument ID: MSVOAG Time Analyzed: 11:48  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	864276	13.02				
UPPER LIMIT	1728552	13.52				
LOWER LIMIT	432138	12.52				
EPA SAMPLE NO.						
EFF-44HZ	685289	13.02				
MW-5AMS	752567	13.01				
MW-5AMSD	771155	13.01				
BSG0315W1	832325	13.02				
VBG0315W2	762428	13.02				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

## **ANALYTICAL RESULTS SUMMARY**

**PROJECT NAME : DEC GLADDING CORDAGE**

**MALCOLM PIRNIE, INC.  
855 Route 146, Suite 210**

**Clifton Park , NY - 12065  
Phone No: 5182507300**

**ORDER ID : B1413**

**ATTENTION : Jeremy Wyckoff**



**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**FORM S-I**  
**SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY**

<b>NYSDEC Sample ID/Code</b>	<b>Laboratory Sample ID/Code</b>	<b>VOA GC/MS (Method #)</b>	<b>BNA GC/MS (Method #)</b>	<b>VOA GC (Method #)</b>	<b>Pest PCBs (Method #)</b>	<b>Metals (Method #)</b>	<b>Other (Method #)</b>
RW-1	B1413-01	8260B					
RW-2	B1413-02	8260B					
EFF-44HZ	B1413-03	8260B					
TRIPBLANK	B1413-04	8260B					

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION**

**FORM S-IIb**

**SAMPLE PREPARATION AND ANALYSIS SUMMARY  
VOLATILE (VOA) ANALYSES**

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
B1413-01	WATER	02/19/10	02/23/10		02/23/10
B1413-02	WATER	02/19/10	02/23/10		02/23/10
B1413-03	WATER	02/19/10	02/23/10		02/23/10
B1413-04	WATER	02/19/10	02/23/10		02/23/10

\* Details For Test :VOC-TCLVOA-10

---

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL**

**CONSERVATION**

**FORM S-III**

**SAMPLE PREPARATION AND ANALYSIS SUMMARY**

**MISCELLANEOUS ORGANIC ANALYSES**

<b>Laboratory Sample ID</b>	<b>Matrix</b>	<b>Analytical Protocol</b>	<b>Extraction Method</b>	<b>Auxiliary Cleanup</b>	<b>Dil/Conc Factor</b>
B1413-01	Water	8260B	5030		
B1413-02	Water	8260B	5030		
B1413-03	Water	8260B	5030		
B1413-04	Water	8260B	5030		

**Cover Page****Order ID :** B1413**Project ID :** DEC Gladding Cordage**Client :** Malcolm Pirnie, Inc.**Lab Sample Number**

B1413-01  
B1413-02  
B1413-03  
B1413-04

**Client Sample Number**

RW-1  
RW-2  
EFF-44HZ  
TRIPBLANK

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : \_\_\_\_\_



## CASE NARRATIVE

**Malcolm Pirnie, Inc.**

**Project Name: DEC Gladding Cordage**

**Project # N/A**

**Chemtech Project # B1413**

### **A. Number of Samples and Date of Receipt:**

4 Water samples were received on 2/23/10.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: and VOC-TCLVOA-10. This data package contains results for VOC-TCLVOA-10.

### **C. Analytical Techniques:**

The analysis performed on instrument MSVOA G were done using GC column RTX-VMS which is 20 meters, 0.18 ID, 1.0 df, Restek Cat. #49914. The Trap was supplied by OI Analytical, OI #10 Trap , OI Eclipse 4660 Concentrator.

The analysis of VOC-TCLVOA-10 was based on method 8260.

### **D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD recoveries met criteria except for Acetone.

The Blank Spike met requirements for all samples except for Acetone but it was not detected in Samples.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

The %RSD is greater than 15% in the Initial Calibration (Method 82G021210W.M) for 2-Butanone, 4-Methyl-2-Pentanone, 2-Hexanone and 1,2,4-Trichlorobenzene. These compounds are passing on linear regressions and quadratic regressions, however in this case they were left on average response factor.

The Tuning criteria met requirements.

### **E. Additional Comments:**

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature \_\_\_\_\_



1A

## VOLATILE ORGANICS ANALYSIS DATA SHEET

## EPA SAMPLE NO.

RW-1

Lab Name: Chemtech Contract: MALC02

Lab Code: CHEM Case No.: B1413 SAS No.: B1413 SDG No.: B1413

Matrix (soil/water): WATER Lab Sample ID: B1413-01

Sample wt/vol: 5 (g/mL) ml Lab File ID: VG025504.D

Level: (low/med) \_\_\_\_\_ Date Received: 02/23/10

% Moisture: not dec. 100 Date Analyzed: 02/23/10

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q
---------	----------	-----------------	------	---

75-71-8	Dichlorodifluoromethane	1		U
74-87-3	Chloromethane	1		U
75-01-4	Vinyl Chloride	1		U
74-83-9	Bromomethane	1		U
75-00-3	Chloroethane	1		U
75-69-4	Trichlorofluoromethane	1		U
76-13-1	1,1,2-Trichlorotrifluoroethane	1		U
75-35-4	1,1-Dichloroethene	3.2		
67-64-1	Acetone	5		U
75-15-0	Carbon Disulfide	1		U
1634-04-4	Methyl tert-butyl Ether	1		U
79-20-9	Methyl Acetate	1		U
75-09-2	Methylene Chloride	1		U
156-60-5	trans-1,2-Dichloroethene	1		U
75-34-3	1,1-Dichloroethane	3.2		
110-82-7	Cyclohexane	1		U
78-93-3	2-Butanone	5		U
56-23-5	Carbon Tetrachloride	1		U
156-59-2	cis-1,2-Dichloroethene	1		U
67-66-3	Chloroform	1		U
71-55-6	1,1,1-Trichloroethane	66		
108-87-2	Methylcyclohexane	1		U
71-43-2	Benzene	1		U
107-06-2	1,2-Dichloroethane	1		U
79-01-6	Trichloroethene	1		U
78-87-5	1,2-Dichloropropane	1		U
75-27-4	Bromodichloromethane	1		U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-1

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1413 SAS No.: B1413 SDG No.: B1413Matrix (soil/water): WATER Lab Sample ID: B1413-01Sample wt/vol: 5 (g/mL) ml Lab File ID: VG025504.DLevel: (low/med) \_\_\_\_\_ Date Received: 02/23/10% Moisture: not dec. 100 Date Analyzed: 02/23/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U
10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-2

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1413 SAS No.: B1413 SDG No.: B1413Matrix (soil/water): WATER Lab Sample ID: B1413-02Sample wt/vol: 5 (g/mL) ml Lab File ID: VG025505.DLevel: (low/med) Date Received: 02/23/10% Moisture: not dec. Date Analyzed: 02/23/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q
---------	----------	-----------------	------	---

75-71-8	Dichlorodifluoromethane	1		U
74-87-3	Chloromethane	1		U
75-01-4	Vinyl Chloride	1		U
74-83-9	Bromomethane	1		U
75-00-3	Chloroethane	1		U
75-69-4	Trichlorofluoromethane	1		U
76-13-1	1,1,2-Trichlorotrifluoroethane	1		U
75-35-4	1,1-Dichloroethene	1.9		
67-64-1	Acetone	5		U
75-15-0	Carbon Disulfide	1		U
1634-04-4	Methyl tert-butyl Ether	1		U
79-20-9	Methyl Acetate	1		U
75-09-2	Methylene Chloride	1		U
156-60-5	trans-1,2-Dichloroethene	1		U
75-34-3	1,1-Dichloroethane	1.1		
110-82-7	Cyclohexane	1		U
78-93-3	2-Butanone	5		U
56-23-5	Carbon Tetrachloride	1		U
156-59-2	cis-1,2-Dichloroethene	1		U
67-66-3	Chloroform	1		U
71-55-6	1,1,1-Trichloroethane	49		
108-87-2	Methylcyclohexane	1		U
71-43-2	Benzene	1		U
107-06-2	1,2-Dichloroethane	1		U
79-01-6	Trichloroethene	1		U
78-87-5	1,2-Dichloropropane	1		U
75-27-4	Bromodichloromethane	1		U
108-10-1	4-Methyl-2-Pentanone	5		U
108-88-3	Toluene	1		U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-2

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1413 SAS No.: B1413 SDG No.: B1413Matrix (soil/water): WATER Lab Sample ID: B1413-02Sample wt/vol: 5 (g/mL) ml Lab File ID: VG025505.DLevel: (low/med) \_\_\_\_\_ Date Received: 02/23/10% Moisture: not dec. 100 Date Analyzed: 02/23/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFF-44HZ

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1413 SAS No.: B1413 SDG No.: B1413Matrix (soil/water): WATER Lab Sample ID: B1413-03Sample wt/vol: 5 (g/mL) ml Lab File ID: VG025506.DLevel: (low/med) \_\_\_\_\_ Date Received: 02/23/10% Moisture: not dec. 100 Date Analyzed: 02/23/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFF-44HZ

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1413 SAS No.: B1413 SDG No.: B1413Matrix (soil/water): WATER Lab Sample ID: B1413-03Sample wt/vol: 5 (g/mL) ml Lab File ID: VG025506.DLevel: (low/med) \_\_\_\_\_ Date Received: 02/23/10% Moisture: not dec. 100 Date Analyzed: 02/23/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1413 SAS No.: B1413 SDG No.: B1413Matrix (soil/water): WATER Lab Sample ID: B1413-04Sample wt/vol: 5 (g/mL) ml Lab File ID: VG025501.DLevel: (low/med) Date Received: 02/23/10% Moisture: not dec. Date Analyzed: 02/23/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q
---------	----------	-----------------	------	---

75-71-8	Dichlorodifluoromethane	1		U
74-87-3	Chloromethane	1		U
75-01-4	Vinyl Chloride	1		U
74-83-9	Bromomethane	1		U
75-00-3	Chloroethane	1		U
75-69-4	Trichlorofluoromethane	1		U
76-13-1	1,1,2-Trichlorotrifluoroethane	1		U
75-35-4	1,1-Dichloroethene	1		U
67-64-1	Acetone	17		
75-15-0	Carbon Disulfide	1		U
1634-04-4	Methyl tert-butyl Ether	1		U
79-20-9	Methyl Acetate	1		U
75-09-2	Methylene Chloride	1		U
156-60-5	trans-1,2-Dichloroethene	1		U
75-34-3	1,1-Dichloroethane	1		U
110-82-7	Cyclohexane	1		U
78-93-3	2-Butanone	5		U
56-23-5	Carbon Tetrachloride	1		U
156-59-2	cis-1,2-Dichloroethene	1		U
67-66-3	Chloroform	1		U
71-55-6	1,1,1-Trichloroethane	1		U
108-87-2	Methylcyclohexane	1		U
71-43-2	Benzene	1		U
107-06-2	1,2-Dichloroethane	1		U
79-01-6	Trichloroethene	1		U
78-87-5	1,2-Dichloropropane	1		U
75-27-4	Bromodichloromethane	1		U
108-10-1	4-Methyl-2-Pentanone	5		U
108-88-3	Toluene	1		U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1413 SAS No.: B1413 SDG No.: B1413Matrix (soil/water): WATER Lab Sample ID: B1413-04Sample wt/vol: 5 (g/mL) ml Lab File ID: VG025501.DLevel: (low/med) \_\_\_\_\_ Date Received: 02/23/10% Moisture: not dec. 100 Date Analyzed: 02/23/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U



**Hit Summary Sheet**  
**SW-846**

SDG No.: B1413

Client: Malcolm Pirnie, Inc.

Sample ID	Client ID		Parameter	Concentration	C	RDL	MDL	Units
<b>Client ID:</b>	<b>RW-1</b>							
B1413-01	RW-1	WATER	1,1-Dichloroethene	3.20		1.0	0.47	ug/L
B1413-01	RW-1	WATER	1,1-Dichloroethane	3.20		1.0	0.36	ug/L
B1413-01	RW-1	WATER	1,1,1-Trichloroethane	66.00		1.0	0.40	ug/L
Total Voc :				<b>72.40</b>				
Total Concentration:				<b>72.40</b>				
<b>Client ID:</b>	<b>RW-2</b>							
B1413-02	RW-2	WATER	1,1-Dichloroethene	1.90		1.0	0.47	ug/L
B1413-02	RW-2	WATER	1,1-Dichloroethane	1.10		1.0	0.36	ug/L
B1413-02	RW-2	WATER	1,1,1-Trichloroethane	49.00		1.0	0.40	ug/L
Total Voc :				<b>52.00</b>				
Total Concentration:				<b>52.00</b>				
<b>Client ID:</b>	<b>TRIPBLANK</b>							
B1413-04	TRIPBLANK	WATER	Acetone	17.00		5.0	2.8	ug/L
Total Voc :				<b>17.00</b>				
Total Concentration:				<b>17.00</b>				

**WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY**Lab Name: CHEMTECHContract: MALC02Lab Code: CHEMCASE No.: B1413SAS No.: B1413SDG NO.: B1413

	EPA Sample NO.	SMC1 (DCE) #	SMC2 (DBFM) #	SMC3 (TOL) #	SMC4 (BFB) #	TOT OUT
01	VBG0223W2	91	99	94	96	0
02	BSG0223W1	98	96	95	104	0
03	BSG0223W2	94	96	93	97	0
04	TRIPBLANK	98	98	87	91	0
05	RW-1	100	98	93	99	0
06	RW-2	101	100	94	96	0
07	EFF-44HZ	102	101	91	95	0

**QC LIMITS**

SMC1 (DCE) = 1,2-Dichloroethane-d4 (70-120)

SMC2 (DBFM) =Dibromofluoromethane (85-115)

SMC3 (TOL) =Toluene-d8 (85-120)

SMC4 (BFB) =4-Bromofluorobenzene (75-120)

# Column to be used to flag recovery values

\* Values outside of contract required QC Limits

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1413 SAS No : B1413 SDG No: B1413Matrix Spike - EPA Sample No : BSG0223W1

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC REC
Dichlorodifluoromethane	20		16	80	(35-124)
Chloromethane	20		20	100	(40-125)
Vinyl Chloride	20		22	110	(50-144)
Bromomethane	20		19	95	(44-145)
Chloroethane	20		20	100	(60-135)
Trichlorofluoromethane	20		21	105	(60-137)
1,1,2-Trichlorotrifluoroethane	20		21	105	(52-142)
1,1-Dichloroethene	20		21	105	(70-130)
Acetone	100		160	160*	(50-140)
Carbon Disulfide	20		20	100	(36-155)
Methyl tert-butyl Ether	20		21	105	(65-125)
Methyl Acetate	20		22	110	(51-158)
Methylene Chloride	20		21	105	(61-138)
trans-1,2-Dichloroethene	20		20	100	(60-137)
1,1-Dichloroethane	20		22	110	(70-135)
Cyclohexane	20		20	100	(56-141)
2-Butanone	100		130	130	(56-150)
Carbon Tetrachloride	20		20	100	(65-138)
cis-1,2-Dichloroethene	20		21	105	(70-125)
Chloroform	20		22	110	(67-135)
1,1,1-Trichloroethane	20		21	105	(65-130)
Methylcyclohexane	20		20	100	(56-137)
Benzene	20		20	100	(80-120)
1,2-Dichloroethane	20		22	110	(70-130)
Trichloroethene	20		20	100	(70-125)
1,2-Dichloropropane	20		22	110	(75-125)
Bromodichloromethane	20		21	105	(75-120)
4-Methyl-2-Pentanone	100		120	120	(63-135)
Toluene	20		19	95	(75-120)
t-1,3-Dichloropropene	20		21	105	(66-135)
cis-1,3-Dichloropropene	20		21	105	(70-130)
1,1,2-Trichloroethane	20		21	105	(75-125)
2-Hexanone	100		130	130	(56-130)
Dibromochloromethane	20		21	105	(64-135)

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

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 4 Out of 77 outside limits

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

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1413 SAS No : B1413 SDG No: B1413Matrix Spike - EPA Sample No : BSG0223W1

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC LIMITS REC
1,2-Dibromoethane	20		22	110	(80-120)
Tetrachloroethene	20		19	95	(45-178)
Chlorobenzene	20		21	105	(80-120)
Ethyl Benzene	20		21	105	(75-125)
m/p-Xylenes	40		41	103	(75-130)
o-Xylene	20		20	100	(80-120)
Styrene	20		21	105	(65-135)
Bromoform	20		19	95	(70-130)
Isopropylbenzene	20		20	100	(75-125)
1,1,2,2-Tetrachloroethane	20		20	100	(65-130)
1,3-Dichlorobenzene	20		21	105	(75-125)
1,4-Dichlorobenzene	20		21	105	(75-125)
1,2-Dichlorobenzene	20		21	105	(70-120)
1,2-Dibromo-3-Chloropropane	20		19	95	(54-130)
1,2,4-Trichlorobenzene	20		23	115	(65-133)

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

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 4 Out of 77 outside limits

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

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1413 SAS No : B1413 SDG No: B1413Matrix Spike - EPA Sample No : BSG0223W2

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD		QC LIMITS	
			% REC #	% RPD #	RPD	REC
Dichlorodifluoromethane	20	17	85	6	20	(35-124)
Chloromethane	20	21	105	5	20	(40-125)
Vinyl Chloride	20	22	110	0	20	(50-144)
Bromomethane	20	22	110	15	20	(44-145)
Chloroethane	20	22	110	10	20	(60-135)
Trichlorofluoromethane	20	22	110	5	20	(60-137)
1,1,2-Trichlorotrifluoroethane	20	23	115	9	20	(52-142)
1,1-Dichloroethene	20	21	105	0	20	(70-130)
Acetone	100	130	130	21*	20	(50-140)
Carbon Disulfide	20	20	100	0	20	(36-155)
Methyl tert-butyl Ether	20	21	105	0	20	(65-125)
Methyl Acetate	20	23	115	4	20	(51-158)
Methylene Chloride	20	21	105	0	20	(61-138)
trans-1,2-Dichloroethene	20	21	105	5	20	(60-137)
1,1-Dichloroethane	20	22	110	0	20	(70-135)
Cyclohexane	20	20	100	0	20	(56-141)
2-Butanone	100	120	120	8	20	(56-150)
Carbon Tetrachloride	20	20	100	0	20	(65-138)
cis-1,2-Dichloroethene	20	21	105	0	20	(70-125)
Chloroform	20	23	115	4	20	(67-135)
1,1,1-Trichloroethane	20	21	105	0	20	(65-130)
Methylcyclohexane	20	20	100	0	20	(56-137)
Benzene	20	20	100	0	20	(80-120)
1,2-Dichloroethane	20	21	105	5	20	(70-130)
Trichloroethene	20	20	100	0	20	(70-125)
1,2-Dichloropropane	20	21	105	5	20	(75-125)
Bromodichloromethane	20	21	105	0	20	(75-120)
4-Methyl-2-Pentanone	100	120	120	0	20	(63-135)
Toluene	20	19	95	0	20	(75-120)
t-1,3-Dichloropropene	20	21	105	0	20	(66-135)
cis-1,3-Dichloropropene	20	21	105	0	20	(70-130)
1,1,2-Trichloroethane	20	20	100	5	20	(75-125)
2-Hexanone	100	130	130	0	20	(56-130)
Dibromochloromethane	20	21	105	0	20	(64-135)

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

\* Values outside of QC limits

RPD : 2 Out of 77 outside limits

Spike Recovery : 3 Out of 77 outside limits

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

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1413 SAS No : B1413 SDG No: B1413Matrix Spike - EPA Sample No : BSG0223W2

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD		QC LIMITS	
			% REC #	% RPD #	RPD	REC
1,2-Dibromoethane	20	21	105	5	20	(80-120)
Tetrachloroethene	20	20	100	5	20	(45-178)
Chlorobenzene	20	20	100	5	20	(80-120)
Ethyl Benzene	20	20	100	5	20	(75-125)
m/p-Xylenes	40	39	98	5	20	(75-130)
o-Xylene	20	20	100	0	20	(80-120)
Styrene	20	20	100	5	20	(65-135)
Bromoform	20	19	95	0	20	(70-130)
Isopropylbenzene	20	21	105	5	20	(75-125)
1,1,2,2-Tetrachloroethane	20	21	105	5	20	(65-130)
1,3-Dichlorobenzene	20	22	110	5	20	(75-125)
1,4-Dichlorobenzene	20	20	100	5	20	(75-125)
1,2-Dichlorobenzene	20	20	100	5	20	(70-120)
1,2-Dibromo-3-Chloropropane	20	19	95	0	20	(54-130)
1,2,4-Trichlorobenzene	20	20	100	14	20	(65-133)

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

\* Values outside of QC limits

RPD : 2 Out of 77 outside limits

Spike Recovery : 3 Out of 77 outside limits

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

4A

## VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBG0223W2

Lab Name: CHEMTECHContract: MALC02Lab Code: CHEMCase No.: B1413SAS No.: B1413 SDG NO.: B1413Lab File ID: VG025487.DLab Sample ID: VBG0223W2Date Analyzed: 02/23/2010Time Analyzed: 11:50GC Column: RTX-VMS ID: 0.18 (mm)Heated Purge: (Y/N) NInstrument ID: MSVOAG

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BSG0223W1	BSG0223W1	VG025488.D	02/23/2010
BSG0223W2	BSG0223W2	VG025489.D	02/23/2010
TRIPBLANK	B1413-04	VG025501.D	02/23/2010
RW-1	B1413-01	VG025504.D	02/23/2010
RW-2	B1413-02	VG025505.D	02/23/2010
EFF-44HZ	B1413-03	VG025506.D	02/23/2010

COMMENTS:

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBG0223W2

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1413 SAS No.: B1413 SDG No.: B1413Matrix (soil/water): WATER Lab Sample ID: VBG0223W2Sample wt/vol: 5 (g/mL) ml Lab File ID: VG025487.D

Level: (low/med) \_\_\_\_\_ Date Received: \_\_\_\_\_

% Moisture: not dec. 100 Date Analyzed: 02/23/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

## EPA SAMPLE NO.

VBG0223W2

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1413 SAS No.: B1413 SDG No.: B1413Matrix (soil/water): WATER Lab Sample ID: VBG0223W2Sample wt/vol: 5 (g/mL) mlLab File ID: VG025487.D

Level: (low/med) \_\_\_\_\_

Date Received: \_\_\_\_\_

% Moisture: not dec. 100Date Analyzed: 02/23/10GC Column: RTX-VMS ID: 0.18 (mm)Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U



8A

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: MALC02  
Lab Code: CHEM Case No.: B1413 SAS No.: B1413 SDG NO.: B1413  
Lab File ID: VG025485.D Date Analyzed: 02/23/2010  
Instrument ID: MSVOAG Time Analyzed: 10:54  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	694521	3.59	1305301	4.32	1018501	9.30
	1389042	4.09	2610602	4.82	2037002	9.8
	347260.5	3.09	652650.5	3.82	509250.5	8.8
EPA SAMPLE NO.						
RW-1	560071	3.60	1032071	4.34	839543	9.31
RW-2	567521	3.60	1059626	4.33	857808	9.31
EFF-44HZ	563570	3.61	1057907	4.33	855333	9.32
TRIPBLANK	584123	3.60	1106571	4.33	865194	9.31
BSG0223W1	650837	3.59	1201397	4.32	984952	9.31
BSG0223W2	659133	3.59	1220122	4.32	1009531	9.31
VBG0223W2	667192	3.59	1228421	4.33	987253	9.30

IS1 = Pentafluorobenzene

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.



8A

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: MALC02  
Lab Code: CHEM Case No.: B1413 SAS No.: B1413 SDG NO.: B1413  
Lab File ID: VG025485.D Date Analyzed: 02/23/2010  
Instrument ID: MSVOAG Time Analyzed: 10:54  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	433710	13.02				
UPPER LIMIT	867420	13.52				
LOWER LIMIT	216855	12.52				
EPA SAMPLE NO.						
RW-1	379383	13.03				
RW-2	375160	13.03				
EFF-44HZ	359719	13.03				
TRIPBLANK	382962	13.02				
BSG0223W1	483058	13.02				
BSG0223W2	450267	13.02				
VBG0223W2	466110	13.02				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

## **ANALYTICAL RESULTS SUMMARY**

**PROJECT NAME : DEC GLADDING CORDAGE**

**MALCOLM PIRNIE, INC.  
855 Route 146, Suite 210**

**Clifton Park , NY - 12065  
Phone No: 5182507300**

**ORDER ID : B1052  
ATTENTION : Jeremy Wyckoff**



**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**FORM S-I**  
**SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY**

<b>NYSDEC Sample ID/Code</b>	<b>Laboratory Sample ID/Code</b>	<b>VOA GC/MS (Method #)</b>	<b>BNA GC/MS (Method #)</b>	<b>VOA GC (Method #)</b>	<b>Pest PCBs (Method #)</b>	<b>Metals (Method #)</b>	<b>Other (Method #)</b>
RW-1	B1052-01	8260B					
RW-2	B1052-02	8260B					
EFF44HZ	B1052-03	8260B					
TRIPBLANK	B1052-04	8260B					

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION**

**FORM S-IIb**

**SAMPLE PREPARATION AND ANALYSIS SUMMARY  
VOLATILE (VOA) ANALYSES**

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
B1052-01	WATER	01/07/10	01/08/10		01/08/10
B1052-02	WATER	01/07/10	01/08/10		01/08/10
B1052-03	WATER	01/07/10	01/08/10		01/08/10
B1052-04	WATER	01/07/10	01/08/10		01/08/10

\* Details For Test :VOC-TCLVOA-10

---

**NEW YORK STATE DEPARTMENT OF  
ENVIRONMENTAL CONSERVATION**

**FORM S-III**

**SAMPLE PREPARATION AND ANALYSIS SUMMARY  
MISCELLANEOUS ORGANIC ANALYSES**

<b>Laboratory Sample ID</b>	<b>Matrix</b>	<b>Analytical Protocol</b>	<b>Extraction Method</b>	<b>Auxiliary Cleanup</b>	<b>Dil/Conc Factor</b>
B1052-01	Water	8260B	5030		
B1052-02	Water	8260B	5030		
B1052-03	Water	8260B	5030		
B1052-04	Water	8260B	5030		

---

**Cover Page****Order ID :** B1052**Project ID :** DEC Gladding Cordage**Client :** Malcolm Pirnie, Inc.**Lab Sample Number**

B1052-01  
B1052-02  
B1052-03  
B1052-04

**Client Sample Number**

RW-1  
RW-2  
EFF44HZ  
TRIPBLANK

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : \_\_\_\_\_



## CASE NARRATIVE

**Malcolm Pirnie, Inc.**

**Project Name: DEC Gladding Cordage**

**Project # N/A**

**Chemtech Project # B1052**

### **A. Number of Samples and Date of Receipt:**

4 Water samples were received on 1/8/10.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: and VOC-TCLVOA-10. This data package contains results for VOC-TCLVOA-10.

### **C. Analytical Techniques:**

The analysis performed on instrument MSVOA G were done using GC column RTX-VMS which is 20 meters, 0.18 ID, 1.0 df, Restek Cat. #49914. The Trap was supplied by OI Analytical, OI #10 Trap , OI Eclipse 4660 Concentrator.

The analysis of VOC-TCLVOA-10 was based on method 8260.

### **D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The Blank Spike met requirements for all samples except for 1,2-Dibromoethane.

The Blank analysis did not indicate the presence of lab contamination.

The % RSD for 2-Hexanone, Acetone, Carbon Disulfide, Cyclohexane, Ethylbenzene, Methylcyclohexane and Methylene Chloride in the initial calibration (Method

82G010710W.M) dated 01/07/10 with instrument G are above 15 %.These compounds are passing on linear regressions, however in this case they were left on average response factor

The Calibration met the requirements.

The Tuning criteria met requirements.

### **E. Additional Comments:**

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature \_\_\_\_\_



1A

## VOLATILE ORGANICS ANALYSIS DATA SHEET

## EPA SAMPLE NO.

RW-1

Lab Name: Chemtech Contract: MALC02

Lab Code: CHEM Case No.: B1052 SAS No.: B1052 SDG No.: B1052

Matrix (soil/water): WATER Lab Sample ID: B1052-01

Sample wt/vol: 5 (g/mL) ml Lab File ID: VG024345.D

Level: (low/med) \_\_\_\_\_ Date Received: 01/08/10

% Moisture: not dec. 100 Date Analyzed: 01/08/10

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q
---------	----------	-----------------	------	---

75-71-8	Dichlorodifluoromethane	1		U
74-87-3	Chloromethane	1		U
75-01-4	Vinyl Chloride	1		U
74-83-9	Bromomethane	1		U
75-00-3	Chloroethane	1		U
75-69-4	Trichlorofluoromethane	1		U
76-13-1	1,1,2-Trichlorotrifluoroethane	1		U
75-35-4	1,1-Dichloroethene	2.5		
67-64-1	Acetone	5		U
75-15-0	Carbon Disulfide	1		U
1634-04-4	Methyl tert-butyl Ether	1		U
79-20-9	Methyl Acetate	1		U
75-09-2	Methylene Chloride	1		U
156-60-5	trans-1,2-Dichloroethene	1		U
75-34-3	1,1-Dichloroethane	2.6		
110-82-7	Cyclohexane	1		U
78-93-3	2-Butanone	5		U
56-23-5	Carbon Tetrachloride	1		U
156-59-2	cis-1,2-Dichloroethene	1		U
67-66-3	Chloroform	1		U
71-55-6	1,1,1-Trichloroethane	53		
108-87-2	Methylcyclohexane	1		U
71-43-2	Benzene	1		U
107-06-2	1,2-Dichloroethane	1		U
79-01-6	Trichloroethene	1		U
78-87-5	1,2-Dichloropropane	1		U
75-27-4	Bromodichloromethane	1		U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-1

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1052 SAS No.: B1052 SDG No.: B1052Matrix (soil/water): WATER Lab Sample ID: B1052-01Sample wt/vol: 5 (g/mL) ml Lab File ID: VG024345.DLevel: (low/med) \_\_\_\_\_ Date Received: 01/08/10% Moisture: not dec. 100 Date Analyzed: 01/08/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U
10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-2

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1052 SAS No.: B1052 SDG No.: B1052Matrix (soil/water): WATER Lab Sample ID: B1052-02Sample wt/vol: 5 (g/mL) ml Lab File ID: VG024346.DLevel: (low/med) \_\_\_\_\_ Date Received: 01/08/10% Moisture: not dec. 100 Date Analyzed: 01/08/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1.7	
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	0.9	J
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	43	
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-2

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1052 SAS No.: B1052 SDG No.: B1052Matrix (soil/water): WATER Lab Sample ID: B1052-02Sample wt/vol: 5 (g/mL) mlLab File ID: VG024346.D

Level: (low/med) \_\_\_\_\_

Date Received: 01/08/10% Moisture: not dec. 100Date Analyzed: 01/08/10GC Column: RTX-VMS ID: 0.18 (mm)Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFF44HZ

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1052 SAS No.: B1052 SDG No.: B1052Matrix (soil/water): WATER Lab Sample ID: B1052-03Sample wt/vol: 5 (g/mL) ml Lab File ID: VG024347.DLevel: (low/med) Date Received: 01/08/10% Moisture: not dec. Date Analyzed: 01/08/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q
---------	----------	-----------------	------	---

75-71-8	Dichlorodifluoromethane	1		U
74-87-3	Chloromethane	1		U
75-01-4	Vinyl Chloride	1		U
74-83-9	Bromomethane	1		U
75-00-3	Chloroethane	1		U
75-69-4	Trichlorofluoromethane	1		U
76-13-1	1,1,2-Trichlorotrifluoroethane	1		U
75-35-4	1,1-Dichloroethene	1		U
67-64-1	Acetone	5		U
75-15-0	Carbon Disulfide	1		U
1634-04-4	Methyl tert-butyl Ether	1		U
79-20-9	Methyl Acetate	1		U
75-09-2	Methylene Chloride	1		U
156-60-5	trans-1,2-Dichloroethene	1		U
75-34-3	1,1-Dichloroethane	1		U
110-82-7	Cyclohexane	1		U
78-93-3	2-Butanone	5		U
56-23-5	Carbon Tetrachloride	1		U
156-59-2	cis-1,2-Dichloroethene	1		U
67-66-3	Chloroform	1		U
71-55-6	1,1,1-Trichloroethane	1		U
108-87-2	Methylcyclohexane	1		U
71-43-2	Benzene	1		U
107-06-2	1,2-Dichloroethane	1		U
79-01-6	Trichloroethene	1		U
78-87-5	1,2-Dichloropropane	1		U
75-27-4	Bromodichloromethane	1		U
108-10-1	4-Methyl-2-Pentanone	5		U
108-88-3	Toluene	1		U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFF44HZ

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1052 SAS No.: B1052 SDG No.: B1052Matrix (soil/water): WATER Lab Sample ID: B1052-03Sample wt/vol: 5 (g/mL) ml Lab File ID: VG024347.DLevel: (low/med) \_\_\_\_\_ Date Received: 01/08/10% Moisture: not dec. 100 Date Analyzed: 01/08/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1052 SAS No.: B1052 SDG No.: B1052Matrix (soil/water): WATER Lab Sample ID: B1052-04Sample wt/vol: 5 (g/mL) ml Lab File ID: VG024344.DLevel: (low/med) Date Received: 01/08/10% Moisture: not dec. Date Analyzed: 01/08/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q
---------	----------	-----------------	------	---

75-71-8	Dichlorodifluoromethane	1		U
74-87-3	Chloromethane	1		U
75-01-4	Vinyl Chloride	1		U
74-83-9	Bromomethane	1		U
75-00-3	Chloroethane	1		U
75-69-4	Trichlorofluoromethane	1		U
76-13-1	1,1,2-Trichlorotrifluoroethane	1		U
75-35-4	1,1-Dichloroethene	1		U
67-64-1	Acetone	5		U
75-15-0	Carbon Disulfide	1		U
1634-04-4	Methyl tert-butyl Ether	1		U
79-20-9	Methyl Acetate	1		U
75-09-2	Methylene Chloride	1		U
156-60-5	trans-1,2-Dichloroethene	1		U
75-34-3	1,1-Dichloroethane	1		U
110-82-7	Cyclohexane	1		U
78-93-3	2-Butanone	5		U
56-23-5	Carbon Tetrachloride	1		U
156-59-2	cis-1,2-Dichloroethene	1		U
67-66-3	Chloroform	1		U
71-55-6	1,1,1-Trichloroethane	1		U
108-87-2	Methylcyclohexane	1		U
71-43-2	Benzene	1		U
107-06-2	1,2-Dichloroethane	1		U
79-01-6	Trichloroethene	1		U
78-87-5	1,2-Dichloropropane	1		U
75-27-4	Bromodichloromethane	1		U
108-10-1	4-Methyl-2-Pentanone	5		U
108-88-3	Toluene	1		U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1052 SAS No.: B1052 SDG No.: B1052Matrix (soil/water): WATER Lab Sample ID: B1052-04Sample wt/vol: 5 (g/mL) ml Lab File ID: VG024344.DLevel: (low/med) \_\_\_\_\_ Date Received: 01/08/10% Moisture: not dec. 100 Date Analyzed: 01/08/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U



**Hit Summary Sheet**  
**SW-846**

SDG No.: B1052

Client: Malcolm Pirnie, Inc.

Sample ID	Client ID		Parameter	Concentration	C	RDL	MDL	Units
<b>Client ID:</b>	<b>RW-1</b>							
B1052-01	RW-1	WATER	1,1-Dichloroethene	2.50		1.0	0.47	ug/L
B1052-01	RW-1	WATER	1,1-Dichloroethane	2.60		1.0	0.36	ug/L
B1052-01	RW-1	WATER	1,1,1-Trichloroethane	53.00		1.0	0.40	ug/L
<b>Total Voc :</b>				<b>58.10</b>				
<b>Total Concentration:</b>				<b>58.10</b>				
<b>Client ID:</b>	<b>RW-2</b>							
B1052-02	RW-2	WATER	1,1-Dichloroethene	1.70		1.0	0.47	ug/L
B1052-02	RW-2	WATER	1,1-Dichloroethane	0.90	J	1.0	0.36	ug/L
B1052-02	RW-2	WATER	1,1,1-Trichloroethane	43.00		1.0	0.40	ug/L
<b>Total Voc :</b>				<b>45.60</b>				
<b>Total Concentration:</b>				<b>45.60</b>				

**WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY**Lab Name: CHEMTECHContract: MALC02Lab Code: CHEMCASE No.: B1052SAS No.: B1052SDG NO.: B1052

	EPA Sample NO.	SMC1 (DCE) #	SMC2 (DBFM) #	SMC3 (TOL) #	SMC4 (BFB) #	TOT OUT
01	VBG0108W1	84	102	88	87	0
02	BSG0108W1	88	94	90	85	0
03	BSG0108W2	89	95	89	85	0
04	TRIPBLANK	90	105	86	92	0
05	RW-1	91	99	87	90	0
06	RW-2	90	102	87	88	0
07	EFF44HZ	88	101	91	90	0

**QC LIMITS**

SMC1 (DCE) = 1,2-Dichloroethane-d4 (70-120)

SMC2 (DBFM) =Dibromofluoromethane (85-115)

SMC3 (TOL) =Toluene-d8 (85-120)

SMC4 (BFB) =4-Bromofluorobenzene (75-120)

# Column to be used to flag recovery values

\* Values outside of contract required QC Limits

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1052 SAS No : B1052 SDG No: B1052Matrix Spike - EPA Sample No : BSG0108W1

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC LIMITS REC
Dichlorodifluoromethane	20		18	90	(35-124)
Chloromethane	20		18	90	(40-125)
Vinyl Chloride	20		18	90	(50-144)
Bromomethane	20		21	105	(44-145)
Chloroethane	20		18	90	(60-135)
Trichlorofluoromethane	20		18	90	(60-137)
1,1,2-Trichlorotrifluoroethane	20		17	85	(52-142)
1,1-Dichloroethene	20		17	85	(70-130)
Acetone	100		81	81	(50-140)
Carbon Disulfide	20		18	90	(36-155)
Methyl tert-butyl Ether	20		17	85	(65-125)
Methyl Acetate	20		15	75	(51-158)
Methylene Chloride	20		17	85	(61-138)
trans-1,2-Dichloroethene	20		16	80	(60-137)
1,1-Dichloroethane	20		17	85	(70-135)
Cyclohexane	20		17	85	(56-141)
2-Butanone	100		86	86	(56-150)
Carbon Tetrachloride	20		18	90	(65-138)
cis-1,2-Dichloroethene	20		17	85	(70-125)
Chloroform	20		18	90	(67-135)
1,1,1-Trichloroethane	20		17	85	(65-130)
Methylcyclohexane	20		17	85	(56-137)
Benzene	20		18	90	(80-120)
1,2-Dichloroethane	20		18	90	(70-130)
Trichloroethene	20		17	85	(70-125)
1,2-Dichloropropane	20		18	90	(75-125)
Bromodichloromethane	20		18	90	(75-120)
4-Methyl-2-Pentanone	100		93	93	(63-135)
Toluene	20		17	85	(75-120)
t-1,3-Dichloropropene	20		17	85	(66-135)
cis-1,3-Dichloropropene	20		17	85	(70-130)
1,1,2-Trichloroethane	20		18	90	(75-125)
2-Hexanone	100		89	89	(56-130)
Dibromochloromethane	20		17	85	(64-135)

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

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 3 Out of 77 outside limits

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

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1052 SAS No : B1052 SDG No: B1052Matrix Spike - EPA Sample No : BSG0108W1

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC LIMITS REC
1,2-Dibromoethane	20		16	80	(80-120)
Tetrachloroethene	20		17	85	(45-178)
Chlorobenzene	20		17	85	(80-120)
Ethyl Benzene	20		18	90	(75-125)
m/p-Xylenes	40		36	90	(75-130)
o-Xylene	20		17	85	(80-120)
Styrene	20		17	85	(65-135)
Bromoform	20		17	85	(70-130)
Isopropylbenzene	20		17	85	(75-125)
1,1,2,2-Tetrachloroethane	20		17	85	(65-130)
1,3-Dichlorobenzene	20		16	80	(75-125)
1,4-Dichlorobenzene	20		16	80	(75-125)
1,2-Dichlorobenzene	20		16	80	(70-120)
1,2-Dibromo-3-Chloropropane	20		16	80	(54-130)
1,2,4-Trichlorobenzene	20		16	80	(65-133)

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

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 3 Out of 77 outside limits

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

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1052 SAS No : B1052 SDG No: B1052Matrix Spike - EPA Sample No : BSG0108W2

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD		QC LIMITS	
			% REC #	% RPD #	RPD	REC
Dichlorodifluoromethane	20	18	90	0	20	(35-124)
Chloromethane	20	18	90	0	20	(40-125)
Vinyl Chloride	20	18	90	0	20	(50-144)
Bromomethane	20	22	110	5	20	(44-145)
Chloroethane	20	19	95	5	20	(60-135)
Trichlorofluoromethane	20	17	85	6	20	(60-137)
1,1,2-Trichlorotrifluoroethane	20	16	80	6	20	(52-142)
1,1-Dichloroethene	20	16	80	6	20	(70-130)
Acetone	100	67	67	19	20	(50-140)
Carbon Disulfide	20	17	85	6	20	(36-155)
Methyl tert-butyl Ether	20	16	80	6	20	(65-125)
Methyl Acetate	20	15	75	0	20	(51-158)
Methylene Chloride	20	16	80	6	20	(61-138)
trans-1,2-Dichloroethene	20	17	85	6	20	(60-137)
1,1-Dichloroethane	20	17	85	0	20	(70-135)
Cyclohexane	20	17	85	0	20	(56-141)
2-Butanone	100	79	79	8	20	(56-150)
Carbon Tetrachloride	20	18	90	0	20	(65-138)
cis-1,2-Dichloroethene	20	16	80	6	20	(70-125)
Chloroform	20	16	80	12	20	(67-135)
1,1,1-Trichloroethane	20	17	85	0	20	(65-130)
Methylcyclohexane	20	16	80	6	20	(56-137)
Benzene	20	17	85	6	20	(80-120)
1,2-Dichloroethane	20	18	90	0	20	(70-130)
Trichloroethene	20	16	80	6	20	(70-125)
1,2-Dichloropropane	20	17	85	6	20	(75-125)
Bromodichloromethane	20	17	85	6	20	(75-120)
4-Methyl-2-Pentanone	100	84	84	10	20	(63-135)
Toluene	20	16	80	6	20	(75-120)
t-1,3-Dichloropropene	20	16	80	6	20	(66-135)
cis-1,3-Dichloropropene	20	16	80	6	20	(70-130)
1,1,2-Trichloroethane	20	16	80	12	20	(75-125)
2-Hexanone	100	91	91	2	20	(56-130)
Dibromochloromethane	20	16	80	6	20	(64-135)

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

\* Values outside of QC limits

RPD : 3 Out of 77 outside limits

Spike Recovery : 4 Out of 77 outside limits

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

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1052 SAS No : B1052 SDG No: B1052Matrix Spike - EPA Sample No : BSG0108W2

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD		QC LIMITS	
			% REC #	% RPD #	RPD	REC
1,2-Dibromoethane	20	15	75*	6	20	(80-120)
Tetrachloroethene	20	17	85	0	20	(45-178)
Chlorobenzene	20	16	80	6	20	(80-120)
Ethyl Benzene	20	17	85	6	20	(75-125)
m/p-Xylenes	40	32	80	12	20	(75-130)
o-Xylene	20	16	80	6	20	(80-120)
Styrene	20	16	80	6	20	(65-135)
Bromoform	20	17	85	0	20	(70-130)
Isopropylbenzene	20	16	80	6	20	(75-125)
1,1,2,2-Tetrachloroethane	20	16	80	6	20	(65-130)
1,3-Dichlorobenzene	20	16	80	0	20	(75-125)
1,4-Dichlorobenzene	20	16	80	0	20	(75-125)
1,2-Dichlorobenzene	20	16	80	0	20	(70-120)
1,2-Dibromo-3-Chloropropane	20	15	75	6	20	(54-130)
1,2,4-Trichlorobenzene	20	15	75	6	20	(65-133)

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

\* Values outside of QC limits

RPD : 3 Out of 77 outside limits

Spike Recovery : 4 Out of 77 outside limits

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

4A

## VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBG0108W1

Lab Name: CHEMTECHContract: MALC02Lab Code: CHEM Case No.: B1052SAS No.: B1052 SDG NO.: B1052Lab File ID: VG024333.DLab Sample ID: VBG0108W1Date Analyzed: 01/08/2010Time Analyzed: 12:09GC Column: RTX-VMS ID: 0.18 (mm)Heated Purge: (Y/N) NInstrument ID: MSVOAG

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BSG0108W1	BSG0108W1	VG024335.D	01/08/2010
BSG0108W2	BSG0108W2	VG024336.D	01/08/2010
TRIPBLANK	B1052-04	VG024344.D	01/08/2010
RW-1	B1052-01	VG024345.D	01/08/2010
RW-2	B1052-02	VG024346.D	01/08/2010
EFF44HZ	B1052-03	VG024347.D	01/08/2010

COMMENTS:

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBG0108W1

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1052 SAS No.: B1052 SDG No.: B1052Matrix (soil/water): WATER Lab Sample ID: VBG0108W1Sample wt/vol: 5 (g/mL) ml Lab File ID: VG024333.D

Level: (low/med) \_\_\_\_\_ Date Received: \_\_\_\_\_

% Moisture: not dec. 100 Date Analyzed: 01/08/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

## EPA SAMPLE NO.

VBG0108W1

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1052 SAS No.: B1052 SDG No.: B1052Matrix (soil/water): WATER Lab Sample ID: VBG0108W1Sample wt/vol: 5 (g/mL) mlLab File ID: VG024333.D

Level: (low/med) \_\_\_\_\_

Date Received: \_\_\_\_\_

% Moisture: not dec. 100Date Analyzed: 01/08/10GC Column: RTX-VMS ID: 0.18 (mm)Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U



8A

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: MALC02  
Lab Code: CHEM Case No.: B1052 SAS No.: B1052 SDG NO.: B1052  
Lab File ID: VG024332.D Date Analyzed: 01/08/2010  
Instrument ID: MSVOAG Time Analyzed: 11:28  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	1017783	3.58	1829358	4.32	1364546	9.30
	2035566	4.08	3658716	4.82	2729092	9.8
	508891.5	3.08	914679	3.82	682273	8.8
EPA SAMPLE NO.						
RW-1	888391	3.58	1568543	4.31	1119368	9.29
RW-2	780841	3.58	1348833	4.31	967892	9.30
EFF44HZ	947586	3.58	1602750	4.31	1165375	9.30
TRIPBLANK	825620	3.58	1396584	4.31	1009576	9.30
BSG0108W1	900350	3.58	1586484	4.31	1154504	9.30
BSG0108W2	707871	3.58	1252218	4.31	922427	9.30
VBG0108W1	1072523	3.58	1829892	4.31	1370108	9.30

IS1 = Pentafluorobenzene

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.



8A

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: MALC02  
Lab Code: CHEM Case No.: B1052 SAS No.: B1052 SDG NO.: B1052  
Lab File ID: VG024332.D Date Analyzed: 01/08/2010  
Instrument ID: MSVOAG Time Analyzed: 11:28  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	636322	13.02				
UPPER LIMIT	1272644	13.52				
LOWER LIMIT	318161	12.52				
EPA SAMPLE NO.						
RW-1	611747	13.01				
RW-2	516990	13.01				
EFF44HZ	599455	13.01				
TRIPBLANK	568136	13.02				
BSG0108W1	571027	13.02				
BSG0108W2	435954	13.02				
VBG0108W1	692083	13.02				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

## **ANALYTICAL RESULTS SUMMARY**

**PROJECT NAME : DEC GLADDING CORDAGE**

**MALCOLM PIRNIE, INC.  
855 Route 146, Suite 210**

**Clifton Park , NY - 12065  
Phone No: 5182507300**

**ORDER ID : B1718  
ATTENTION : Jeremy Wyckoff**



**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**FORM S-I**  
**SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY**

NYSDEC Sample ID/Code	Laboratory Sample ID/Code	VOA GC/MS (Method #)	BNA GC/MS (Method #)	VOA GC (Method #)	Pest PCBs (Method #)	Metals (Method #)	Other (Method #)
TW-4I	B1718-01	8260B					
TW-14S	B1718-02	8260B					
TW-14I	B1718-03	8260B					
TW-14D	B1718-04	8260B					
TW-15	B1718-05	8260B					
TW-5S	B1718-06	8260B					
TW-5I	B1718-07	8260B					
TW-5D	B1718-08	8260B					
TW-3D	B1718-09	8260B					
MW-X	B1718-10	8260B					
TW-3I	B1718-11	8260B					
TW-3S	B1718-12	8260B					
TW-7S	B1718-13	8260B					
TW-7I	B1718-14	8260B					
TW-7D	B1718-15	8260B					
TW-9I	B1718-16	8260B					
TW-9D	B1718-17	8260B					
TW-6S	B1718-18	8260B					
TW-6I	B1718-19	8260B					
TW-6D	B1718-20	8260B					
TW-12I	B1718-21	8260B					
TW-12D	B1718-22	8260B					
TRIPBLANK	B1718-23	8260B					

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION**

**FORM S-IIb**

**SAMPLE PREPARATION AND ANALYSIS SUMMARY  
VOLATILE (VOA) ANALYSES**

<b>Laboratory Sample ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Rec'd at Lab</b>	<b>Date Extracted</b>	<b>Date Analyzed</b>
B1718-01	WATER	03/23/10	03/26/10		03/27/10
B1718-02	WATER	03/23/10	03/26/10		03/27/10
B1718-03	WATER	03/23/10	03/26/10		03/27/10
B1718-04	WATER	03/23/10	03/26/10		03/27/10
B1718-05	WATER	03/23/10	03/26/10		03/27/10
B1718-06	WATER	03/23/10	03/26/10		03/27/10
B1718-07	WATER	03/23/10	03/26/10		03/29/10
B1718-08	WATER	03/23/10	03/26/10		03/29/10
B1718-09	WATER	03/23/10	03/26/10		03/29/10
B1718-10	WATER	03/23/10	03/26/10		03/29/10
B1718-11	WATER	03/23/10	03/26/10		03/29/10
B1718-12	WATER	03/23/10	03/26/10		03/29/10
B1718-13	WATER	03/23/10	03/26/10		03/29/10
B1718-14	WATER	03/23/10	03/26/10		03/29/10
B1718-15	WATER	03/23/10	03/26/10		03/29/10
B1718-16	WATER	03/23/10	03/26/10		03/29/10
B1718-17	WATER	03/23/10	03/26/10		03/29/10
B1718-18	WATER	03/23/10	03/26/10		03/29/10
B1718-19	WATER	03/23/10	03/26/10		03/29/10
B1718-20	WATER	03/23/10	03/26/10		03/29/10
B1718-21	WATER	03/23/10	03/26/10		03/29/10
B1718-22	WATER	03/23/10	03/26/10		03/29/10
B1718-23	WATER	03/17/10	03/26/10		03/27/10

\* Details For Test :VOC-TCLVOA-10

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION**

**FORM S-III**

**SAMPLE PREPARATION AND ANALYSIS SUMMARY  
MISCELLANEOUS ORGANIC ANALYSES**

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
B1718-01	Water	8260B	5030		
B1718-02	Water	8260B	5030		
B1718-03	Water	8260B	5030		
B1718-04	Water	8260B	5030		
B1718-05	Water	8260B	5030		
B1718-06	Water	8260B	5030		
B1718-07	Water	8260B	5030		
B1718-08	Water	8260B	5030		
B1718-09	Water	8260B	5030		
B1718-10	Water	8260B	5030		
B1718-11	Water	8260B	5030		
B1718-12	Water	8260B	5030		
B1718-13	Water	8260B	5030		
B1718-14	Water	8260B	5030		
B1718-15	Water	8260B	5030		
B1718-16	Water	8260B	5030		
B1718-17	Water	8260B	5030		
B1718-18	Water	8260B	5030		
B1718-19	Water	8260B	5030		
B1718-20	Water	8260B	5030		
B1718-21	Water	8260B	5030		
B1718-22	Water	8260B	5030		
B1718-23	Water	8260B	5030		

## Cover Page

**Order ID :** B1718

**Project ID :** DEC Gladding Cordage

**Client :** Malcolm Pirnie, Inc.

**Lab Sample Number**

B1718-01  
B1718-02  
B1718-03  
B1718-04  
B1718-05  
B1718-06  
B1718-07  
B1718-08  
B1718-09  
B1718-10  
B1718-11  
B1718-12  
B1718-13  
B1718-14  
B1718-15  
B1718-16  
B1718-17  
B1718-18  
B1718-19  
B1718-20  
B1718-21  
B1718-22  
B1718-23

**Client Sample Number**

TW-4I  
TW-14S  
TW-14I  
TW-14D  
TW-15  
TW-5S  
TW-5I  
TW-5D  
TW-3D  
MW-X  
TW-3I  
TW-3S  
TW-7S  
TW-7I  
TW-7D  
TW-9I  
TW-9D  
TW-6S  
TW-6I  
TW-6D  
TW-12I  
TW-12D  
TRIPBLANK

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature :

Mildred V. Reyes  
I am approving this document  
2010.04.07 16:30:39 -04'00'

**CASE NARRATIVE**

**Malcolm Pirnie, Inc.**

**Project Name: DEC Gladding Cordage**

**Project # N/A**

**Chemtech Project # B1718**

**A. Number of Samples and Date of Receipt:**

23 Water samples were received on 3/26/10.

**B. Parameters**

According to the Chain of Custody document, the following analyses were requested: and VOC-TCLVOA-10. This data package contains results for VOC-TCLVOA-10.

**C. Analytical Techniques:**

The analysis performed on instrument MSVOA H were done using GC column RTX-VMS which is 20 meters, 0.18 ID, 1.0 df, Restek Cat. #49914. The Trap was supplied BY OI Analytical, OI #10 Trap , OI Eclipse 4660 Concentrator.

The analysis of VOC-TCLVOA-10 was based on method 8260B.

**D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD recoveries met criteria.

The Blank Spike met requirements for all samples except for Methyl Acetate and 2-Hexanone but they were not detected in Samples.

The Blank Spike Duplicate met requirements for all samples except for 2-Hexanone but it was not detected in Samples.

The Blank analysis did not indicate the presence of lab contamination.

The %RSD is greater than 15% in the Initial Calibration (Method 82H031810W.M) for Methylene Chloride, 4-Methyl-2-Pentanone, and Tetrachloroethene. These compounds are passing on linear regressions and quadratic regressions, however in this case they were left on average response factor.

The Continuing Calibration (VH034938.D & VH034995.D Method 82H031810W.M.) met the requirements except for Methyl Acetate and 2-Hexanone but they were not detected in Samples.

The Tuning criteria met requirements.

**E. Additional Comments:**

Please use %D calculated based on AvgRF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration Curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature\_\_\_\_\_

Mildred V. Reyes  
I am approving this document  
2010.04.07 16:30:15 -04'00'



1A

## VOLATILE ORGANICS ANALYSIS DATA SHEET

## EPA SAMPLE NO.

TW-4I

Lab Name: Chemtech Contract: MALC02

Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718

Matrix (soil/water): WATER Lab Sample ID: B1718-01

Sample wt/vol: 5 (g/mL) ml Lab File ID: VH034948.D

Level: (low/med) \_\_\_\_\_ Date Received: 03/26/10

% Moisture: not dec. 100 Date Analyzed: 03/27/10

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q
---------	----------	-----------------	------	---

75-71-8	Dichlorodifluoromethane	1		U
74-87-3	Chloromethane	1		U
75-01-4	Vinyl Chloride	1		U
74-83-9	Bromomethane	1		U
75-00-3	Chloroethane	1		U
75-69-4	Trichlorofluoromethane	1		U
76-13-1	1,1,2-Trichlorotrifluoroethane	1		U
75-35-4	1,1-Dichloroethene	1		U
67-64-1	Acetone	18		
75-15-0	Carbon Disulfide	1		U
1634-04-4	Methyl tert-butyl Ether	1		U
79-20-9	Methyl Acetate	1		U
75-09-2	Methylene Chloride	1		U
156-60-5	trans-1,2-Dichloroethene	1		U
75-34-3	1,1-Dichloroethane	2.5		
110-82-7	Cyclohexane	1		U
78-93-3	2-Butanone	5		U
56-23-5	Carbon Tetrachloride	1		U
156-59-2	cis-1,2-Dichloroethene	1		U
67-66-3	Chloroform	1		U
71-55-6	1,1,1-Trichloroethane	23		
108-87-2	Methylcyclohexane	1		U
71-43-2	Benzene	1		U
107-06-2	1,2-Dichloroethane	1		U
79-01-6	Trichloroethene	1		U
78-87-5	1,2-Dichloropropane	1		U
75-27-4	Bromodichloromethane	1		U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-4I

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-01Sample wt/vol: 5 (g/mL) ml Lab File ID: VH034948.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/27/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U
10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-14S

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-02Sample wt/vol: 5 (g/mL) ml Lab File ID: VH034949.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/27/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q
---------	----------	-----------------	------	---

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q
75-71-8	Dichlorodifluoromethane	1	U	
74-87-3	Chloromethane	1	U	
75-01-4	Vinyl Chloride	1	U	
74-83-9	Bromomethane	1	U	
75-00-3	Chloroethane	1	U	
75-69-4	Trichlorofluoromethane	1	U	
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	
75-35-4	1,1-Dichloroethene	1	U	
67-64-1	Acetone	16		
75-15-0	Carbon Disulfide	1	U	
1634-04-4	Methyl tert-butyl Ether	1	U	
79-20-9	Methyl Acetate	1	U	
75-09-2	Methylene Chloride	1	U	
156-60-5	trans-1,2-Dichloroethene	1	U	
75-34-3	1,1-Dichloroethane	0.64	J	
110-82-7	Cyclohexane	1	U	
78-93-3	2-Butanone	5	U	
56-23-5	Carbon Tetrachloride	1	U	
156-59-2	cis-1,2-Dichloroethene	1	U	
67-66-3	Chloroform	1	U	
71-55-6	1,1,1-Trichloroethane	16		
108-87-2	Methylcyclohexane	1	U	
71-43-2	Benzene	1	U	
107-06-2	1,2-Dichloroethane	1	U	
79-01-6	Trichloroethene	1	U	
78-87-5	1,2-Dichloropropane	1	U	
75-27-4	Bromodichloromethane	1	U	
108-10-1	4-Methyl-2-Pentanone	5	U	
108-88-3	Toluene	1	U	

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-14S

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-02Sample wt/vol: 5 (g/mL) ml Lab File ID: VH034949.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/27/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-14I

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-03Sample wt/vol: 5 (g/mL) ml Lab File ID: VH034950.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/27/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	2.1	
67-64-1	Acetone	17	
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	3.2	
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	82	
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-14I

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-03Sample wt/vol: 5 (g/mL) ml Lab File ID: VH034950.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/27/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-14D

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-04Sample wt/vol: 5 (g/mL) ml Lab File ID: VH034951.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/27/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	18	
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	9.1	
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-14D

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-04Sample wt/vol: 5 (g/mL) mlLab File ID: VH034951.D

Level: (low/med) \_\_\_\_\_

Date Received: 03/26/10% Moisture: not dec. 100Date Analyzed: 03/27/10GC Column: RTX-VMS ID: 0.18 (mm)Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-15

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-05Sample wt/vol: 5 (g/mL) ml Lab File ID: VH034952.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/27/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	2.7	
67-64-1	Acetone	15	
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	4.1	
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	97	
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-15

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-05Sample wt/vol: 5 (g/mL) ml Lab File ID: VH034952.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/27/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-5S

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-06Sample wt/vol: 5 (g/mL) ml Lab File ID: VH034943.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/27/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q
---------	----------	-----------------	------	---

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q
75-71-8	Dichlorodifluoromethane	1		U
74-87-3	Chloromethane	1		U
75-01-4	Vinyl Chloride	1		U
74-83-9	Bromomethane	1		U
75-00-3	Chloroethane	1		U
75-69-4	Trichlorofluoromethane	1		U
76-13-1	1,1,2-Trichlorotrifluoroethane	1		U
75-35-4	1,1-Dichloroethene	1		U
67-64-1	Acetone	18		
75-15-0	Carbon Disulfide	1		U
1634-04-4	Methyl tert-butyl Ether	1		U
79-20-9	Methyl Acetate	1		U
75-09-2	Methylene Chloride	1		U
156-60-5	trans-1,2-Dichloroethene	1		U
75-34-3	1,1-Dichloroethane	1		U
110-82-7	Cyclohexane	1		U
78-93-3	2-Butanone	5		U
56-23-5	Carbon Tetrachloride	1		U
156-59-2	cis-1,2-Dichloroethene	1		U
67-66-3	Chloroform	1		U
71-55-6	1,1,1-Trichloroethane	7.4		
108-87-2	Methylcyclohexane	1		U
71-43-2	Benzene	1		U
107-06-2	1,2-Dichloroethane	1		U
79-01-6	Trichloroethene	1		U
78-87-5	1,2-Dichloropropane	1		U
75-27-4	Bromodichloromethane	1		U
108-10-1	4-Methyl-2-Pentanone	5		U
108-88-3	Toluene	1		U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-5S

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-06Sample wt/vol: 5 (g/mL) ml Lab File ID: VH034943.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/27/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-5I

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-07Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035000.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	15	
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	2.3	
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	8.6	
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	32	
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	0.63	J

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-5I

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-07Sample wt/vol: 5 (g/mL) mlLab File ID: VH035000.D

Level: (low/med) \_\_\_\_\_

Date Received: 03/26/10% Moisture: not dec. 100Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm)Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U



-1E-

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TW-5I

Lab Name: Chemtech Contract: MALC02  
Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718  
Matrix (soil/water): WATER Lab Sample ID: B1718-07  
Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035000.D  
Level: (low/med) LOW Date Received: 03/26/10  
% Moisture: not dec. 100 Date Analyzed: 03/29/10  
GC Column: RTX-VM<sub>5</sub> ID: 0.18 Dilution Factor: 1  
Soil Extract Volume: 5000 Soil Aliquot Volume: \_\_\_\_\_  
Number TICS found: 2 Concentration Units: ug/L  
(ug/L or ug/Kg)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
87-68-3	Hexachlorobutadiene	11.33	1.4	J
87-61-6	1,2,3-Trichlorobenzene	11.72	0.67	J

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-5D

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-08Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035001.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	17	
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	28	
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-5D

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-08Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035001.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-3D

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-09Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035002.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	13	
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	0.76	J
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-3D

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-09Sample wt/vol: 5 (g/mL) mlLab File ID: VH035002.D

Level: (low/med) \_\_\_\_\_

Date Received: 03/26/10% Moisture: not dec. 100Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm)Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-X

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-10Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035003.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q
---------	----------	-----------------	------	---

75-71-8	Dichlorodifluoromethane	1		U
74-87-3	Chloromethane	1		U
75-01-4	Vinyl Chloride	1		U
74-83-9	Bromomethane	1		U
75-00-3	Chloroethane	1		U
75-69-4	Trichlorofluoromethane	1		U
76-13-1	1,1,2-Trichlorotrifluoroethane	1		U
75-35-4	1,1-Dichloroethene	1		U
67-64-1	Acetone	15		
75-15-0	Carbon Disulfide	1		U
1634-04-4	Methyl tert-butyl Ether	1		U
79-20-9	Methyl Acetate	1		U
75-09-2	Methylene Chloride	1		U
156-60-5	trans-1,2-Dichloroethene	1		U
75-34-3	1,1-Dichloroethane	2.1		
110-82-7	Cyclohexane	1		U
78-93-3	2-Butanone	5		U
56-23-5	Carbon Tetrachloride	1		U
156-59-2	cis-1,2-Dichloroethene	1		U
67-66-3	Chloroform	1		U
71-55-6	1,1,1-Trichloroethane	7.8		
108-87-2	Methylcyclohexane	1		U
71-43-2	Benzene	28		
107-06-2	1,2-Dichloroethane	1		U
79-01-6	Trichloroethene	1		U
78-87-5	1,2-Dichloropropane	1		U
75-27-4	Bromodichloromethane	1		U
108-10-1	4-Methyl-2-Pentanone	5		U
108-88-3	Toluene	0.65		J

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-X

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-10Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035003.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-3I

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-11Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035004.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	13	
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-3I

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-11Sample wt/vol: 5 (g/mL) mlLab File ID: VH035004.D

Level: (low/med) \_\_\_\_\_

Date Received: 03/26/10% Moisture: not dec. 100Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm)Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-3S

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-12Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035005.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	14	
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	6.2	
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1.1	
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-3S

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-12Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035005.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-7S

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-13Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035006.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	12	
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	6.8	
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-7S

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-13Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035006.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-7I

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-14Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035007.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	17	
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	2.2	
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-7I

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-14Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035007.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-7D

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-15Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035008.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q
---------	----------	-----------------	------	---

75-71-8	Dichlorodifluoromethane	1		U
74-87-3	Chloromethane	1		U
75-01-4	Vinyl Chloride	1		U
74-83-9	Bromomethane	1		U
75-00-3	Chloroethane	1		U
75-69-4	Trichlorofluoromethane	1		U
76-13-1	1,1,2-Trichlorotrifluoroethane	1		U
75-35-4	1,1-Dichloroethene	1		U
67-64-1	Acetone	18		
75-15-0	Carbon Disulfide	1		U
1634-04-4	Methyl tert-butyl Ether	1		U
79-20-9	Methyl Acetate	1		U
75-09-2	Methylene Chloride	1		U
156-60-5	trans-1,2-Dichloroethene	1		U
75-34-3	1,1-Dichloroethane	1		U
110-82-7	Cyclohexane	1		U
78-93-3	2-Butanone	5		U
56-23-5	Carbon Tetrachloride	1		U
156-59-2	cis-1,2-Dichloroethene	1		U
67-66-3	Chloroform	1		U
71-55-6	1,1,1-Trichloroethane	5.2		
108-87-2	Methylcyclohexane	1		U
71-43-2	Benzene	1		U
107-06-2	1,2-Dichloroethane	1		U
79-01-6	Trichloroethene	1		U
78-87-5	1,2-Dichloropropane	1		U
75-27-4	Bromodichloromethane	1		U
108-10-1	4-Methyl-2-Pentanone	5		U
108-88-3	Toluene	1		U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-7D

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-15Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035008.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-9I

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-16Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035009.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q
---------	----------	-----------------	------	---

75-71-8	Dichlorodifluoromethane	1		U
74-87-3	Chloromethane	1		U
75-01-4	Vinyl Chloride	1		U
74-83-9	Bromomethane	1		U
75-00-3	Chloroethane	1		U
75-69-4	Trichlorofluoromethane	1		U
76-13-1	1,1,2-Trichlorotrifluoroethane	1		U
75-35-4	1,1-Dichloroethene	1		U
67-64-1	Acetone	14		
75-15-0	Carbon Disulfide	1		U
1634-04-4	Methyl tert-butyl Ether	1		U
79-20-9	Methyl Acetate	1		U
75-09-2	Methylene Chloride	1		U
156-60-5	trans-1,2-Dichloroethene	1		U
75-34-3	1,1-Dichloroethane	1		U
110-82-7	Cyclohexane	1		U
78-93-3	2-Butanone	5		U
56-23-5	Carbon Tetrachloride	1		U
156-59-2	cis-1,2-Dichloroethene	1		U
67-66-3	Chloroform	1		U
71-55-6	1,1,1-Trichloroethane	4.3		
108-87-2	Methylcyclohexane	1		U
71-43-2	Benzene	1		U
107-06-2	1,2-Dichloroethane	1		U
79-01-6	Trichloroethene	1		U
78-87-5	1,2-Dichloropropane	1		U
75-27-4	Bromodichloromethane	1		U
108-10-1	4-Methyl-2-Pentanone	5		U
108-88-3	Toluene	1		U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-9I

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-16Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035009.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-9D

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-17Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035010.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	13	
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-9D

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-17Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035010.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-6S

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-18Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035011.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q
---------	----------	-----------------	------	---

75-71-8	Dichlorodifluoromethane	1		U
74-87-3	Chloromethane	1		U
75-01-4	Vinyl Chloride	1		U
74-83-9	Bromomethane	1		U
75-00-3	Chloroethane	1		U
75-69-4	Trichlorofluoromethane	1		U
76-13-1	1,1,2-Trichlorotrifluoroethane	1		U
75-35-4	1,1-Dichloroethene	1		U
67-64-1	Acetone	15		
75-15-0	Carbon Disulfide	1		U
1634-04-4	Methyl tert-butyl Ether	1		U
79-20-9	Methyl Acetate	1		U
75-09-2	Methylene Chloride	1		U
156-60-5	trans-1,2-Dichloroethene	1		U
75-34-3	1,1-Dichloroethane	1		U
110-82-7	Cyclohexane	1		U
78-93-3	2-Butanone	5		U
56-23-5	Carbon Tetrachloride	1		U
156-59-2	cis-1,2-Dichloroethene	1		U
67-66-3	Chloroform	1.1		
71-55-6	1,1,1-Trichloroethane	1		U
108-87-2	Methylcyclohexane	1		U
71-43-2	Benzene	1		U
107-06-2	1,2-Dichloroethane	1		U
79-01-6	Trichloroethene	1		U
78-87-5	1,2-Dichloropropane	1		U
75-27-4	Bromodichloromethane	1		U
108-10-1	4-Methyl-2-Pentanone	5		U
108-88-3	Toluene	1		U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-6S

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-18Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035011.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-6I

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-19Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035012.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	18	
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	0.99	J
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-6I

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-19Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035012.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-6D

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-20Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035013.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	9.5	
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-6D

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-20Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035013.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-12I

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-21Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035014.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	21	
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-12I

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-21Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035014.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-12D

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-22Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035015.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	13	
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-12D

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-22Sample wt/vol: 5 (g/mL) ml Lab File ID: VH035015.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-23Sample wt/vol: 5 (g/mL) ml Lab File ID: VH034944.DLevel: (low/med) Date Received: 03/26/10% Moisture: not dec. Date Analyzed: 03/27/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/L	Q
---------	----------	-----------------	------	---

75-71-8	Dichlorodifluoromethane	1		U
74-87-3	Chloromethane	1		U
75-01-4	Vinyl Chloride	1		U
74-83-9	Bromomethane	1		U
75-00-3	Chloroethane	1		U
75-69-4	Trichlorofluoromethane	1		U
76-13-1	1,1,2-Trichlorotrifluoroethane	1		U
75-35-4	1,1-Dichloroethene	1		U
67-64-1	Acetone	5		U
75-15-0	Carbon Disulfide	1		U
1634-04-4	Methyl tert-butyl Ether	1		U
79-20-9	Methyl Acetate	1		U
75-09-2	Methylene Chloride	1		U
156-60-5	trans-1,2-Dichloroethene	1		U
75-34-3	1,1-Dichloroethane	1		U
110-82-7	Cyclohexane	1		U
78-93-3	2-Butanone	5		U
56-23-5	Carbon Tetrachloride	1		U
156-59-2	cis-1,2-Dichloroethene	1		U
67-66-3	Chloroform	1		U
71-55-6	1,1,1-Trichloroethane	1		U
108-87-2	Methylcyclohexane	1		U
71-43-2	Benzene	1		U
107-06-2	1,2-Dichloroethane	1		U
79-01-6	Trichloroethene	1		U
78-87-5	1,2-Dichloropropane	1		U
75-27-4	Bromodichloromethane	1		U
108-10-1	4-Methyl-2-Pentanone	5		U
108-88-3	Toluene	1		U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: B1718-23Sample wt/vol: 5 (g/mL) ml Lab File ID: VH034944.DLevel: (low/med) \_\_\_\_\_ Date Received: 03/26/10% Moisture: not dec. 100 Date Analyzed: 03/27/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U



**Hit Summary Sheet**  
**SW-846**

SDG No.: B1718

Client: Malcolm Pirnie, Inc.

Sample ID	Client ID		Parameter	Concentration	C	RDL	MDL	Units
<b>Client ID:</b>	<b>MW-X</b>							
B1718-10	MW-X	WATER	Acetone	15.00		5.0	2.8	ug/L
B1718-10	MW-X	WATER	1,1-Dichloroethane	2.10		1.0	0.36	ug/L
B1718-10	MW-X	WATER	1,1,1-Trichloroethane	7.80		1.0	0.40	ug/L
B1718-10	MW-X	WATER	Benzene	28.00		1.0	0.32	ug/L
B1718-10	MW-X	WATER	Toluene	0.65	J	1.0	0.37	ug/L
			<b>Total Voc :</b>	<b>53.55</b>				
			<b>Total Concentration:</b>	<b>53.55</b>				
<b>Client ID:</b>	<b>TW-12D</b>							
B1718-22	TW-12D	WATER	Acetone	13.00		5.0	2.8	ug/L
			<b>Total Voc :</b>	<b>13.00</b>				
			<b>Total Concentration:</b>	<b>13.00</b>				
<b>Client ID:</b>	<b>TW-12I</b>							
B1718-21	TW-12I	WATER	Acetone	21.00		5.0	2.8	ug/L
			<b>Total Voc :</b>	<b>21.00</b>				
			<b>Total Concentration:</b>	<b>21.00</b>				
<b>Client ID:</b>	<b>TW-14D</b>							
B1718-04	TW-14D	WATER	Acetone	18.00		5.0	2.8	ug/L
B1718-04	TW-14D	WATER	1,1,1-Trichloroethane	9.10		1.0	0.40	ug/L
			<b>Total Voc :</b>	<b>27.10</b>				
			<b>Total Concentration:</b>	<b>27.10</b>				
<b>Client ID:</b>	<b>TW-14I</b>							
B1718-03	TW-14I	WATER	1,1-Dichloroethene	2.10		1.0	0.47	ug/L
B1718-03	TW-14I	WATER	Acetone	17.00		5.0	2.8	ug/L
B1718-03	TW-14I	WATER	1,1-Dichloroethane	3.20		1.0	0.36	ug/L
B1718-03	TW-14I	WATER	1,1,1-Trichloroethane	82.00		1.0	0.40	ug/L
			<b>Total Voc :</b>	<b>104.30</b>				
			<b>Total Concentration:</b>	<b>104.30</b>				
<b>Client ID:</b>	<b>TW-14S</b>							
B1718-02	TW-14S	WATER	Acetone	16.00		5.0	2.8	ug/L
B1718-02	TW-14S	WATER	1,1-Dichloroethane	0.64	J	1.0	0.36	ug/L
B1718-02	TW-14S	WATER	1,1,1-Trichloroethane	16.00		1.0	0.40	ug/L
			<b>Total Voc :</b>	<b>32.64</b>				
			<b>Total Concentration:</b>	<b>32.64</b>				
<b>Client ID:</b>	<b>TW-15</b>							
B1718-05	TW-15	WATER	1,1-Dichloroethene	2.70		1.0	0.47	ug/L
B1718-05	TW-15	WATER	Acetone	15.00		5.0	2.8	ug/L
B1718-05	TW-15	WATER	1,1-Dichloroethane	4.10		1.0	0.36	ug/L
B1718-05	TW-15	WATER	1,1,1-Trichloroethane	97.00		1.0	0.40	ug/L
			<b>Total Voc :</b>	<b>118.80</b>				
			<b>Total Concentration:</b>	<b>118.80</b>				
<b>Client ID:</b>	<b>TW-3D</b>							

**Hit Summary Sheet  
SW-846**SDG No.: B1718Client: Malcolm Pirnie, Inc.

Sample ID	Client ID	Parameter	Concentration	C	RDL	MDL	Units	
B1718-09	TW-3D	WATER	Acetone	13.00	5.0	2.8	ug/L	
B1718-09	TW-3D	WATER	Benzene	0.76	J	1.0	0.32	ug/L
<b>Total Voc :</b>				<b>13.76</b>				
<b>Total Concentration:</b>				<b>13.76</b>				
<b>Client ID:</b>	<b>TW-3I</b>							
B1718-11	TW-3I	WATER	Acetone	13.00	5.0	2.8	ug/L	
<b>Total Voc :</b>				<b>13.00</b>				
<b>Total Concentration:</b>				<b>13.00</b>				
<b>Client ID:</b>	<b>TW-3S</b>							
B1718-12	TW-3S	WATER	Acetone	14.00	5.0	2.8	ug/L	
B1718-12	TW-3S	WATER	1,1,1-Trichloroethane	6.20	1.0	0.40	ug/L	
B1718-12	TW-3S	WATER	Benzene	1.10	1.0	0.32	ug/L	
<b>Total Voc :</b>				<b>21.30</b>				
<b>Total Concentration:</b>				<b>21.30</b>				
<b>Client ID:</b>	<b>TW-4I</b>							
B1718-01	TW-4I	WATER	Acetone	18.00	5.0	2.8	ug/L	
B1718-01	TW-4I	WATER	1,1-Dichloroethane	2.50	1.0	0.36	ug/L	
B1718-01	TW-4I	WATER	1,1,1-Trichloroethane	23.00	1.0	0.40	ug/L	
<b>Total Voc :</b>				<b>43.50</b>				
<b>Total Concentration:</b>				<b>43.50</b>				
<b>Client ID:</b>	<b>TW-5D</b>							
B1718-08	TW-5D	WATER	Acetone	17.00	5.0	2.8	ug/L	
B1718-08	TW-5D	WATER	1,1,1-Trichloroethane	28.00	1.0	0.40	ug/L	
<b>Total Voc :</b>				<b>45.00</b>				
<b>Total Concentration:</b>				<b>45.00</b>				
<b>Client ID:</b>	<b>TW-5I</b>							
B1718-07	TW-5I	WATER	Acetone	15.00	5.0	2.8	ug/L	
B1718-07	TW-5I	WATER	1,1-Dichloroethane	2.30	1.0	0.36	ug/L	
B1718-07	TW-5I	WATER	1,1,1-Trichloroethane	8.60	1.0	0.40	ug/L	
B1718-07	TW-5I	WATER	Benzene	32.00	1.0	0.32	ug/L	
B1718-07	TW-5I	WATER	Toluene	0.63	J	1.0	0.37	ug/L
<b>Total Voc :</b>				<b>58.53</b>				
B1718-07	TW-5I	WATER	Hexachlorobutadiene	* 1.40	J	1.0	1.0	ug/L
B1718-07	TW-5I	WATER	1,2,3-Trichlorobenzene	* 0.67	J	1.0	0.65	ug/L
<b>Total Tics :</b>				<b>2.07</b>				
<b>Total Concentration:</b>				<b>60.60</b>				
<b>Client ID:</b>	<b>TW-5S</b>							
B1718-06	TW-5S	WATER	Acetone	18.00	5.0	2.8	ug/L	
B1718-06	TW-5S	WATER	1,1,1-Trichloroethane	7.40	1.0	0.40	ug/L	
<b>Total Voc :</b>				<b>25.40</b>				
<b>Total Concentration:</b>				<b>25.40</b>				
<b>Client ID:</b>	<b>TW-6D</b>							

**Hit Summary Sheet  
SW-846**SDG No.: B1718Client: Malcolm Pirnie, Inc.

Sample ID	Client ID	Parameter	Concentration	C	RDL	MDL	Units
B1718-20	TW-6D	WATER Acetone	9.50		5.0	2.8	ug/L
		Total Voc :	<b>9.50</b>				
		Total Concentration:	<b>9.50</b>				
<b>Client ID:</b>	<b>TW-6I</b>						
B1718-19	TW-6I	WATER Acetone	18.00		5.0	2.8	ug/L
B1718-19	TW-6I	WATER Benzene	0.99	J	1.0	0.32	ug/L
		Total Voc :	<b>18.99</b>				
		Total Concentration:	<b>18.99</b>				
<b>Client ID:</b>	<b>TW-6S</b>						
B1718-18	TW-6S	WATER Acetone	15.00		5.0	2.8	ug/L
B1718-18	TW-6S	WATER Chloroform	1.10		1.0	0.34	ug/L
		Total Voc :	<b>16.10</b>				
		Total Concentration:	<b>16.10</b>				
<b>Client ID:</b>	<b>TW-7D</b>						
B1718-15	TW-7D	WATER Acetone	18.00		5.0	2.8	ug/L
B1718-15	TW-7D	WATER 1,1,1-Trichloroethane	5.20		1.0	0.40	ug/L
		Total Voc :	<b>23.20</b>				
		Total Concentration:	<b>23.20</b>				
<b>Client ID:</b>	<b>TW-7I</b>						
B1718-14	TW-7I	WATER Acetone	17.00		5.0	2.8	ug/L
B1718-14	TW-7I	WATER 1,1,1-Trichloroethane	2.20		1.0	0.40	ug/L
		Total Voc :	<b>19.20</b>				
		Total Concentration:	<b>19.20</b>				
<b>Client ID:</b>	<b>TW-7S</b>						
B1718-13	TW-7S	WATER Acetone	12.00		5.0	2.8	ug/L
B1718-13	TW-7S	WATER 1,1,1-Trichloroethane	6.80		1.0	0.40	ug/L
		Total Voc :	<b>18.80</b>				
		Total Concentration:	<b>18.80</b>				
<b>Client ID:</b>	<b>TW-9D</b>						
B1718-17	TW-9D	WATER Acetone	13.00		5.0	2.8	ug/L
		Total Voc :	<b>13.00</b>				
		Total Concentration:	<b>13.00</b>				
<b>Client ID:</b>	<b>TW-9I</b>						
B1718-16	TW-9I	WATER Acetone	14.00		5.0	2.8	ug/L
B1718-16	TW-9I	WATER 1,1,1-Trichloroethane	4.30		1.0	0.40	ug/L
		Total Voc :	<b>18.30</b>				
		Total Concentration:	<b>18.30</b>				

-2A-

**WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY**

Lab Name: **CHEMTECH**Contract: **MALC02**Lab Code: **CHEM**CASE No.: **B1718**SAS No.: **B1718**SDG NO.: **B1718**

	EPA Sample NO.	SMC1 (DCE) #	SMC2 (DBFM) #	SMC3 (TOL) #	SMC4 (BFB) #	TOT OUT
01	VBH0327W2	104	106	106	105	0
02	BSH0327W1	109	109	104	100	0
03	BSH0327W2	108	105	107	99	0
04	TW-5S	106	112	101	102	0
05	TRIPBLANK	108	106	104	101	0
06	TW-4I	102	113	103	101	0
07	TW-14S	106	110	100	104	0
08	TW-14I	105	106	103	104	0
09	TW-14D	105	115	103	104	0
10	TW-15	107	111	106	108	0
11	VBH0329W2	112	107	105	103	0
12	BSH0329W1	115	108	106	100	0
13	TW-5I	110	110	103	101	0
14	TW-5D	112	111	107	106	0
15	TW-3D	115	107	104	101	0
16	MW-X	111	113	101	99	0
17	TW-3I	111	109	103	104	0
18	TW-3S	113	114	105	99	0
19	TW-7S	114	109	102	100	0
20	TW-7I	118	114	103	100	0
21	TW-7D	120	113	103	100	0

**QC LIMITS**

SMC1 (DCE) = 1,2-Dichloroethane-d4 (66-150)

SMC2 (DBFM) =Dibromofluoromethane (76-130)

SMC3 (TOL) =Toluene-d8 (78-121)

SMC4 (BFB) =4-Bromofluorobenzene (70-131)

# Column to be used to flag recovery values

\* Values outside of contract required QC Limits

**WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY**Lab Name: CHEMTECHContract: MALC02Lab Code: CHEMCASE No.: B1718SAS No.: B1718SDG NO.: B1718

22	TW-9I	118	111	103	102	0
23	TW-9D	114	115	107	105	0
24	TW-6S	120	118	108	103	0
25	TW-6I	119	114	103	101	0
26	TW-6D	118	114	106	102	0
27	TW-12I	118	114	104	101	0
28	TW-12D	117	113	104	104	0

**QC LIMITS**

SMC1 (DCE) = 1,2-Dichloroethane-d4 (66-150)

SMC2 (DBFM) =Dibromofluoromethane (76-130)

SMC3 (TOL) =Toluene-d8 (78-121)

SMC4 (BFB) =4-Bromofluorobenzene (70-131)

# Column to be used to flag recovery values

\* Values outside of contract required QC Limits

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1718 SAS No : B1718 SDG No: B1718Matrix Spike - EPA Sample No : BSH0327W1

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC REC
Dichlorodifluoromethane	20		17	85	(35-124)
Chloromethane	20		21	105	(40-125)
Vinyl Chloride	20		22	110	(50-144)
Bromomethane	20		21	105	(44-145)
Chloroethane	20		20	100	(60-135)
Trichlorofluoromethane	20		20	100	(60-137)
1,1,2-Trichlorotrifluoroethane	20		21	105	(52-142)
1,1-Dichloroethene	20		21	105	(70-130)
Acetone	100		120	120	(50-140)
Carbon Disulfide	20		22	110	(36-155)
Methyl tert-butyl Ether	20		22	110	(65-125)
Methyl Acetate	20		32	160*	(51-158)
Methylene Chloride	20		23	115	(61-138)
trans-1,2-Dichloroethene	20		22	110	(60-137)
1,1-Dichloroethane	20		23	115	(70-135)
Cyclohexane	20		22	110	(56-141)
2-Butanone	100		120	120	(56-150)
Carbon Tetrachloride	20		21	105	(65-138)
cis-1,2-Dichloroethene	20		23	115	(70-125)
Chloroform	20		23	115	(67-135)
1,1,1-Trichloroethane	20		22	110	(65-130)
Methylcyclohexane	20		19	95	(56-137)
Benzene	20		21	105	(80-120)
1,2-Dichloroethane	20		20	100	(70-130)
Trichloroethene	20		22	110	(70-125)
1,2-Dichloropropane	20		21	105	(75-125)
Bromodichloromethane	20		21	105	(75-120)
4-Methyl-2-Pentanone	100		120	120	(63-135)
Toluene	20		21	105	(75-120)
t-1,3-Dichloropropene	20		20	100	(66-135)
cis-1,3-Dichloropropene	20		21	105	(70-130)
1,1,2-Trichloroethane	20		20	100	(75-125)
2-Hexanone	100		140	140*	(56-130)
Dibromochloromethane	20		20	100	(64-135)

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

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 2 Out of 78 outside limits

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

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1718 SAS No : B1718 SDG No: B1718Matrix Spike - EPA Sample No : BSH0327W1

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC LIMITS REC
1,2-Dibromoethane	20		21	105	(80-120)
Tetrachloroethene	20		27	135	(45-178)
Chlorobenzene	20		20	100	(80-120)
Ethyl Benzene	20		19	95	(75-125)
m/p-Xylenes	40		40	100	(75-130)
o-Xylene	20		20	100	(80-120)
Styrene	20		20	100	(65-135)
Bromoform	20		19	95	(70-130)
Isopropylbenzene	20		20	100	(75-125)
1,1,2,2-Tetrachloroethane	20		21	105	(65-130)
1,3-Dichlorobenzene	20		21	105	(75-125)
1,4-Dichlorobenzene	20		20	100	(75-125)
1,2-Dichlorobenzene	20		20	100	(70-120)
1,2-Dibromo-3-Chloropropane	20		20	100	(54-130)
1,2,4-Trichlorobenzene	20		17	85	(65-133)

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

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 2 Out of 78 outside limits

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

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1718 SAS No : B1718 SDG No: B1718Matrix Spike - EPA Sample No : BSH0327W2

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD		QC LIMITS	
			% REC #	% RPD #	RPD	REC
Dichlorodifluoromethane	20	16	80	6	20	(35-124)
Chloromethane	20	20	100	5	20	(40-125)
Vinyl Chloride	20	22	110	0	20	(50-144)
Bromomethane	20	20	100	5	20	(44-145)
Chloroethane	20	19	95	5	20	(60-135)
Trichlorofluoromethane	20	19	95	5	20	(60-137)
1,1,2-Trichlorotrifluoroethane	20	20	100	5	20	(52-142)
1,1-Dichloroethene	20	20	100	5	20	(70-130)
Acetone	100	140	140	15	20	(50-140)
Carbon Disulfide	20	21	105	5	20	(36-155)
Methyl tert-butyl Ether	20	22	110	0	20	(65-125)
Methyl Acetate	20	28	140	13	20	(51-158)
Methylene Chloride	20	22	110	4	20	(61-138)
trans-1,2-Dichloroethene	20	22	110	0	20	(60-137)
1,1-Dichloroethane	20	23	115	0	20	(70-135)
Cyclohexane	20	21	105	5	20	(56-141)
2-Butanone	100	120	120	0	20	(56-150)
Carbon Tetrachloride	20	20	100	5	20	(65-138)
cis-1,2-Dichloroethene	20	23	115	0	20	(70-125)
Chloroform	20	23	115	0	20	(67-135)
1,1,1-Trichloroethane	20	20	100	10	20	(65-130)
Methylcyclohexane	20	19	95	0	20	(56-137)
Benzene	20	21	105	0	20	(80-120)
1,2-Dichloroethane	20	21	105	5	20	(70-130)
Trichloroethene	20	21	105	5	20	(70-125)
1,2-Dichloropropane	20	22	110	5	20	(75-125)
Bromodichloromethane	20	21	105	0	20	(75-120)
4-Methyl-2-Pentanone	100	120	120	0	20	(63-135)
Toluene	20	21	105	0	20	(75-120)
t-1,3-Dichloropropene	20	21	105	5	20	(66-135)
cis-1,3-Dichloropropene	20	21	105	0	20	(70-130)
1,1,2-Trichloroethane	20	21	105	5	20	(75-125)
2-Hexanone	100	140	140*	0	20	(56-130)
Dibromochloromethane	20	21	105	5	20	(64-135)

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

\* Values outside of QC limits

RPD : 0 Out of 78 outside limits

Spike Recovery : 2 Out of 78 outside limits

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

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1718 SAS No : B1718 SDG No: B1718Matrix Spike - EPA Sample No : BSH0327W2

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD		QC LIMITS	
			% REC #	% RPD #	RPD	REC
1,2-Dibromoethane	20	22	110	5	20	(80-120)
Tetrachloroethene	20	28	140	4	20	(45-178)
Chlorobenzene	20	20	100	0	20	(80-120)
Ethyl Benzene	20	20	100	5	20	(75-125)
m/p-Xylenes	40	39	98	2	20	(75-130)
o-Xylene	20	19	95	5	20	(80-120)
Styrene	20	21	105	5	20	(65-135)
Bromoform	20	19	95	0	20	(70-130)
Isopropylbenzene	20	20	100	0	20	(75-125)
1,1,2,2-Tetrachloroethane	20	21	105	0	20	(65-130)
1,3-Dichlorobenzene	20	21	105	0	20	(75-125)
1,4-Dichlorobenzene	20	20	100	0	20	(75-125)
1,2-Dichlorobenzene	20	21	105	5	20	(70-120)
1,2-Dibromo-3-Chloropropane	20	21	105	5	20	(54-130)
1,2,4-Trichlorobenzene	20	19	95	11	20	(65-133)

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

\* Values outside of QC limits

RPD : 0 Out of 78 outside limits

Spike Recovery : 2 Out of 78 outside limits

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

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1718 SAS No : B1718 SDG No: B1718Matrix Spike - EPA Sample No : BSH0329W1

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS QC % LIMITS REC# REC
Dichlorodifluoromethane	20		16	80 (35-124)
Chloromethane	20		21	105 (37-148)
Vinyl Chloride	20		21	105 (45-144)
Bromomethane	20		20	100 (44-146)
Chloroethane	20		20	100 (46-148)
Trichlorofluoromethane	20		19	95 (56-137)
1,1,2-Trichlorotrifluoroethane	20		21	105 (52-142)
1,1-Dichloroethene	20		21	105 (57-135)
Acetone	100		120	120 (50-149)
Carbon Disulfide	20		21	105 (36-155)
Methyl tert-butyl Ether	20		22	110 (60-144)
Methyl Acetate	20		27	135 (51-158)
Methylene Chloride	20		21	105 (61-138)
trans-1,2-Dichloroethene	20		21	105 (59-137)
1,1-Dichloroethane	20		22	110 (64-142)
Cyclohexane	20		21	105 (56-141)
2-Butanone	100		120	120 (56-152)
Carbon Tetrachloride	20		20	100 (59-138)
cis-1,2-Dichloroethene	20		22	110 (64-137)
Chloroform	20		22	110 (67-138)
1,1,1-Trichloroethane	20		20	100 (65-132)
Methylcyclohexane	20		17	85 (56-137)
Benzene	20		19	95 (66-135)
1,2-Dichloroethane	20		20	100 (65-137)
Trichloroethene	20		19	95 (65-134)
1,2-Dichloropropane	20		20	100 (68-137)
Bromodichloromethane	20		20	100 (67-134)
4-Methyl-2-Pentanone	100		120	120 (63-146)
Toluene	20		19	95 (67-133)
t-1,3-Dichloropropene	20		20	100 (66-135)
cis-1,3-Dichloropropene	20		20	100 (66-132)
1,1,2-Trichloroethane	20		19	95 (67-136)
2-Hexanone	100		130	130 (56-153)
Dibromochloromethane	20		19	95 (64-137)

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

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 0 Out of 78 outside limits

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

## WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: MALC02Lab Code: CHEM Cas No: B1718 SAS No : B1718 SDG No: B1718Matrix Spike - EPA Sample No : BSH0329W1

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC LIMITS REC
1,2-Dibromoethane	20		20	100	(66-137)
Tetrachloroethene	20		24	120	(37-178)
Chlorobenzene	20		19	95	(67-133)
Ethyl Benzene	20		18	90	(66-133)
m/p-Xylenes	40		36	90	(65-134)
o-Xylene	20		18	90	(65-134)
Styrene	20		18	90	(65-136)
Bromoform	20		17	85	(56-157)
Isopropylbenzene	20		19	95	(66-133)
1,1,2,2-Tetrachloroethane	20		20	100	(63-136)
1,3-Dichlorobenzene	20		20	100	(66-131)
1,4-Dichlorobenzene	20		19	95	(65-131)
1,2-Dichlorobenzene	20		19	95	(66-132)
1,2-Dibromo-3-Chloropropane	20		20	100	(54-141)
1,2,4-Trichlorobenzene	20		17	85	(61-133)

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

\* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 0 Out of 78 outside limits

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

4A

## VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBH0327W2

Lab Name: CHEMTECHContract: MALC02Lab Code: CHEM Case No.: B1718SAS No.: B1718 SDG No.: B1718Lab File ID: VH034940.DLab Sample ID: VBH0327W2Date Analyzed: 03/27/2010Time Analyzed: 15:34GC Column: RTX-VMS ID: 0.18 (mm)Heated Purge: (Y/N) NInstrument ID: MSVOAH

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BSH0327W1	BSH0327W1	VH034941.D	03/27/2010
BSH0327W2	BSH0327W2	VH034942.D	03/27/2010
TW-5S	B1718-06	VH034943.D	03/27/2010
TRIPBLANK	B1718-23	VH034944.D	03/27/2010
TW-4I	B1718-01	VH034948.D	03/27/2010
TW-14S	B1718-02	VH034949.D	03/27/2010
TW-14I	B1718-03	VH034950.D	03/27/2010
TW-14D	B1718-04	VH034951.D	03/27/2010
TW-15	B1718-05	VH034952.D	03/27/2010

COMMENTS:

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBH0327W2

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: VBH0327W2Sample wt/vol: 5 (g/mL) ml Lab File ID: VH034940.D

Level: (low/med) \_\_\_\_\_ Date Received: \_\_\_\_\_

% Moisture: not dec. 100 Date Analyzed: 03/27/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

## EPA SAMPLE NO.

VBH0327W2

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: VBH0327W2Sample wt/vol: 5 (g/mL) ml Lab File ID: VH034940.D

Level: (low/med) \_\_\_\_\_ Date Received: \_\_\_\_\_

% Moisture: not dec. 100 Date Analyzed: 03/27/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

## Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

4A

## VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBH0329W2

Lab Name: CHEMTECHContract: MALC02Lab Code: CHEMCase No.: B1718SAS No.: B1718 SDG No.: B1718Lab File ID: VH034997.DLab Sample ID: VBH0329W2Date Analyzed: 03/29/2010Time Analyzed: 10:49GC Column: RTX-VMS ID: 0.18 (mm)Heated Purge: (Y/N) NInstrument ID: MSVOAH

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BSH0329W1	BSH0329W1	VH034998.D	03/29/2010
TW-5I	B1718-07	VH035000.D	03/29/2010
TW-5D	B1718-08	VH035001.D	03/29/2010
TW-3D	B1718-09	VH035002.D	03/29/2010
MW-X	B1718-10	VH035003.D	03/29/2010
TW-3I	B1718-11	VH035004.D	03/29/2010
TW-3S	B1718-12	VH035005.D	03/29/2010
TW-7S	B1718-13	VH035006.D	03/29/2010
TW-7I	B1718-14	VH035007.D	03/29/2010
TW-7D	B1718-15	VH035008.D	03/29/2010
TW-9I	B1718-16	VH035009.D	03/29/2010
TW-9D	B1718-17	VH035010.D	03/29/2010
TW-6S	B1718-18	VH035011.D	03/29/2010
TW-6I	B1718-19	VH035012.D	03/29/2010
TW-6D	B1718-20	VH035013.D	03/29/2010
TW-12I	B1718-21	VH035014.D	03/29/2010
TW-12D	B1718-22	VH035015.D	03/29/2010

COMMENTS:

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBH0329W2

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: VBH0329W2Sample wt/vol: 5 (g/mL) ml Lab File ID: VH034997.D

Level: (low/med) \_\_\_\_\_ Date Received: \_\_\_\_\_

% Moisture: not dec. 100 Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
79-20-9	Methyl Acetate	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
110-82-7	Cyclohexane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
108-87-2	Methylcyclohexane	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBH0329W2

Lab Name: Chemtech Contract: MALC02Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG No.: B1718Matrix (soil/water): WATER Lab Sample ID: VBH0329W2Sample wt/vol: 5 (g/mL) ml Lab File ID: VH034997.D

Level: (low/med) \_\_\_\_\_ Date Received: \_\_\_\_\_

% Moisture: not dec. 100 Date Analyzed: 03/29/10GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U



8A

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: MALC02  
Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG NO.: B1718  
Lab File ID: VH034938.D Date Analyzed: 03/27/2010  
Instrument ID: MSVOAH Time Analyzed: 14:32  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	943906	3.21	2013166	3.68	1680182	6.86
	1887812	3.71	4026332	4.18	3360364	7.36
	471953	2.71	1006583	3.18	840091	6.36
EPA SAMPLE NO.						
TW-4I	786067	3.21	1666760	3.68	1446211	6.86
TW-14S	763654	3.22	1645354	3.68	1390867	6.86
TW-14I	793143	3.21	1662036	3.68	1403558	6.86
TW-14D	768983	3.21	1587464	3.67	1363889	6.86
TW-15	768537	3.22	1627876	3.67	1399241	6.86
TW-5S	734618	3.21	1546593	3.68	1285232	6.86
TRIPBLANK	642484	3.21	1412813	3.67	1197147	6.86
BSH0327W1	814908	3.22	1780128	3.68	1506135	6.86
BSH0327W2	821319	3.21	1721600	3.67	1498681	6.85
VBH0327W2	824843	3.21	1720884	3.68	1460612	6.86

IS1 = Pentafluorobenzene

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.



8A

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: MALC02  
Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG NO.: B1718  
Lab File ID: VH034938.D Date Analyzed: 03/27/2010  
Instrument ID: MSVOAH Time Analyzed: 14:32  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	798539	9.66				
UPPER LIMIT	1597078	10.16				
LOWER LIMIT	399269.5	9.16				
EPA SAMPLE NO.						
TW-4I	663619	9.65				
TW-14S	664518	9.65				
TW-14I	653867	9.65				
TW-14D	648131	9.65				
TW-15	678819	9.64				
TW-5S	622591	9.65				
TRIPBLANK	534057	9.65				
BSH0327W1	726195	9.65				
BSH0327W2	705159	9.65				
VBH0327W2	712353	9.65				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: MALC02  
Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG NO.: B1718  
Lab File ID: VH034995.D Date Analyzed: 03/29/2010  
Instrument ID: MSVOAH Time Analyzed: 09:48  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	875090	3.24	1978495	3.71	1746031	6.89
	1750180	3.74	3956990	4.21	3492062	7.39
	437545	2.74	989247.5	3.21	873015.5	6.39
EPA SAMPLE NO.						
TW-5I	607417	3.23	1359678	3.70	1131841	6.89
TW-5D	594493	3.24	1261365	3.70	1091951	6.89
TW-3D	606453	3.24	1337235	3.70	1104232	6.89
MW-X	631377	3.23	1413972	3.70	1191576	6.89
TW-3I	744134	3.23	1619492	3.70	1380720	6.89
TW-3S	743134	3.24	1600114	3.70	1381550	6.89
TW-7S	650105	3.24	1448873	3.70	1201918	6.89
TW-7I	588938	3.24	1337921	3.71	1131875	6.90
TW-7D	644400	3.24	1469161	3.71	1232462	6.90
TW-9I	667210	3.24	1522075	3.70	1264568	6.89
TW-9D	637205	3.24	1325178	3.70	1163265	6.89
TW-6S	674474	3.24	1515093	3.70	1308230	6.89
TW-6I	684675	3.24	1526790	3.71	1315341	6.89
TW-6D	689352	3.24	1544962	3.71	1318401	6.89
TW-12I	669923	3.24	1501197	3.70	1242279	6.89
TW-12D	674500	3.24	1527234	3.70	1322971	6.89
BSH0329W1	748484	3.23	1648057	3.70	1406313	6.89
VBH0329W2	777299	3.24	1723175	3.70	1450463	6.89

8A

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: MALC02  
Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG NO.: B1718  
Lab File ID: VH034995.D Date Analyzed: 03/29/2010  
Instrument ID: MSVOAH Time Analyzed: 09:48  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	875090	3.24	1978495	3.71	1746031	6.89
	1750180	3.74	3956990	4.21	3492062	7.39
	437545	2.74	989247.5	3.21	873015.5	6.39
EPA SAMPLE NO.						

IS1 = Pentafluorobenzene

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

8A

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: MALC02  
Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG NO.: B1718  
Lab File ID: VH034995.D Date Analyzed: 03/29/2010  
Instrument ID: MSVOAH Time Analyzed: 09:48  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	783642	9.68				
	1567284	10.18				
	391821	9.18				
EPA SAMPLE NO.						
TW-5I	522895	9.67				
TW-5D	524583	9.67				
TW-3D	511855	9.67				
MW-X	544990	9.68				
TW-3I	630465	9.68				
TW-3S	604721	9.67				
TW-7S	547425	9.68				
TW-7I	518529	9.68				
TW-7D	553830	9.69				
TW-9I	595242	9.67				
TW-9D	515282	9.68				
TW-6S	602056	9.67				
TW-6I	593421	9.67				
TW-6D	577896	9.67				
TW-12I	587839	9.67				
TW-12D	589449	9.67				
BSH0329W1	667733	9.67				
VBH0329W2	678631	9.67				

8A

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: MALC02  
Lab Code: CHEM Case No.: B1718 SAS No.: B1718 SDG NO.: B1718  
Lab File ID: VH034995.D Date Analyzed: 03/29/2010  
Instrument ID: MSVOAH Time Analyzed: 09:48  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	783642	9.68				
UPPER LIMIT	1567284	10.18				
LOWER LIMIT	391821	9.18				
EPA SAMPLE NO.						

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

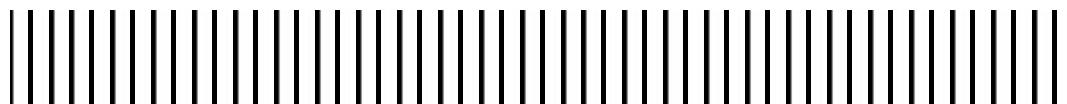


**New York State Department of Environmental Conservation**  
Gladding Cordage Site - Quarterly Report and Annual  
Groundwater Monitoring Summary

---

## **Appendix C**

### **Generally Acceptable Procedure for Passive Diffusion Bag Samplers**



# **GENERALLY ACCEPTABLE PROCEDURE**

## **FOR**

### **PASSIVE DIFFUSION BAG SAMPLERS**

#### **PURPOSE/APPLICATION**

---

Water-filled passive diffusion bag (PDB) samplers can be an effective, simple and inexpensive alternative to traditional groundwater sampling methods for measuring concentrations of a variety of volatile organic compounds (VOCs) in groundwater.

A typical passive diffusion bag sampler consists of low-density polyethylene lay-flat tube closed at both ends containing deionized water. The samplers operate by chemical diffusion across the semipermeable polyethylene membrane until a chemical equilibrium exists on both sides of the membrane. The samplers may be used individually or in "stacks" (several samplers positioned vertically at target depths) to assess the vertical distribution of VOCs in a well.

#### **ADVANTAGES**

---

- # PDB samplers produce little to no purge water, thus reducing sampling and disposal costs.
- # PDB samplers are relatively inexpensive.
- # PDB samplers are simple to deploy and recover.
- # PDB samplers are dedicated, single use, thus, there is no down-hole equipment to be decontaminated between wells.
- # Sampler deployment and recovery is rapid, making PDB samplers desirable for use where access is a problem or where discretion is necessary (residential communities, business districts, or busy streets).
- # PDB samplers are not affected by turbidity. The pore size of the polyethylene sampler is 10 angstroms or less which prevents sediment from entering the PDB sampler.
- # PDB samplers reduce interference from purge water mixing.
- # PDB samplers typically require less labor compared to traditional purge techniques.

#### **LIMITATIONS**

---

- # PDB samplers are not effective for obtaining representative concentrations of all compounds. Water-filled polyethylene PDB samplers typically do not provide representative concentrations of MTBE (methyl-*tert*-butyl ether), acetone, SVOCs, PCBs, and metals. Factors that limit the ability of compounds to diffuse

through the PDB membrane include molecular size, shape, and any hydrophobic properties of the compounds.

- # PDB samplers typically take about 14 days to reach equilibrium concentrations. This could be a limitation if the goal of the sampling event is to gain a representative sample at a single point in time in an aquifer where VOC concentrations change more rapidly than the samplers equilibrate.
- # In wells containing stratified chemical concentrations, concentrations in a single PDB sampler may not represent the zone with the highest concentration.
- # Because wells sampled with PDB samplers are not purged, information on common field parameters is not obtained.
- # Requires careful placement at known depth for repeatable results.
- # PDB samplers provide only a limited sample volume.
- # PDB samplers are not universally accepted by all regulatory agencies. Consult with regulators before using.

## **RECOMMENDED EQUIPMENT**

---

- # Polyethylene passive diffusion bags.
- # Deionized water
- # Stainless steel weights
- # Rope/wire with sufficient strength to support the weight and sampler. The rope/wire should be non-elastic (i.e. polyester, nylon, or stainless steel or Teflon coated stainless steel wire).
- # Hooks to secure the rope/wire to the well casing
- # Electronic water level probe
- # Measuring tape
- # Nitrile or Latex protective gloves.

## **EQUIPMENT DECONTAMINATION**

---

PDB samplers are single-use disposable samplers, thus no decontamination is necessary. To prevent cross-contamination, rope should not be used in more than one well. However, stainless steel weights and coated stainless steel wire can be reused after sufficient decontamination with low phosphate detergent (Alconox or equivalent) and water.

## **PROCEDURES**

---

### **Deployment**

- # Using the electronic water level probe, measure the depth to water and the total well depth. Compare these measurements with previous measurements from the well and the reported depth of the well screen from the well construction record. This is to check if sediment has accumulated on the bottom of the well and if the well construction records are accurate.

- # Attach a stainless steel weight to the end of the line. Sufficient weight should be added to overcome the buoyancy of the PDB sampler.
- # Calculate the distance from the bottom of the well, to the depth where the PDB sampler is to be placed.
- # At the designated point, secure the PDB sampler to the weighted line using the ring tabs on both ends of the sampler.
- # Label PDB sampler(s) with well I.D. and depth (if using multiple PDBs in one well).
- # For relatively short well screens (less than five feet), the center point of the PDB sampler should be suspended at the vertical midpoint of the saturated well-screen length.
- # For well screens greater than five feet in length, it is suggested to use multiple PDB samplers vertically along the length of the well screen for at least the initial sampling. Multiple samplers are used to determine if contaminant stratification is present and to locate the zone with of highest concentration. The midpoint of each PDB sampler should be positioned at the midpoint of the sample interval.
- # With PDB sampler(s) attached, lower the weighted line to the bottom of the well. The weighted line should be taut when the PDB sampler(s) is at the target depth(s).
- # Secure the assembly in place. Attach the weighted line with a hook to the well riser or well cap. The well should be covered to prevent surface water infiltration.
- # Allow the system to remain undisturbed while the PDB sampler(s) equilibrate (minimum 14 days recommended; 6 months or more allowable if needed).

### **Sample Recovery**

- # Remove the PDB sampler from the well using the attached line. Avoid exposing the sampler to excessive agitation as it is removed from the well.
- # Examine the surface of the PDB sampler for tears, algae, iron, or other coatings. If there are tears in the membrane, the sample should be discarded. If the outside of the sampler is coated with any material, it should be noted.
- # Detach the sampler from the weighted line and remove any excess fluids or materials from the exterior of the bag. This can be accomplished with paper towels.
- # There are several acceptable methods for transferring water from the PDB sampler to the 40ml volatile organic analysis (VOA) vials:
  - If a discharge device is provided by the PDB sampler supplier, it can be inserted either in place of the fill plug or directly into the bag.
  - If no discharge device is provided, the PDB sampler can be cut at one end using scissors or a sharp probe. The water should then be poured gently from the PDB sampler to the 40 ml VOA vials.
- # Samples should be preserved according to the analytical method and stored at approximately 4 °C in accordance with standard sampling protocol.
- # Any unused water from the PDB samplers should be disposed in accordance with local, state, and federal regulations.

**PDB Sampler Suppliers**  
Columbia Analytical Services  
Lambertville, NJ  
Phone: (609) 397-5326  
Fax: (609) 397-5327

EON Product, Inc.  
P.O. Box 390246  
Snellville, GA 30039  
Toll-Free: (800) 474-2490  
Fax: (770) 978-8661

## **REFERENCES**

---

Vroblesky, D.A., 2001, User's Guide for Polyethylene-Based Passive Diffusion Bag Samplers to Obtain Volatile Organic Compound Concentrations in Wells: U.S. Geological Survey Water-Resources Investigation Report 01-4060, p. 1-11.

Naval Facilities Engineering Command, Washington D.C. 20374-5065, 2000, Diffusion Membrane Samplers, A Low-Cost Alternative Groundwater Monitoring Tool for VOCs: NFESC TDS-2085-ENV, p. 1-2.

<http://www.clu-in.org/products/newsltrs/gwc/gwc1297.htm>

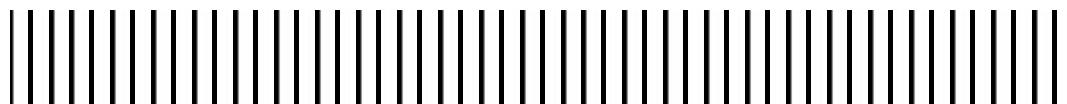


**New York State Department of Environmental Conservation**  
Gladding Cordage Site - Quarterly Report and Annual  
Groundwater Monitoring Summary

---

## **Appendix D**

## **Well Inspection Logs**



MALCOLM  
PIRNIE

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Gladding Cordage

PROJECT NUMBER:

0266365

DATE OF INSPECTION:

3/9/10

INSPECTOR:

JRW

WELL DESIGNATION:

TW-12D

WELL LOCATION:

\_\_\_\_\_

### Outward Appearance

Flushmount Diameter	_____ inches	N/A [ ]
Approximate Stickup Height	<u>2.5</u> feet	N/A [ ]
Integrity of Protective Casing	Describe: <u>Good</u>	_____
Protective Casing Material	Steel [X]	Stainless Steel [ ] Other _____
Protective Casing Width or Dia.	<u>4</u> inches	_____
Weep Hole in Protective Casing	Yes [ ]	No [X] Describe: _____
Surface Seal/Apron Material	Cement [X]	Bentonite [ ] Not apparent [ ] Other _____
Integrity of Surface Seal/Apron	Describe: <u>Deteriorated</u>	_____
Surface Drainage	Away from Wellhead [ ]	Toward Wellhead [ ]
Bollards Present?	Yes [ ]	No [X] Describe: _____
Well ID. Visible?	Yes [X]	No [ ] Describe: _____
Lock Present and Functional?	Yes [X]	No [ ] Describe: _____
Photograph Taken? Photo #	Yes [ ]	No [X] Describe: _____

### Inner Appearance

Integrity of Well Casing	Describe: <u>Good</u>	_____
Integrity of Cap Seal	Describe: <u>Good</u>	_____
Surface Water in Casing?	Yes [ ]	No [X] Describe: _____
Well Casing Diameter	<u>2</u> inches	_____
Well Casing Material	PVC [ ]	Steel [ ] Stainless Steel [X]
Inner Cap	Threaded [X]	Slip [ ] Expansion Plug [ ] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [ ] None [X]
Evidence of Double Casing?	Yes [ ]	No [X] Describe: _____

### Downhole

Odor	Yes [ ]	No [X] Describe: _____
PID Reading	<u>NM</u> ppm	_____
Depth to Water (to top of casing)	<u>6.25</u> feet (nearest 0.01)	Depth to LNAPL _____ feet (nearest 0.01) N/A [ ]
Total Well Depth (to top of casing)	<u>99.12</u> feet (nearest 0.1)	_____

Sediment (Hard/Soft Bottom) Describe: Soft.

Additional Comments:

---

---

---

---

---

---

MALCOLM  
PIRNIE

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Gladding Cordage

PROJECT NUMBER: 0266365

DATE OF INSPECTION:

3/9/10

INSPECTOR:

JRW

WELL DESIGNATION:

TW-12 I

WELL LOCATION:

\_\_\_\_\_

### Outward Appearance

Flushmount Diameter

2.5 inches

N/A [ ]

Approximate Stickup Height

\_\_\_\_\_ feet

N/A [ ]

Integrity of Protective Casing

Describe: Good

Protective Casing Material

Steel

Stainless Steel [ ]

Other \_\_\_\_\_

Protective Casing Width or Dia.

4 inches

Weep Hole in Protective Casing

Yes [ ]

No

Surface Seal/Apron Material

Cement

Bentonite [ ]

Not apparent [ ] Other \_\_\_\_\_

Integrity of Surface Seal/Apron

Describe: Deteriorated

Surface Drainage

Away from Wellhead

Toward Wellhead [ ]

Bollards Present?

Yes [ ]

No

Describe: \_\_\_\_\_

Well ID. Visible?

Yes

No [ ]

Describe: \_\_\_\_\_

Lock Present and Functional?

Yes

No [ ]

Describe: \_\_\_\_\_

Photograph Taken? Photo #

Yes [ ]

No

Describe: \_\_\_\_\_

### Inner Appearance

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes [ ]

No

Describe: \_\_\_\_\_

Well Casing Diameter

2 inches

Well Casing Material

PVC [ ]

Steel [ ]

Stainless Steel

Inner Cap

Threaded [ ]

Slip

Expansion Plug [ ] None [ ]

Reference/Measuring Point

Groove [ ]

Indelible Mark [ ]

None

Evidence of Double Casing?

Yes [ ]

No

Describe: \_\_\_\_\_

### Downhole

Odor

Yes

No [ ] Describe: \_\_\_\_\_

PID Reading

113 ppm

Depth to Water (to top of casing)

8.24 feet (nearest 0.01)

Depth to LNAPL

\_\_\_\_\_ feet (nearest 0.01) N/A

Total Well Depth (to top of casing)

69.85 feet (nearest 0.1)

Sediment (Hard/Soft Bottom)

Describe: soft

Additional Comments:

---

---

---

---

---

---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Gladding Carday PROJECT NUMBER: 0266365  
 DATE OF INSPECTION: 3/9/10 INSPECTOR: JRW  
 WELL DESIGNATION: TW-15I  
 WELL LOCATION:

**Outward Appearance**

Flushmount Diameter	<u>8</u> inches	N/A [ ]
Approximate Stickup Height	<u> </u> feet	N/A [ ]
Integrity of Protective Casing	Describe: <u>Good</u>	
Protective Casing Material	Steel [ ]	Stainless Steel [ ]
Protective Casing Width or Dia.	<u> </u> inches	
Weep Hole in Protective Casing	Yes [ ]	No [ ]
Surface Seal/Apron Material	Cement <input checked="" type="checkbox"/>	Bentonite [ ]
Integrity of Surface Seal/Apron	Describe: <u>Good</u>	
Surface Drainage	Away from Wellhead <input checked="" type="checkbox"/> Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No <input checked="" type="checkbox"/> Describe: _____
Well ID. Visible?	Yes [ ]	No <input checked="" type="checkbox"/> Describe: _____
Lock Present and Functional?	Yes [ ]	No <input checked="" type="checkbox"/> Describe: _____
Photograph Taken? Photo #	Yes [ ]	No <input checked="" type="checkbox"/> Describe: _____

**Inner Appearance**

Integrity of Well Casing	Describe: <u>Good</u>	
Integrity of Cap Seal	Describe: <u>Good</u>	
Surface Water in Casing?	Yes [ ]	No <input checked="" type="checkbox"/> Describe: _____
Well Casing Diameter	<u>2</u> inches	
Well Casing Material	PVC <input checked="" type="checkbox"/>	Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark <input checked="" type="checkbox"/>
Evidence of Double Casing?	Yes [ ]	No <input checked="" type="checkbox"/> Describe: _____

**Downhole**

Odor	Yes [ ]	No <input checked="" type="checkbox"/> Describe: _____
PID Reading	<u>0.00</u> ppm	
Depth to Water (to top of casing)	<u>9.76</u> feet (nearest 0.01)	Depth to LNAPL _____ feet (nearest 0.01) N/A <input checked="" type="checkbox"/>
Total Well Depth (to top of casing)	<u>73.13</u> feet (nearest 0.1)	
Sediment (Hard/Soft Bottom)	Describe: <u>soft.</u>	

Additional Comments:

---



---



---



---



---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Gladney, Cordage PROJECT NUMBER: 0266365  
 DATE OF INSPECTION: 3/9/10 INSPECTOR: JRW  
 WELL DESIGNATION: TW-6S  
 WELL LOCATION:

**Outward Appearance**

Flushmount Diameter 8 inches N/A [ ]  
 Approximate Stickup Height \_\_\_\_\_ feet N/A [ ]  
 Integrity of Protective Casing Describe: Good  
 Protective Casing Material Steel [ ] Stainless Steel [ ] Other \_\_\_\_\_  
 Protective Casing Width or Dia. \_\_\_\_\_ inches  
 Weep Hole in Protective Casing Yes [ ] No [ ]  
 Surface Seal/Apron Material Cement  Bentonite [ ] Not apparent [ ] Other \_\_\_\_\_  
 Integrity of Surface Seal/Apron Describe: Good  
 Surface Drainage Away from Wellhead  Toward Wellhead [ ]  
 Bollards Present? Yes [ ] No  Describe: \_\_\_\_\_  
 Well ID. Visible? Yes [ ] No  Describe: \_\_\_\_\_  
 Lock Present and Functional? Yes [ ] No  Describe: \_\_\_\_\_  
 Photograph Taken? Photo # Yes [ ] No  Describe: \_\_\_\_\_

**Inner Appearance**

Integrity of Well Casing Describe: Good  
 Integrity of Cap Seal Describe: Good  
 Surface Water in Casing? Yes [ ] No  Describe: \_\_\_\_\_  
 Well Casing Diameter 2 inches  
 Well Casing Material PVC [ ] Steel [ ] Stainless Steel   
 Inner Cap Threaded [ ] Slip [ ] Expansion Plug  None [ ]  
 Reference/Measuring Point Groove [ ] Indelible Mark [ ] None  measure @ high pt.  
 Evidence of Double Casing? Yes [ ] No  Describe: \_\_\_\_\_

**Downhole**

Odor Yes [ ] No  Describe: \_\_\_\_\_  
 PID Reading 0.00 ppm  
 Depth to Water (to top of casing) 6.96 feet (nearest 0.01) Depth to LNAPL \_\_\_\_\_ feet (nearest 0.01) N/A   
 Total Well Depth (to top of casing) 22.0 feet (nearest 0.1)  
 Sediment (Hard/Soft Bottom) Describe: soft.

Additional Comments:

---

---

---

---

---

---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Gladding Cottage PROJECT NUMBER: 0266365

DATE OF INSPECTION:

3/9/10 INSPECTOR: JRW

WELL DESIGNATION:

TW-6D

WELL LOCATION:

**Outward Appearance**

Flushmount Diameter

8 inches N/A [ ]

Approximate Stickup Height

  feet N/A [ ]

Integrity of Protective Casing

Describe: Good

Protective Casing Material

Steel [ ] Stainless Steel [ ] Other \_\_\_\_\_

Protective Casing Width or Dia.

  inches

Weep Hole in Protective Casing

Yes [ ] No [ ]

Surface Seal/Apron Material

Cement  Bentonite [ ] Not apparent [ ] Other \_\_\_\_\_

Integrity of Surface Seal/Apron

Describe: Good

Surface Drainage

Away from Wellhead  Toward Wellhead [ ]

Bollards Present?

Yes [ ] No  Describe: \_\_\_\_\_

Well ID. Visible?

Yes [ ] No  Describe: \_\_\_\_\_

Lock Present and Functional?

Yes [ ] No  Describe: \_\_\_\_\_

Photograph Taken? Photo #

Yes [ ] No  Describe: \_\_\_\_\_**Inner Appearance**

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes [ ] No  Describe: \_\_\_\_\_

Well Casing Diameter

2 inches

Well Casing Material

PVC [ ] Steel [ ] Stainless Steel 

Inner Cap

Threaded [ ] Slip [ ] Expansion Plug  None [ ]

Reference/Measuring Point

Groove [ ] Indelible Mark [ ] None  measure @ high pt.

Evidence of Double Casing?

Yes [ ] No  Describe: \_\_\_\_\_**Downhole**

Odor

Yes [ ] No  Describe: \_\_\_\_\_

PID Reading

NM ppm

Depth to Water (to top of casing)

7.38 feet (nearest 0.01) Depth to LNAPL \_\_\_\_\_ feet (nearest 0.01) N/A 

Total Well Depth (to top of casing)

19.56 feet (nearest 0.1)

Sediment (Hard/Soft Bottom)

Describe: So ft.

Additional Comments:

---



---



---



---



---



---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Gladwyne Condo PROJECT NUMBER: 0266365

DATE OF INSPECTION:

3/9/10 INSPECTOR: JRW

WELL DESIGNATION:

TW-6 2

WELL LOCATION:

**Outward Appearance**

Flushmount Diameter

8 inches N/A [ ]

Approximate Stickup Height

  feet N/A [ ]

Integrity of Protective Casing

Describe: Good

Protective Casing Material

Steel [ ] Stainless Steel [ ] Other \_\_\_\_\_

Protective Casing Width or Dia.

  inches

Weep Hole in Protective Casing

Yes [ ] No [ ]

Surface Seal/Apron Material

Cement [ ] Bentonite [ ] Not apparent [ ] Other \_\_\_\_\_

Integrity of Surface Seal/Apron

Describe: Good

Surface Drainage

Away from Wellhead [ ] Toward Wellhead [ ]

Bollards Present?

Yes [ ] No [x] Describe: \_\_\_\_\_

Well ID. Visible?

Yes [ ] No [x] Describe: \_\_\_\_\_

Lock Present and Functional?

Yes [ ] No [x] Describe: \_\_\_\_\_

Photograph Taken? Photo #

Yes [ ] No [x] Describe: \_\_\_\_\_

**Inner Appearance**

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes [ ] No [x] Describe: \_\_\_\_\_

Well Casing Diameter

2 inches

Well Casing Material

PVC [x] Steel [ ] Stainless Steel [ ]

Inner Cap

Threaded [ ] Slip [ ] Expansion Plug [x] None [ ]

Reference/Measuring Point

Groove [ ] Indelible Mark [x] None [ ]

Evidence of Double Casing?

Yes [ ] No [x] Describe: \_\_\_\_\_

**Downhole**

Odor

Yes [ ] No [x] Describe: \_\_\_\_\_

PID Reading

NM ppmDepth to Water (to top of casing) 7.64 feet (nearest 0.01) Depth to LNAPL \_\_\_\_\_ feet (nearest 0.01) N/A [x]Total Well Depth (to top of casing) 68.37 feet (nearest 0.1)Sediment (Hard/Soft Bottom) Describe: Soft.

Additional Comments:

---



---



---



---



---



---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Gladding Cordage

PROJECT NUMBER:

0266365

DATE OF INSPECTION:

3/9/10

INSPECTOR:

JRW

WELL DESIGNATION:

TW-10D

WELL LOCATION:

## Outward Appearance

Flushmount Diameter

8 inches

N/A [ ]

Approximate Stickup Height

  feet

N/A [ ]

Integrity of Protective Casing

Describe: Good

Protective Casing Material

Steel [ ]

Stainless Steel [ ]

Other \_\_\_\_\_

Protective Casing Width or Dia.

  inches

Weep Hole in Protective Casing

Yes [ ]

No [ ]

Surface Seal/Apron Material

Cement 

Bentonite [ ]

Not apparent [ ] Other \_\_\_\_\_

Integrity of Surface Seal/Apron

Describe: Good

Surface Drainage

Away from Wellhead 

Toward Wellhead [ ]

Bollards Present?

Yes [ ]

No 

Describe: \_\_\_\_\_

Well ID. Visible?

Yes [ ]

No 

Describe: \_\_\_\_\_

Lock Present and Functional?

Yes [ ]

No 

Describe: \_\_\_\_\_

Photograph Taken? Photo #

Yes [ ]

No 

Describe: \_\_\_\_\_

## Inner Appearance

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes [ ]

No 

Describe: \_\_\_\_\_

Well Casing Diameter

2 inches

Well Casing Material

PVC [ ]

Steel [ ]

Stainless Steel 

Inner Cap

Threaded [ ]

Slip [ ]

Expansion Plug 

Reference/Measuring Point

Groove [ ]

Indelible Mark [ ]

None 

Evidence of Double Casing?

Yes [ ]

No 

Describe: \_\_\_\_\_

## Downhole

Odor

Yes [ ]

No 

Describe: \_\_\_\_\_

PID Reading

100 ppm

Depth to Water (to top of casing)

6.84 feet (nearest 0.01)

Depth to LNAPL

feet (nearest 0.01) N/A [ ]

Total Well Depth (to top of casing)

91.82 feet (nearest 0.1)

Sediment (Hard/Soft Bottom)

Describe: soft

Additional Comments:

---



---



---



---



---



---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Glad Day Cottage

PROJECT NUMBER:

0266365

DATE OF INSPECTION:

3/9/10

INSPECTOR:

JRW

WELL DESIGNATION:

TW-14

WELL LOCATION:

**Outward Appearance**

Flushmount Diameter

8 inches

N/A [ ]

Approximate Stickup Height

       feet

N/A [ ]

Integrity of Protective Casing

Describe: Good

Protective Casing Material

Steel [ ]

Stainless Steel [ ]

Other \_\_\_\_\_

Protective Casing Width or Dia.

       inches

Weep Hole in Protective Casing

Yes [ ]

No [ ]

Surface Seal/Apron Material

Cement 

Bentonite [ ]

Not apparent [ ] Other \_\_\_\_\_

Integrity of Surface Seal/Apron

Describe: Good

Surface Drainage

Away from Wellhead 

Toward Wellhead [ ]

Bollards Present?

Yes [ ]

No 

Describe: \_\_\_\_\_

Well ID. Visible?

Yes 

No [ ]

Describe: \_\_\_\_\_

Lock Present and Functional?

Yes No 

Describe: \_\_\_\_\_

Photograph Taken? Photo #

Yes [ ]

No 

Describe: \_\_\_\_\_

**Inner Appearance**

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes [ ]

No 

Describe: \_\_\_\_\_

Well Casing Diameter

2 inches

Well Casing Material

PVC [ ]

Steel [ ]

Stainless Steel 

Inner Cap

Threaded [ ]

Slip [ ]

Expansion Plug 

Reference/Measuring Point

Groove [ ]

Indelible Mark [ ]

None 

Evidence of Double Casing?

Yes [ ]

No 

Describe: \_\_\_\_\_

**Downhole**

Odor

Yes [ ]

No 

Describe: \_\_\_\_\_

PID Reading

NM ppm

Depth to Water (to top of casing)

7.41 feet (nearest 0.01)

Depth to LNAPL

feet (nearest 0.01) N/A 

Total Well Depth (to top of casing)

75.08 feet (nearest 0.1)

Sediment (Hard/Soft Bottom)

Describe: soft.

Additional Comments:

---



---



---



---



---



---



---



---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Gleaming Corage PROJECT NUMBER: 0266365

DATE OF INSPECTION:

3/9/10 INSPECTOR: JRW

WELL DESIGNATION:

TW-42

WELL LOCATION:

## Outward Appearance

Flushmount Diameter

8 inches N/A [ ]

Approximate Stickup Height

  feet N/A [ ]

Integrity of Protective Casing

Describe: OK

Protective Casing Material

Steel [ ] Stainless Steel [ ] Other \_\_\_\_\_

Protective Casing Width or Dia.

  inches

Weep Hole in Protective Casing

Yes [ ] No [ ]

Surface Seal/Apron Material

Cement  Bentonite [ ] Not apparent [ ] Other \_\_\_\_\_

Integrity of Surface Seal/Apron

Describe: Good

Surface Drainage

Away from Wellhead [ ] Toward Wellhead 

Bollards Present?

Yes [ ] No  Describe: \_\_\_\_\_

Well ID. Visible?

Yes  No  Describe: \_\_\_\_\_

Lock Present and Functional?

Yes [ ] No  Describe: \_\_\_\_\_

Photograph Taken? Photo #

Yes [ ] No  Describe: \_\_\_\_\_

## Inner Appearance

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes [ ] No  Describe: \_\_\_\_\_

Well Casing Diameter

2 inches

Well Casing Material

PVC  Steel [ ] Stainless Steel [ ]

Inner Cap

Threaded [ ] Slip [ ] Expansion Plug  None [ ]

Reference/Measuring Point

Groove [ ] Indelible Mark [ ] None  measure @ high point,

Evidence of Double Casing?

Yes [ ] No  Describe: \_\_\_\_\_

## Downhole

Odor

Yes [ ] No  Describe: \_\_\_\_\_

PID Reading

1.0 ppm

Depth to Water (to top of casing)

7.06 feet (nearest 0.01) Depth to LNAPL \_\_\_\_\_ feet (nearest 0.01) N/A 

Total Well Depth (to top of casing)

66.71 feet (nearest 0.1)

Sediment (Hard/Soft Bottom)

Describe: Soft

Additional Comments:

---



---



---



---



---



---



---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Gladding Congate PROJECT NUMBER: 0266365

DATE OF INSPECTION:

3/9/10 INSPECTOR: JRW

WELL DESIGNATION:

TW-14D

WELL LOCATION:

## Outward Appearance

Flushmount Diameter

8 inches N/A [ ]

Approximate Stickup Height

  feet N/A [ ]

Integrity of Protective Casing

Describe: Good

Protective Casing Material

Steel [ ] Stainless Steel [ ] Other \_\_\_\_\_

Protective Casing Width or Dia.

  inches

Weep Hole in Protective Casing

Yes [ ] No [ ]

Surface Seal/Apron Material

Cement  Bentonite [ ] Not apparent [ ] Other \_\_\_\_\_

Integrity of Surface Seal/Apron

Describe: Good

Surface Drainage

Away from Wellhead [ ] Toward Wellhead 

Bollards Present?

Yes [ ] No  Describe: \_\_\_\_\_

Well ID. Visible?

Yes  No [ ] Describe: \_\_\_\_\_

Lock Present and Functional?

Yes  No  Describe: \_\_\_\_\_

Photograph Taken? Photo #

Yes [ ] No  Describe: \_\_\_\_\_

## Inner Appearance

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes [ ] No  Describe: \_\_\_\_\_

Well Casing Diameter

2 inches

Well Casing Material

PVC [ ] Steel [ ] Stainless Steel 

Inner Cap

Threaded [ ] Slip [ ] Expansion Plug  None [ ]

Reference/Measuring Point

Groove [ ] Indelible Mark [ ] None  measure @ high point

Evidence of Double Casing?

Yes [ ] No  Describe: \_\_\_\_\_

## Downhole

Odor

Yes [ ] No  Describe: \_\_\_\_\_

PID Reading

1.01 ppm

Depth to Water (to top of casing)

6.99 feet (nearest 0.01) Depth to LNAPL \_\_\_\_\_ feet (nearest 0.01) N/A 

Total Well Depth (to top of casing)

89.76 feet (nearest 0.1)

Sediment (Hard/Soft Bottom)

Describe: \_\_\_\_\_

Additional Comments:

---



---



---



---



---



---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Gilding Candy PROJECT NUMBER: 0266365

DATE OF INSPECTION:

3/9/10

INSPECTOR:

WELL DESIGNATION:

TW-#5

WELL LOCATION:

**Outward Appearance**

Flushmount Diameter

8 inches

N/A [ ]

Approximate Stickup Height

       feet

N/A [ ]

Integrity of Protective Casing

Describe: OK

Protective Casing Material

Steel [ ]

Stainless Steel [ ]

Other \_\_\_\_\_

Protective Casing Width or Dia.

       inches

Weep Hole in Protective Casing

Yes [ ]

No [ ]

Surface Seal/Apron Material

Cement 

Bentonite [ ]

Not apparent [ ] Other \_\_\_\_\_

Integrity of Surface Seal/Apron

Describe: Good

Surface Drainage

Away from Wellhead [ ]

Toward Wellhead 

Bollards Present?

Yes [ ]

No 

Describe: \_\_\_\_\_

Well ID. Visible?

Yes 

No [ ]

Describe: \_\_\_\_\_

Lock Present and Functional?

Yes No 

Describe: \_\_\_\_\_

Photograph Taken? Photo #

Yes [ ]

No 

Describe: \_\_\_\_\_

**Inner Appearance**

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes 

No [ ]

Describe: \_\_\_\_\_

Well Casing Diameter

2 inches

Well Casing Material

PVC [ ]

Steel [ ]

Stainless Steel 

Inner Cap

Threaded [ ]

Slip [ ]

Expansion Plug  None [ ]

Reference/Measuring Point

Groove [ ]

Indelible Mark [ ]

None  Measure @ high point

Evidence of Double Casing?

Yes [ ]

No 

Describe: \_\_\_\_\_

**Downhole**

Odor

Yes [ ]

No 

Describe: \_\_\_\_\_

PID Reading

0.0 ppm

Depth to Water (to top of casing)

6.81 feet (nearest 0.01)

Depth to LNAPL

feet (nearest 0.01) N/A 

Total Well Depth (to top of casing)

19.91 feet (nearest 0.1)

Sediment (Hard/Soft Bottom)

Describe: \_\_\_\_\_

Additional Comments:

met'  
surface water coming well.

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

660 King Condo PROJECT NUMBER: 0266365

DATE OF INSPECTION:

3/9/10 INSPECTOR: JRW

WELL DESIGNATION:

TW-5D

WELL LOCATION:

**Outward Appearance**

Flushmount Diameter

  inches N/A [ ]

Approximate Stickup Height

3.0 feet N/A [ ]

Integrity of Protective Casing

Describe: Good

Protective Casing Material

Steel [x] Stainless Steel [ ] Other \_\_\_\_\_

Protective Casing Width or Dia.

4 inches

Weep Hole in Protective Casing

Yes [ ] No [x]

Surface Seal/Apron Material

Cement [ ] Bentonite [ ] Not apparent [x] Other \_\_\_\_\_

Integrity of Surface Seal/Apron

Describe: Cover w/ Grass

Surface Drainage

Away from Wellhead [x] Toward Wellhead [ ]

Bollards Present?

Yes [ ] No [x] Describe: \_\_\_\_\_

Well ID. Visible?

Yes [x] No [ ] Describe: \_\_\_\_\_

Lock Present and Functional?

Yes [x] No [ ] Describe: \_\_\_\_\_

Photograph Taken? Photo #

**Inner Appearance**

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes [ ] No [x] Describe: \_\_\_\_\_

Well Casing Diameter

7 inches

Well Casing Material

PVC [x] Steel [ ] Stainless Steel [x]

Inner Cap

Threaded [ ] Slip [x] Expansion Plug [ ] None [ ]

Reference/Measuring Point

Groove [ ] Indelible Mark [x] None [ ]

Evidence of Double Casing?

Yes [ ] No [x] Describe: \_\_\_\_\_

**Downhole**

Odor

Yes [ ] No [x] Describe: \_\_\_\_\_

PID Reading

144 ppm

Depth to Water (to top of casing)

9.53 feet (nearest 0.01) Depth to LNAPL \_\_\_\_\_ feet (nearest 0.01) N/A [x]

Total Well Depth (to top of casing)

90.24 feet (nearest 0.1)

Sediment (Hard/Soft Bottom)

Describe: Soft

Additional Comments:

---



---



---



---



---



---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Gladding Garage PROJECT NUMBER: 0266365

DATE OF INSPECTION:

3/9/10 INSPECTOR: JRW

WELL DESIGNATION:

TW-5 I

WELL LOCATION:

## Outward Appearance

Flushmount Diameter	<u>      </u> inches	N/A [ ]
Approximate Stickup Height	<u>2.5</u> feet	N/A [ ]
Integrity of Protective Casing	Describe: <u>Good</u>	
Protective Casing Material	Steel [x]	Stainless Steel [ ] Other _____
Protective Casing Width or Dia.	<u>4</u> inches	
Weep Hole in Protective Casing	Yes [ ]	No [x]
Surface Seal/Apron Material	Cement [x]	Bentonite [ ] Not apparent [ ] Other _____
Integrity of Surface Seal/Apron	Describe: <u>Good</u>	
Surface Drainage	Away from Wellhead [x]	Toward Wellhead [ ]
Bollards Present?	Yes [ ]	No [x] Describe: _____
Well ID. Visible?	Yes [x]	No [ ] Describe: _____
Lock Present and Functional?	Yes [x]	No [ ] Describe: _____
Photograph Taken? Photo #	Yes [ ]	No [x] Describe: _____

## Inner Appearance

Integrity of Well Casing	Describe: <u>Good</u>	
Integrity of Cap Seal	Describe: <u>Good</u>	
Surface Water in Casing?	Yes [ ]	No [x] Describe: _____
Well Casing Diameter	<u>2</u> inches	
Well Casing Material	PVC [x]	Steel [ ] Stainless Steel [ ]
Inner Cap	Threaded [ ]	Slip [ ] Expansion Plug [x] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark [x] None [ ]
Evidence of Double Casing?	Yes [ ]	No [x] Describe: _____

## Downhole

Odor	Yes [ ]	No [x]	Describe: _____
PID Reading	<u>1000</u> ppm		
Depth to Water (to top of casing)	<u>8.63</u> feet (nearest 0.01)	Depth to LNAPL	feet (nearest 0.01) N/A [x]
Total Well Depth (to top of casing)	<u>70.71</u> feet (nearest 0.1)		

Sediment (Hard/Soft Bottom) Describe: Soft

Additional Comments:

---



---



---



---



---



---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Gladding Corralage PROJECT NUMBER: 0266365  
 DATE OF INSPECTION: 3/9/10 INSPECTOR: JRW  
 WELL DESIGNATION: TW - 5 S  
 WELL LOCATION:

**Outward Appearance**

Flushmount Diameter \_\_\_\_\_ inches N/A [ ]  
 Approximate Stickup Height 2.5 feet N/A [ ]  
 Integrity of Protective Casing Describe: Good  
 Protective Casing Material Steel  Stainless Steel [ ] Other \_\_\_\_\_  
 Protective Casing Width or Dia. 4 inches \_\_\_\_\_  
 Weep Hole in Protective Casing Yes [ ] No  \_\_\_\_\_  
 Surface Seal/Apron Material Cement  Bentonite [ ] Not apparent [ ] Other \_\_\_\_\_  
 Integrity of Surface Seal/Apron Describe: Good  
 Surface Drainage Away from Wellhead  Toward Wellhead [ ]  
 Bollards Present? Yes [ ] No  Describe: \_\_\_\_\_  
 Well ID. Visible? Yes  No [ ] Describe: \_\_\_\_\_  
 Lock Present and Functional? Yes  No [ ] Describe: \_\_\_\_\_  
 Photograph Taken? Photo # Yes [ ] No  Describe: \_\_\_\_\_

**Inner Appearance**

Integrity of Well Casing Describe: Good  
 Integrity of Cap Seal Describe: Good  
 Surface Water in Casing? Yes [ ] No  Describe: \_\_\_\_\_  
 Well Casing Diameter 2 inches  
 Well Casing Material PVC  Steel [ ] Stainless Steel [ ]  
 Inner Cap Threaded [ ] Slip [ ] Expansion Plug  None [ ]  
 Reference/Measuring Point Groove [ ] Indelible Mark  None [ ]  
 Evidence of Double Casing? Yes [ ] No  Describe: \_\_\_\_\_

**Downhole**

Odor Yes [ ] No  Describe: \_\_\_\_\_  
 PID Reading 100 ppm  
 Depth to Water (to top of casing) 8.24 feet (nearest 0.01) Depth to LNAPL \_\_\_\_\_ feet (nearest 0.01) N/A   
 Total Well Depth (to top of casing) 22.03 feet (nearest 0.1)  
 Sediment (Hard/Soft Bottom) Describe: Soft

## Additional Comments:

---

---

---

---

---

---

---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Gladding Condo PROJECT NUMBER: 0266365

DATE OF INSPECTION:

3/9/10 INSPECTOR:

WELL DESIGNATION:

TW-9D

WELL LOCATION:

**Outward Appearance**

Flushmount Diameter

       inches N/A [ ]

Approximate Stickup Height

1.5 feet N/A [ ]

Integrity of Protective Casing

Describe: Good

Protective Casing Material

Steel  Stainless Steel [ ] Other \_\_\_\_\_

Protective Casing Width or Dia.

4 inches

Weep Hole in Protective Casing

Yes  No [ ]

Surface Seal/Apron Material

Cement [ ] Bentonite [ ] Not apparent  Other \_\_\_\_\_

Integrity of Surface Seal/Apron

Describe: Cover w/ Grass

Surface Drainage

Away from Wellhead  Toward Wellhead [ ]

Bollards Present?

Yes [ ] No  Describe: \_\_\_\_\_

Well ID. Visible?

Yes  No [ ] Describe: \_\_\_\_\_

Lock Present and Functional?

Yes  No [ ] Describe: \_\_\_\_\_

Photograph Taken? Photo #

Yes [ ] No [ ] Describe: \_\_\_\_\_

**Inner Appearance**

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes [ ] No  Describe: \_\_\_\_\_

Well Casing Diameter

2 inches

Well Casing Material

PVC [ ] Steel [ ] Stainless Steel 

Inner Cap

Threaded [ ] Slip  Expansion Plug [ ] None [ ]

Reference/Measuring Point

Groove [ ] Indelible Mark  None [ ]

Evidence of Double Casing?

Yes [ ] No  Describe: \_\_\_\_\_**Downhole**

Odor

Yes [ ] No  Describe: \_\_\_\_\_

PID Reading

0.0 ppm

Depth to Water (to top of casing)

101.63 feet (nearest 0.01) Depth to LNAPL \_\_\_\_\_ feet (nearest 0.01) N/A 

Total Well Depth (to top of casing)

84.94 feet (nearest 0.1)

Sediment (Hard/Soft Bottom)

Describe: Soft

Additional Comments:

---



---



---



---



---



---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Gladding Cordage PROJECT NUMBER: 0266365

DATE OF INSPECTION:

3/9/10 INSPECTOR: JRW

WELL DESIGNATION:

TW-9I

WELL LOCATION:

## Outward Appearance

Flushmount Diameter

       inches N/A [ ]

Approximate Stickup Height

1.5 feet N/A [ ]

Integrity of Protective Casing

Describe: Good

Protective Casing Material

Steel  Stainless Steel [ ] Other \_\_\_\_\_

Protective Casing Width or Dia.

4 inches

Weep Hole in Protective Casing

Yes  No [ ]

Surface Seal/Apron Material

Cement  Bentonite [ ] Not apparent [ ] Other \_\_\_\_\_

Integrity of Surface Seal/Apron

Describe: Deteriorated

Surface Drainage

Away from Wellhead  Toward Wellhead [ ]

Bollards Present?

Yes [ ] No  Describe: \_\_\_\_\_

Well ID. Visible?

Yes  No [ ] Describe: \_\_\_\_\_

Lock Present and Functional?

Yes  No [ ] Describe: \_\_\_\_\_

Photograph Taken? Photo #

Yes [ ] No  Describe: \_\_\_\_\_

## Inner Appearance

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes [ ] No  Describe: \_\_\_\_\_

Well Casing Diameter

2 inches

Well Casing Material

PVC [ ] Steel [ ] Stainless Steel  ]

Inner Cap

Threaded [ ] Slip  Expansion Plug [ ] None [ ]

Reference/Measuring Point

Groove [ ] Indelible Mark  None [ ]

Evidence of Double Casing?

Yes [ ] No  Describe: \_\_\_\_\_

## Downhole

Odor

Yes [ ] No  Describe: \_\_\_\_\_

PID Reading

Nm ppm

Depth to Water (to top of casing)

10.11 feet (nearest 0.01) Depth to LNAPL \_\_\_\_\_ feet (nearest 0.01) N/A  ]

Total Well Depth (to top of casing)

63.34 feet (nearest 0.1)

Sediment (Hard/Soft Bottom)

Describe: Soft.

Additional Comments:

---



---



---



---



---



---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Gladwin CordagePROJECT NUMBER: 0266365

DATE OF INSPECTION:

3/7/10

INSPECTOR:

JRW

WELL DESIGNATION:

TW-7D

WELL LOCATION:

**Outward Appearance**

Flushmount Diameter

\_\_\_\_\_ inches

N/A [ ]

Approximate Stickup Height

2.0 feet

N/A [ ]

Integrity of Protective Casing

Describe: Good

Protective Casing Material

Steel [x]

Stainless Steel [ ]

Other \_\_\_\_\_

Protective Casing Width or Dia.

4 inches

Weep Hole in Protective Casing

Yes [ ]

No [x]

Surface Seal/Apron Material

Cement [ ]

Bentonite [ ]

Not apparent [ ] Other \_\_\_\_\_

Integrity of Surface Seal/Apron

Describe: Covers well Snow

Surface Drainage

Away from Wellhead [x]

Toward Wellhead [ ]

Bollards Present?

Yes [ ]

No [x]

Describe: \_\_\_\_\_

Well ID. Visible?

Yes [x]

No [ ]

Describe: \_\_\_\_\_

Lock Present and Functional?

Yes [x]

No [ ]

Describe: \_\_\_\_\_

Photograph Taken? Photo #

Yes [ ]

No [x]

Describe: \_\_\_\_\_

**Inner Appearance**

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes [ ]

No [x]

Describe: \_\_\_\_\_

Well Casing Diameter

2 inches

Well Casing Material

PVC [ ]

Steel [ ]

Stainless Steel [x]

Inner Cap

Threaded [ ]

Slip [ ]

Expansion Plug [x]

None [ ]

Reference/Measuring Point

Groove [ ]

Indelible Mark [x]

None [ ]

Evidence of Double Casing?

Yes [ ]

No [x]

Describe: \_\_\_\_\_

**Downhole**

Odor

Yes [ ]

No [x]

Describe: \_\_\_\_\_

PID Reading

100 ppm

Depth to Water (to top of casing)

9.40 feet (nearest 0.01)

Depth to LNAPL

feet (nearest 0.01) N/A [x]

Total Well Depth (to top of casing)

79.82 feet (nearest 0.1)

Sediment (Hard/Soft Bottom)

Describe: Soft

Additional Comments:

---



---



---



---



---



---



---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Gladding Cordage PROJECT NUMBER: 0266365  
 DATE OF INSPECTION: 3/9/10 INSPECTOR: JRW  
 WELL DESIGNATION: TW-7 I  
 WELL LOCATION:

**Outward Appearance**

Flushmount Diameter	_____ inches	N/A [ ]
Approximate Stickup Height	<u>2.5</u> feet	N/A [ ]
Integrity of Protective Casing	Describe: <u>Good</u>	
Protective Casing Material	Steel <input checked="" type="checkbox"/>	Stainless Steel [ ] Other _____
Protective Casing Width or Dia.	<u>4</u> inches	
Weep Hole in Protective Casing	Yes [ ]	No <input checked="" type="checkbox"/>
Surface Seal/Apron Material	Cement [ ]	Bentonite [ ] Not apparent <input checked="" type="checkbox"/> Other _____
Integrity of Surface Seal/Apron	Describe: <u>Canal w/ Snow</u>	
Surface Drainage	Away from Wellhead <input checked="" type="checkbox"/> Toward Wellhead [ ]	
Bollards Present?	Yes [ ]	No <input checked="" type="checkbox"/> Describe: _____
Well ID. Visible?	Yes <input checked="" type="checkbox"/>	No [ ] Describe: _____
Lock Present and Functional?	Yes <input checked="" type="checkbox"/>	No [ ] Describe: _____
Photograph Taken? Photo #	Yes [ ]	No <input checked="" type="checkbox"/> Describe: _____

**Inner Appearance**

Integrity of Well Casing	Describe: <u>Good</u>	
Integrity of Cap Seal	Describe: <u>Good</u>	
Surface Water in Casing?	Yes [ ]	No <input checked="" type="checkbox"/> Describe: _____
Well Casing Diameter	<u>2</u> inches	
Well Casing Material	PVC [ ]	Steel [ ] Stainless Steel <input checked="" type="checkbox"/>
Inner Cap	Threaded [ ]	Slip <input checked="" type="checkbox"/> Expansion Plug [ ] None [ ]
Reference/Measuring Point	Groove [ ]	Indelible Mark <input checked="" type="checkbox"/> None [ ]
Evidence of Double Casing?	Yes [ ]	No <input checked="" type="checkbox"/> . Describe: _____

**Downhole**

Odor	Yes [ ]	No <input checked="" type="checkbox"/> . Describe: _____
PID Reading	<u>Nm</u> ppm	
Depth to Water (to top of casing)	<u>9.56</u> feet (nearest 0.01)	Depth to LNAPL _____ feet (nearest 0.01) N/A <input checked="" type="checkbox"/>
Total Well Depth (to top of casing)	<u>55.65</u> feet (nearest 0.1)	
Sediment (Hard/Soft Bottom)	Describe: <u>Soft.</u>	

Additional Comments:

---



---



---



---



---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Gladning Garage

PROJECT NUMBER:

0266365

DATE OF INSPECTION:

3/9/10

INSPECTOR:

JRW

WELL DESIGNATION:

TW-75

WELL LOCATION:

**Outward Appearance**

Flushmount Diameter

       inches

N/A [ ]

Approximate Stickup Height

2.5 feet

N/A [ ]

Integrity of Protective Casing

Describe: Good

Protective Casing Material

Steel [x]

Stainless Steel [ ]

Other \_\_\_\_\_

Protective Casing Width or Dia.

4 inches

Weep Hole in Protective Casing

Yes [ ]

No [x]

Surface Seal/Apron Material

Cement [ ]

Bentonite [ ]

Not apparent [x] Other \_\_\_\_\_

Integrity of Surface Seal/Apron

Describe: Cover w/ Snow

Surface Drainage

Away from Wellhead [x]

Toward Wellhead [ ]

Bollards Present?

Yes [ ]

No [x]

Describe: \_\_\_\_\_

Well ID. Visible?

Yes [x]

No [ ]

Describe: \_\_\_\_\_

Lock Present and Functional?

Yes [x]

No [ ]

Describe: \_\_\_\_\_

Photograph Taken? Photo #

Yes [ ]

No [x]

Describe: \_\_\_\_\_

**Inner Appearance**

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes [ ]

No [x]

Describe: \_\_\_\_\_

Well Casing Diameter

2 inches

Well Casing Material

PVC [ ]

Steel [ ]

Stainless Steel [x]

Inner Cap

Threaded [ ]

Slip [x]

Expansion Plug [ ] None [ ]

Reference/Measuring Point

Groove [ ]

Indelible Mark [x]

None [ ]

Evidence of Double Casing?

Yes [ ]

No [x]

Describe: \_\_\_\_\_

**Downhole**

Odor

Yes [ ]

No [x]

Describe: \_\_\_\_\_

PID Reading

0.00 ppm

Depth to Water (to top of casing)

9.04 feet (nearest 0.01)

Depth to LNAPL

feet (nearest 0.01) N/A [x]

Total Well Depth (to top of casing)

17.91 feet (nearest 0.1)

Sediment (Hard/Soft Bottom)

Describe: Firm

Additional Comments:

---



---



---



---



---



---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Gladding Cordage PROJECT NUMBER: 0266365

DATE OF INSPECTION:

5/9/10 INSPECTOR: JRW

WELL DESIGNATION:

7w-3D

WELL LOCATION:

## Outward Appearance

Flushmount Diameter

  inches N/A [ ]

Approximate Stickup Height

2.5 feet N/A [ ]

Integrity of Protective Casing

Describe: Good

Protective Casing Material

Steel [x] Stainless Steel [ ] Other \_\_\_\_\_

Protective Casing Width or Dia.

4 inches

Weep Hole in Protective Casing

Yes [ ] No [x]

Surface Seal/Apron Material

Cement [ ] Bentonite [ ] Not apparent [x] Other \_\_\_\_\_

Integrity of Surface Seal/Apron

Describe: Covered w/ Snow

Surface Drainage

Away from Wellhead [x] Toward Wellhead [ ]

Bollards Present?

Yes [ ] No [x] Describe: \_\_\_\_\_

Well ID. Visible?

Yes [x] No [ ] Describe: \_\_\_\_\_

Lock Present and Functional?

Yes [x] No [ ] Describe: \_\_\_\_\_

Photograph Taken? Photo #

Yes [ ] No [x] Describe: \_\_\_\_\_

## Inner Appearance

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes [ ] No [x] Describe: \_\_\_\_\_

Well Casing Diameter

2 inches

Well Casing Material

PVC [ ] Steel [ ] Stainless Steel [x]

Inner Cap

Threaded [ ] Slip [x] Expansion Plug [ ] None [ ]

Reference/Measuring Point

Groove [ ] Indelible Mark [x] None [ ]

Evidence of Double Casing?

Yes [ ] No [x] Describe: \_\_\_\_\_

## Downhole

Odor

Yes [ ] No [x] Describe: \_\_\_\_\_

PID Reading

~100 ppm

Depth to Water (to top of casing)

9.54 feet (nearest 0.01) Depth to LNAPL \_\_\_\_\_ feet (nearest 0.01) N/A [x]

Total Well Depth (to top of casing)

100.60 feet (nearest 0.1)

Sediment (Hard/Soft Bottom)

Describe: \_\_\_\_\_

Additional Comments:

*[Handwritten signature]*

---



---



---



---



---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Gladding Cordage

PROJECT NUMBER:

0266365

DATE OF INSPECTION:

Feb-35 3/9/10

INSPECTOR:

Jew

WELL DESIGNATION:

TW-35

WELL LOCATION:

## Outward Appearance

Flushmount Diameter

       inches

N/A [ ]

Approximate Stickup Height

3.0 feet

N/A [ ]

Integrity of Protective Casing

Describe: Good

Protective Casing Material

Steel [x]

Stainless Steel [ ]

Other \_\_\_\_\_

Protective Casing Width or Dia.

4 inches

Weep Hole in Protective Casing

Yes [ ]

No [x]

Surface Seal/Apron Material

Cement [ ]

Bentonite [ ]

Not apparent [x] Other \_\_\_\_\_

Integrity of Surface Seal/Apron

Describe: Covered w/ Snow.

Surface Drainage

Away from Wellhead [x]

Toward Wellhead [ ]

Bollards Present?

Yes [ ]

No [x]

Describe: \_\_\_\_\_

Well ID. Visible?

Yes [x]

No [ ]

Describe: \_\_\_\_\_

Lock Present and Functional?

Yes [x]

No [ ]

Describe: \_\_\_\_\_

Photograph Taken? Photo #

Yes [ ]

No [x]

Describe: \_\_\_\_\_

## Inner Appearance

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes [ ]

No [x]

Describe: \_\_\_\_\_

Well Casing Diameter

2 inches

Well Casing Material

PVC [x]

Steel [ ]

Stainless Steel [ ]

Inner Cap

Threaded [x]

Slip [ ]

Expansion Plug [ ] None [ ]

Reference/Measuring Point

Groove [ ]

Indelible Mark [x]

None [ ]

Evidence of Double Casing?

Yes [ ]

No [x]

Describe: \_\_\_\_\_

## Downhole

Odor

Yes [ ]

No [x]

Describe: \_\_\_\_\_

PID Reading

0.0 ppm

Depth to Water (to top of casing)

9.83 feet (nearest 0.01)

Depth to LNAPL

feet (nearest 0.01) N/A [x]

Total Well Depth (to top of casing)

17.47 feet (nearest 0.1)

Sediment (Hard/Soft Bottom)

Describe: Soft.

Additional Comments:

---



---



---



---



---



---



---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Gladding Cordage PROJECT NUMBER: 0266365

DATE OF INSPECTION:

3/9/10

INSPECTOR:

JRW

WELL DESIGNATION:

TW-31

WELL LOCATION:

## Outward Appearance

Flushmount Diameter

       inches N/A [ ]

Approximate Stickup Height

3.0 feet N/A [ ]

Integrity of Protective Casing

Describe: Good

Protective Casing Material

Steel [x] Stainless Steel [ ] Other \_\_\_\_\_

Protective Casing Width or Dia.

4 inches

Weep Hole in Protective Casing

Yes [ ] No [ ]

Surface Seal/Apron Material

Cement [ ] Bentonite [ ] Not apparent [x] Other \_\_\_\_\_

Integrity of Surface Seal/Apron

Describe: Covered w/ snow

Surface Drainage

Away from Wellhead [x] Toward Wellhead [ ]

Bollards Present?

Yes [ ] No [x] Describe: \_\_\_\_\_

Well ID. Visible?

Yes [x] No [ ] Describe: \_\_\_\_\_

Lock Present and Functional?

Yes [x] No [ ] Describe: \_\_\_\_\_

Photograph Taken? Photo #

Yes [ ] No [x] Describe: \_\_\_\_\_

## Inner Appearance

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes [ ] No [x] Describe: \_\_\_\_\_

Well Casing Diameter

2 inches

Well Casing Material

PVC [ ] Steel [ ] Stainless Steel [x]

Inner Cap

Threaded [ ] Slip [x] Expansion Plug [ ] None [ ]

Reference/Measuring Point

Groove [ ] Indelible Mark [x] None [ ]

Evidence of Double Casing?

Yes [ ] No [x] Describe: \_\_\_\_\_

## Downhole

Odor

Yes [ ] No [x] Describe: \_\_\_\_\_

PID Reading

         ppm

Depth to Water (to top of casing)

9.26 feet (nearest 0.01) Depth to LNAPL \_\_\_\_\_ feet (nearest 0.01) N/A [x]

Total Well Depth (to top of casing)

57.87 feet (nearest 0.1)

Sediment (Hard/Soft Bottom)

Describe: soft

Additional Comments:

---



---



---



---



---



---



---

MALCOLM  
PIRNIE

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Gladding Cordage

PROJECT NUMBER:

0266365

DATE OF INSPECTION:

3/9/10

INSPECTOR:

JRW

WELL DESIGNATION:

TW-3D

WELL LOCATION:

### Outward Appearance

Flushmount Diameter

\_\_\_\_\_ inches

N/A [ ]

Approximate Stickup Height

2.5 feet

N/A [ ]

Integrity of Protective Casing

Describe: Good

Protective Casing Material

Steel [x]

Stainless Steel [ ]

Other \_\_\_\_\_

4 inches

Protective Casing Width or Dia.

Yes [ ]

No [x]

Weep Hole in Protective Casing

Cement [ ]

Bentonite [ ]

Not apparent [x] Other \_\_\_\_\_

Surface Seal/Apron Material

Describe: Concave w/ snow

Surface Drainage

Away from Wellhead [x]

Toward Wellhead [ ]

Bollards Present?

Yes [ ]

No [x]

Describe: \_\_\_\_\_

Well ID. Visible?

Yes [x]

No [ ]

Describe: \_\_\_\_\_

Lock Present and Functional?

Yes [x]

No [ ]

Describe: \_\_\_\_\_

Photograph Taken? Photo #

Yes [ ]

No [x]

Describe: \_\_\_\_\_

### Inner Appearance

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes [ ]

No [x]

Describe: \_\_\_\_\_

Well Casing Diameter

2 inches

Well Casing Material

PVC [ ]

Steel [ ]

Stainless Steel [x]

Inner Cap

Threaded [ ]

Slip [x]

Expansion Plug [ ] None [ ]

Reference/Measuring Point

Groove [ ]

Indelible Mark [x]

None [ ]

Evidence of Double Casing?

Yes [ ]

No [x]

Describe: \_\_\_\_\_

### Downhole

Odor

Yes [ ]

No [x]

Describe: \_\_\_\_\_

PID Reading

10 ppm

Depth to Water (to top of casing)

8.36 feet (nearest 0.01)

Depth to LNAPL

feet (nearest 0.01) N/A [ ]

Total Well Depth (to top of casing)

13.70 feet (nearest 0.1)

Sediment (Hard/Soft Bottom)

Describe: \_\_\_\_\_

Additional Comments:

---

---

---

---

---

---

MALCOLM  
PIRNIE

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Glenning Condoage PROJECT NUMBER: 0266365

DATE OF INSPECTION:

3/1/10 INSPECTOR: JRW

WELL DESIGNATION:

TW-2S

WELL LOCATION:

### Outward Appearance

Flushmount Diameter

\_\_\_\_\_ inches N/A [ ]

Approximate Stickup Height

30 feet N/A [ ]

Integrity of Protective Casing

Describe: Good

Protective Casing Material

Steel [x] Stainless Steel [ ] Other \_\_\_\_\_

Protective Casing Width or Dia.

4 inches

Weep Hole in Protective Casing

Yes [ ] No [x]

Surface Seal/Apron Material

Cement [ ] Bentonite [ ] Not apparent [x] Other \_\_\_\_\_

Integrity of Surface Seal/Apron

Describe: Covered w/ snow

Surface Drainage

Away from Wellhead [x] Toward Wellhead [ ]

Bollards Present?

Yes [ ] No [x] Describe: \_\_\_\_\_

Well ID. Visible?

Yes [x] No [ ] Describe: \_\_\_\_\_

Lock Present and Functional?

Yes [x] No [ ] Describe: \_\_\_\_\_

Photograph Taken? Photo #

Yes [ ] No [x] Describe: \_\_\_\_\_

### Inner Appearance

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes [ ] No [x] Describe: \_\_\_\_\_

Well Casing Diameter

2 inches

Well Casing Material

PVC [x] Steel [ ] Stainless Steel [ ]

Inner Cap

Threaded [x] Slip [ ] Expansion Plug [ ] None [ ]

Reference/Measuring Point

Groove [ ] Indelible Mark [x] None [ ]

Evidence of Double Casing?

Yes [ ] No [x] Describe: \_\_\_\_\_

### Downhole

Odor

Yes [ ] No [x] Describe: \_\_\_\_\_

PID Reading

Nm ppm

Depth to Water (to top of casing)

8.37 feet (nearest 0.01) Depth to LNAPL \_\_\_\_\_ feet (nearest 0.01) N/A [ ]

Total Well Depth (to top of casing) 13.30 feet (nearest 0.1)

Sediment (Hard/Soft Bottom) Describe: Soft.

Additional Comments:

---

---

---

---

---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Gladding Cordage PROJECT NUMBER: 0266365

DATE OF INSPECTION:

3/9/10 INSPECTOR: JRW

WELL DESIGNATION:

TW-2 I

WELL LOCATION:

## Outward Appearance

Flushmount Diameter

  inches N/A [ ]

Approximate Stickup Height

2.5 feet N/A [ ]

Integrity of Protective Casing

Describe: Good

Protective Casing Material

Steel [x] Stainless Steel [ ] Other \_\_\_\_\_

Protective Casing Width or Dia.

4 inches

Weep Hole in Protective Casing

Yes [ ] No [x]

Surface Seal/Apron Material

Cement [ ] Bentonite [ ] Not apparent [x] Other \_\_\_\_\_

Integrity of Surface Seal/Apron

Describe: \_\_\_\_\_

Surface Drainage

Away from Wellhead [x] Toward Wellhead [ ]

Bollards Present?

Yes [ ] No [x] Describe: \_\_\_\_\_

Well ID. Visible?

Yes [x] No [ ] Describe: \_\_\_\_\_

Lock Present and Functional?

Yes [x] No [ ] Describe: \_\_\_\_\_

Photograph Taken? Photo #

Yes [ ] No [x] Describe: \_\_\_\_\_

## Inner Appearance

Integrity of Well Casing

Describe: OK

Integrity of Cap Seal

Describe: OK

Surface Water in Casing?

Yes [x] No [ ] Describe: at ground level

Well Casing Diameter

2 inches

Well Casing Material

PVC [ ] Steel [ ] Stainless Steel [x]

Inner Cap

Threaded [ ] Slip [x] Expansion Plug [ ] None [ ]

Reference/Measuring Point

Groove [ ] Indelible Mark [x] None [ ]

Evidence of Double Casing?

Yes [ ] No [x] Describe: \_\_\_\_\_

## Downhole

Odor

Yes [ ] No [x] Describe: \_\_\_\_\_

PID Reading

400 ppm

Depth to Water (to top of casing)

5.28 feet (nearest 0.01) Depth to LNAPL \_\_\_\_\_ feet (nearest 0.01) N/A [x]

Total Well Depth (to top of casing)

55.31 feet (nearest 0.1)

Sediment (Hard/Soft Bottom)

Describe: Sat T.

Additional Comments:

---



---



---



---



---



---



---

## GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Gladding PROJECT NUMBER: 0266365  
 DATE OF INSPECTION: 3/9/10 INSPECTOR: JRW  
 WELL DESIGNATION: TW-1  
 WELL LOCATION:

**Outward Appearance**

Flushmount Diameter \_\_\_\_\_ inches N/A [ ]  
 Approximate Stickup Height 2.5 feet N/A [ ]  
 Integrity of Protective Casing Describe: Good  
 Protective Casing Material Steel  Stainless Steel [ ] Other \_\_\_\_\_  
 Protective Casing Width or Dia. 4 inches \_\_\_\_\_  
 Weep Hole in Protective Casing Yes [ ] No  \_\_\_\_\_  
 Surface Seal/Apron Material Cement [ ] Bentonite [ ] Not apparent  Other \_\_\_\_\_  
 Integrity of Surface Seal/Apron Describe: Covered w/ snow.  
 Surface Drainage Away from Wellhead  Toward Wellhead [ ]  
 Bollards Present? Yes [ ] No  Describe: \_\_\_\_\_  
 Well ID. Visible? Yes  No [ ] Describe: \_\_\_\_\_  
 Lock Present and Functional? Yes [ ] No  Describe: lock seized - cut off, <sup>installed</sup> new lock.  
 Photograph Taken? Photo # Yes [ ] No  Describe: \_\_\_\_\_

**Inner Appearance**

Integrity of Well Casing Describe: OK  
 Integrity of Cap Seal Describe: OK  
 Surface Water in Casing? Yes [ ] No  Describe: \_\_\_\_\_  
 Well Casing Diameter 2 inches \_\_\_\_\_  
 Well Casing Material PVC  Steel [ ] Stainless Steel [ ]  
 Inner Cap Threaded  Slip [ ] Expansion Plug [ ] None [ ]  
 Reference/Measuring Point Groove [ ] Indelible Mark  None [ ]  
 Evidence of Double Casing? Yes [ ] No  Describe: \_\_\_\_\_

**Downhole**

Odor Yes [ ] No  Describe: \_\_\_\_\_  
 PID Reading NM ppm \_\_\_\_\_  
 Depth to Water (to top of casing) 7.33 feet (nearest 0.01) Depth to LNAPL \_\_\_\_\_ feet (nearest 0.01) N/A   
 Total Well Depth (to top of casing) 14.50 feet (nearest 0.1)  
 Sediment (Hard/Soft Bottom) Describe: soft.

Additional Comments:

---

---

---

---

---

---

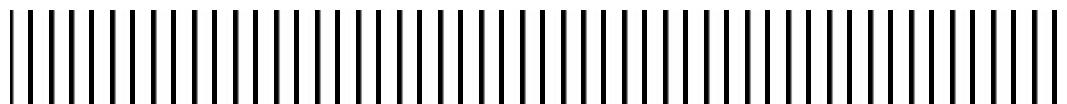


**New York State Department of Environmental Conservation**  
Gladding Cordage Site - Quarterly Report and Annual  
Groundwater Monitoring Summary

---

## **Appendix E**

## **Groundwater Level Data Form**



## GROUNDWATER LEVEL DATA FORM

PROJECT NAME: Gladding Cortage  
PROJECT NUMBER: 0266365

DATE: 3/9/2010  
NAME: JRW

WELL ID	Date	Time	Headspace VOCs (ppm)	Depth to Water (feet)	Reference Point	
TW-1	3/9/2010	09:58	NM	7.33	TOC	
TW-2S	3/9/2010	10:03	NM	8.37	TOC	
TW-2I	3/9/2010	10:03	NM	5.28	TOC	
TW-2D	3/9/2010	10:03	NM	8.36	TOC	
TW-3S	*	3/9/2010	10:27	NM	9.83	TOC
TW-3I	*	3/9/2010	10:27	NM	9.26	TOC
TW-3D	*	3/9/2010	10:27	NM	9.54	TOC
TW-5S	*	3/9/2010	11:56	NM	8.24	TOC
TW-5I	*	3/9/2010	11:56	NM	8.63	TOC
TW-5D	*	3/9/2010	11:56	NM	9.53	TOC
TW-7S	*	3/9/2010	11:03	NM	9.04	TOC
TW-7I	*	3/9/2010	11:03	NM	9.56	TOC
TW-7D	*	3/9/2010	11:03	NM	9.40	TOC
TW-9D	*	3/9/2010	11:36	NM	10.63	TOC
TW-9I	*	3/9/2010	11:36	NM	10.21	TOC
TW-6S	*	3/9/2010	15:30	NM	6.96	TOC
TW-6I	*	3/9/2010	15:30	NM	7.64	TOC
TW-6D	*	3/9/2010	15:30	NM	7.38	TOC
TW-10D		3/9/2010	15:02	NM	6.34	TOC
TW-12I	*	3/9/2010	16:40	NM	8.24	TOC
TW-12D	*	3/9/2010	16:40	NM	6.25	TOC
TW-4I	*	3/9/2010	14:35	NM	7.06	TOC
TW-14S	*	3/9/2010	13:46	NM	6.81	TOC
TW-14I	*	3/9/2010	13:46	NM	7.41	TOC
TW-14D	*	3/9/2010	13:46	NM	6.99	TOC
TW-15	*	3/9/2010	16:05	NM	9.76	TOC

## Notes:

\* - Sample bag (PDB) in well

NM - Not Measured