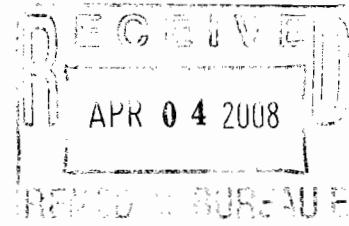




**Dvirka  
and  
Bartilucci**  
CONSULTING ENGINEERS

330 Crossways Park Drive, Woodbury, New York 11797-2015  
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March 28, 2008

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**Mr. Payson Long**  
Division of Environmental Remediation  
New York State Department of Environmental Conservation  
625 Broadway, 12th Floor  
Albany, NY 12233-7013

**Re:** Franklin Cleaners Site (Site No. 1-30-050)  
D&B Work Assignment No. D004446-01  
Quarterly Report No. 13 (September 1, 2007 through November 30, 2007)  
D&B No. 2531

Dear Mr. Long:

The purpose of this letter is to summarize the performance monitoring of the groundwater extraction and treatment system, located approximately 1 mile south/downgradient of the Franklin Cleaners Site (see Attachment A, Figure 1). This performance monitoring report covers the period from September 1, 2007 through November 30, 2007. Presented below is a summary of system operations during the quarter, as well as the results of analytical testing completed, in accordance with the work plan for the referenced work assignment.

**Groundwater Extraction and Treatment System Operations**

During this period, extraction well EW-1 operated at an average pumping rate of 39 gallons per minute (gpm) and extraction well pump EW-2 operated at an average pumping rate of 6.1 gpm.

Approximately 5,752,570 gallons of treated groundwater, based on measurements recorded at the treatment system discharge flow meter, were discharged to the Nassau County Department of Public Works (NCDPW) storm sewer system. It is noted that this volume is inconsistent with the influent flow meters for EW-1 and EW-2 which recorded approximately 5,008,400 gallons of groundwater entering the treatment system.

During this period, the groundwater extraction and treatment system was inoperative for a total of approximately 317 hours due to system alarm conditions and routine system maintenance. The "down time" was not consecutive and occurred over the course of the reporting period involving three alarm episodes and two maintenance events.

A summary of system downtime is presented in Attachment B. Copies of routine system maintenance reports, as prepared by Systematic Technologies, Inc., are presented in Attachment C.

Mr. Payson Long  
Division of Environmental Remediation  
New York State Department of Environmental Conservation  
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**Groundwater Extraction and Treatment System Sampling**

Samples were collected from the EW-1 and EW-2 well influent line sample taps, as well as from the air stripper (liquid) discharge sample tap, at a frequency of twice per month during the months of this period. Each sample was analyzed for volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method OLMO4.2. The samples collected from the air stripper discharge sample tap were also analyzed for iron and manganese by USEPA Method 200.7 and for pH by USEPA Method 150.1.

Sample results are presented in Attachment D. The analytical results of samples collected from the system influent are compared to the NYSDEC Class GA Groundwater Standards and Guidance Values, and the analytical results of samples collected from the air stripper discharge are compared to the effluent limitations. As can be seen from the analytical results in Attachment D, extraction well EW-1 continues to extract tetrachloroethene (PCE) at concentrations ranging from a low of 9 micrograms per liter (ug/l) on September 21, 2007, to a high of 15 ug/l on November 12, 2007 and extraction well EW-2 continues to extract PCE at concentrations ranging from a low of 51 ug/l on September 5, 2007, to a high of 80 ug/l on November 12, 2007. The discharge sample results for the period were all below the VOC effluent limitations and were also in compliance with the iron, manganese and pH effluent limitations, with the exception of the iron sample taken on November 26, 2007. Iron was detected at a concentration of 1,080 ug/l, slightly exceeding the NYSDEC effluent limit of 1,000 ug/l. Preliminary results for samples collected in December 2007 were all below the NYSDEC effluent limit, therefore, the system was not shut down.

Approximately 0.44 pounds of PCE were removed from the extracted groundwater by the low profile air stripper during the reporting period and approximately 30.22 pounds of PCE have been removed since start-up of the system in September 2003. The average PCE removal efficiency for this quarter was greater than 99 percent. Refer to Attachment E for a summary of the extraction and treatment system performance results since the system was placed in operation.

Vapor phase samples were collected from the two carbon adsorption unit influent and effluent sample taps at a frequency of once per week. Each sample was collected by filling a Tedlar bag directly from the sample taps and the samples were screened using a calibrated, handheld photoionization detector (PID). During the period, all PID readings collected at the carbon vessel outlets were 0.0 parts per million (ppm). Refer to Attachment D for results of vapor phase samples collected during the period.

**Groundwater Quality Data**

The network of downgradient groundwater monitoring wells was sampled to evaluate the effectiveness of the groundwater extraction and treatment system. Samples were collected from ASMW-1, ASMW-2, ASMW-3, ASMW-4, ASMW-5, ASMW-6 and ASMW-7 on November 20, 2007. Samples were analyzed for VOCs by USEPA Method OLMO4.2. The locations of the monitoring wells are shown in Figure 2 in Attachment A.

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Mr. Payson Long

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New York State Department of Environmental Conservation

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The results of the analyses of the samples collected from the monitoring wells are presented in Attachment D and summarized on Figure 2 in Attachment A. The results are compared to the NYSDEC Class GA Groundwater Standards and Guidance Values. The concentration of PCE detected in the sample from monitoring well ASMW-1 increased from 4 ug/l (August 15, 2007) to 15 ug/l (November 20, 2007) but is still consistent with low concentrations detected in the well since 2004. The concentration of PCE from monitoring well ASMW-2 decreased from 26 ug/l (August 15, 2007) to 4 ug/l (November 20, 2007) and continues to maintain a historical decreasing trend. The detected concentration of PCE in the sample from monitoring well ASMW-3 continues to be below the standard. VOCs were not detected at concentrations above the standards or guidance values in the samples collected from groundwater monitoring wells ASMW-3, ASMW-4, ASMW-5, ASMW-6 and ASMW-7 during this period. Please refer to the trend line graphs provided in Attachment E, which summarize PCE concentrations detected in samples collected from ASMW-1, ASMW-2 and ASMW-3 since June 2003.

## Data Validation

The biweekly system samples and groundwater samples have been analyzed for VOCs by Mitkem Corporation (Mitkem). The effluent sample (AS-1) was also analyzed for iron, manganese and pH. Mitkem is a New York State Department of Health Environmental Laboratory Approval Program-certified laboratory. The data packages submitted by Mitkem have been reviewed for completeness and compliance with the NYSDEC Analytical Services Protocol (ASP) Quality Assurance/Quality Control (QA/QC) requirements. All sample results have been deemed valid and usable for environmental assessment purposes as qualified below:

- All samples were analyzed within the method specified holding times and all QA/QC requirements (surrogate recoveries, calibrations, blanks, etc.) were met.
- PCE was qualified as non-detect in sample AS-1 (November 12, 2007) due to blank contamination. That is, the method blank associated with this sample contained PCE at a concentration of 3 ug/l which was greater than that detected in the sample (2 ug/l).
- No other problems were noted with sample results and qualification of the data was not required.

## Conclusions

Based on the results of performance monitoring performed during the period, we offer the following conclusions:

- The analytical results of the system influent samples show that the extraction wells EW-1 and EW-2 continue to capture VOC-contaminated groundwater.
- The analytical results of the groundwater discharge samples show that the air stripper is effectively removing the captured VOCs and reducing concentrations to below the discharge criteria.

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- Concentrations of PCE detected in groundwater monitoring well ASMW-1 increased from 4 ug/l (August 15, 2007) to 15 ug/l (November 20, 2007), but it continues to constitute a decreasing trend from a high of 27 ug/l (November 11, 2005) for the past 2-year period.
- Concentrations of PCE detected in groundwater monitoring well ASMW-2 decreased from 26 ug/l (August 15, 2007) to 24 ug/l (November 20, 2007) and continue to constitute a decreasing trend from a high of 69 ug/l (November 11, 2005) for the past 2-year period.

## Recommendations

Based on the results of performance monitoring conducted during the period, we offer the following recommendations:

- Continue operation of the groundwater extraction and treatment system to minimize downgradient migration of PCE, currently being captured by the system.
- Continue groundwater monitoring through the existing monitoring well network to determine contaminant concentration trends over time and to evaluate the continued effectiveness of the remediation system.

Please do not hesitate to contact me at (516) 364-9890 if you have any questions.

Very truly yours,



Albert H. Jaroszewski  
Project Manager

AHJ/PSM/lb,jmy,kap

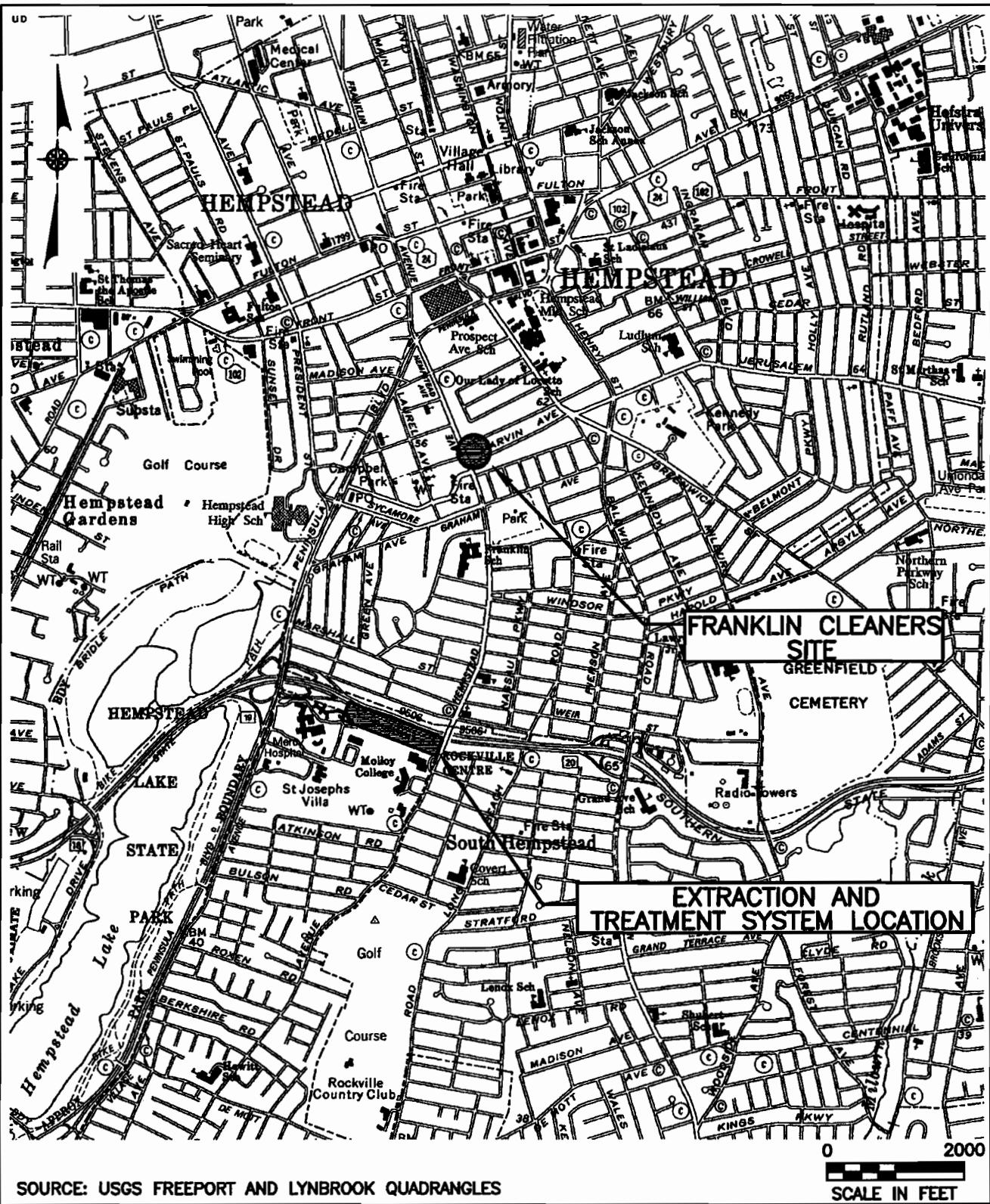
Attachments

cc: J. Trad (NYSDEC)  
J. Multari (Molloy College)  
J. Neri (H2M)  
R. Walka (D&B)  
P. Martorano (D&B)

♦2531\AHJ01168PL(R06)

**ATTACHMENT A**

**FIGURES**

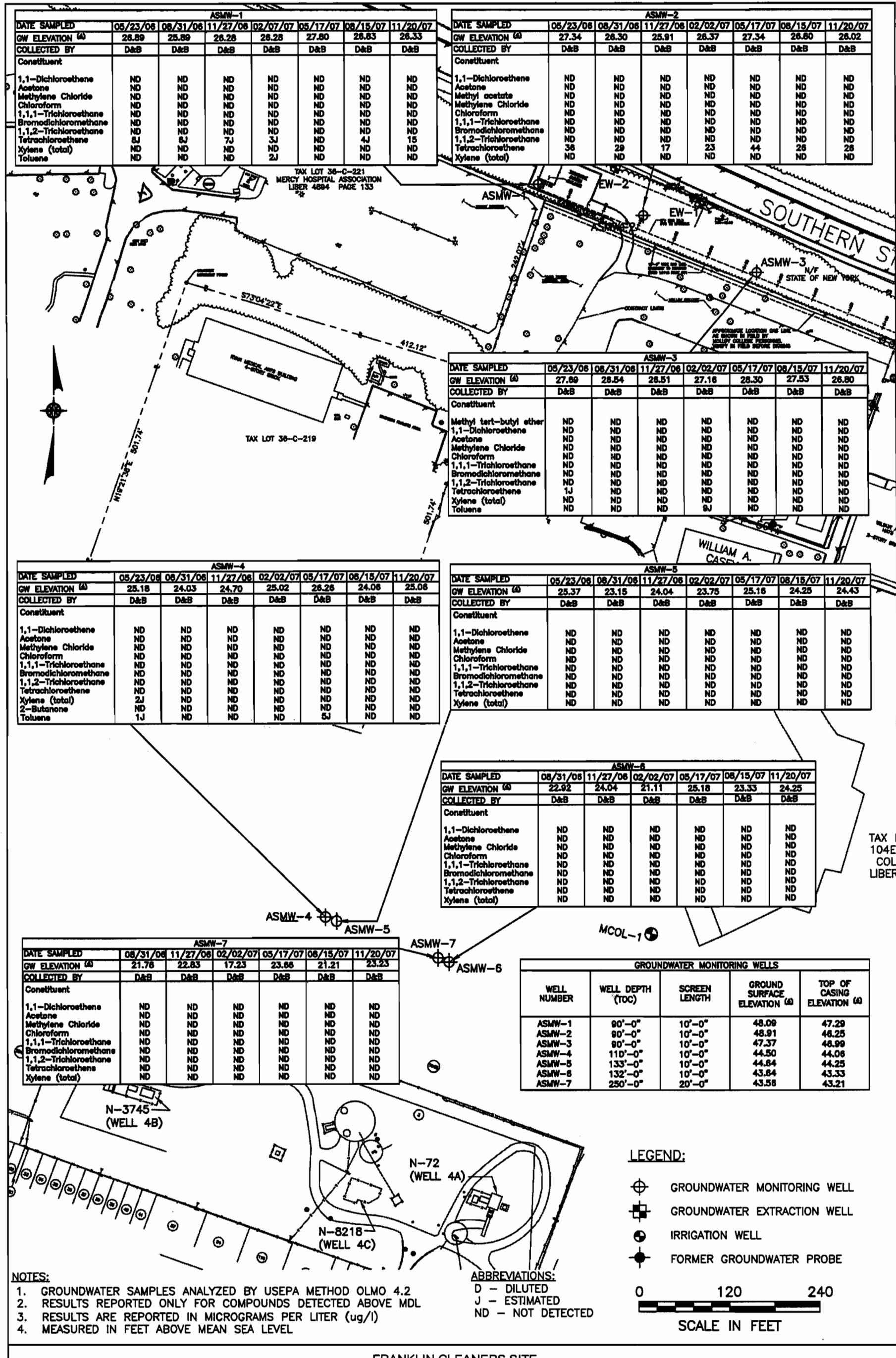


SOURCE: USGS FREEPORT AND LYNBROOK QUADRANGLES

**FRANKLIN CLEANERS SITE  
VILLAGE OF HEMPSTEAD, NEW YORK**

## **SITE LOCATION MAP**

## FIGURE 1



**ATTACHMENT B**

**DESCRIPTION OF SYSTEM ALARM CONDITIONS**

**FRANKLIN CLEANERS SITE  
NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050  
SUMMARY OF SYSTEM DOWNTIME**

		CAUSE FOR SHUTDOWN	
SHUT-OFF DATE/TIME	RESTART DATE/TIME		
9/18/07 10:00 AM	9/18/07 1:30 PM	(1) Non-routine maintenance event: Diagnosed recurring wetwell alarm condition.	
9/30/07 7:00 AM	10/11/07 5:45 PM	Alarm condition #3 - High high wet well. Restart system after purging wet well; system went into alarm condition #4. Sub pump fail. Trouble-shoot problem; floats in well were malfunctioning; change high and low-low floats. Restarted system.	
10/27/07 4:30 AM	10/27/07 10:55 AM	(1) Blower Maintenance - Performed routine blower maintenance on 10/9/07	
11/24/07 3:15 PM	11/26/07 12:30 PM	Alarm condition #2 & #3 - General alarm/high high wet well. Turn pump breaker on/off. Purge wet well. Restart system.	

**NOTES:**

- ## 1. Maintenance event performed by Systematic Technologies, Inc.

**ATTACHMENT C**

**SYSTEM MAINTENANCE REPORTS**

## MAINTENANCE AND INSPECTION REPORT

### FRANKLIN CLEANERS SITE, ROCKVILLE CENTRE, NY

Date: 9/18/07				
Name of Personnel Onsite	Title	Time Arrived	Time Departed	Total Hours
L. Sorensen	President	1000	1330	3.5

Check off Items that were completed:

- Item 1: Snow Removal
- Item 2A: Pressure Blower Maintenance
- Item 2B: Pressure Blower Fan Wheel Replacement
- Item 3: Air Stripper Maintenance
- Item 4: Granular Activated Carbon Removal and Replacement
- Item 5: Submersible Wet Well Pump Maintenance and Inspection
- Item 6: Non-routine Maintenance

#### Description of Work:

Item 6: Non-Routine Maintenance: Diagnosed recurring alarm condition in wet well sump. Found panel stuck in a loop that allowed pumps to cycle on and off on low level alarm float. Turned pumps off, allowed sump to fill to "pump on" level float, re-started pumps. Normal operation resumed, observed three complete cycles.

Name of Part / Supply / Material	Manufacturer	Model Number	Quantity Used
Description of Waste Generated	Volume of Waste	Disposal Facility (Name & Address)	Waste Transporter (Name & Address)

In signing this report I hereby certify that to the best of my knowledge the maintenance and inspection activities performed during this event conform to the requirements specified under contract between STI and Dvirka and Bartilucci.

*L. Sorensen* *Luke Sorensen* *9/19/07*

Signature / Print / Date

# **MAINTENANCE AND INSPECTION REPORT**

**FRANKLIN CLEANERS SITE, ROCKVILLE CENTRE, NY**

Date: 10/9/07

Name of Personnel Onsite	Title	Time Arrived	Time Departed	Total Hours
L. Sorensen	President			

**Check off Items that were completed:**

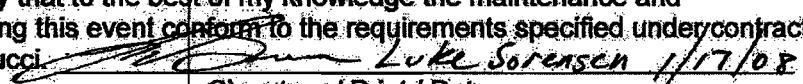
- Item 1: Snow Removal
  - Item 2A: Pressure Blower Maintenance
  - Item 2B: Pressure Blower Fan Wheel Replacement
  - Item 3: Air Stripper Maintenance
  - Item 4: Granular Activated Carbon Removal and Replacement
  - Item 5: Submersible Wet Well Pump Maintenance and Inspection
  - Item 6: Non-routine Maintenance

**Description of Work:**

**Item 2A: Pressure Blower Maintenance**

In signing this report I hereby certify that to the best of my knowledge the maintenance and inspection activities performed during this event conform to the requirements specified under contract between STI and Dvirka and Bartilucci.  Luke Sorensen 1/17/08

**Signature / Print / Date**

<b>MAINTENANCE AND INSPECTION REPORT</b>				
<b>FRANKLIN CLEANERS SITE, ROCKVILLE CENTRE, NY</b>				
Date: 10/11/07				
Name of Personnel Onsite	Title	Time Arrived	Time Departed	Total Hours
L. Sorensen	President	1500	1730	3.5 (incl. trvl.)
Check off Items that were completed:				
<input type="checkbox"/> Item 1: Snow Removal <input type="checkbox"/> Item 2A: Pressure Blower Maintenance <input type="checkbox"/> Item 2B: Pressure Blower Fan Wheel Replacement <input type="checkbox"/> Item 3: Air Stripper Maintenance <input type="checkbox"/> Item 4: Granular Activated Carbon Removal and Replacement <input type="checkbox"/> Item 5: Submersible Wet Well Pump Maintenance and Inspection <input checked="" type="checkbox"/> Item 6: Non-routine Maintenance				
Description of Work:				
Item 6: Non-routine Maintenance: Install two new wet well liquid level controllers				
Name of Part / Supply / Material	Manufacturer	Model Number	Quantity Used	
Liquid Level Controller	ITT Flygt	ENM-10	2	
Description of Waste Generated	Volume of Waste	Disposal Facility (Name & Address)	Waste Transporter (Name & Address)	
In signing this report I hereby certify that to the best of my knowledge the maintenance and inspection activities performed during this event conform to the requirements specified under contract between STI and Dvirka and Bartilucci				
 Signature / Print / Date				

## **MAINTENANCE AND INSPECTION REPORT**

## **FRANKLIN CLEANERS SITE, ROCKVILLE CENTRE, NY**

Employee Work Log				
Date:	Employee Name	Time Arrived	Time Departed	Total Hours
10/22/07	L. Sorensen	President		8

**Check off Items that were completed:**

- Item 1: Snow Removal
  - Item 2A: Pressure Blower Maintenance
  - Item 2B: Pressure Blower Fan Wheel Replacement
  - Item 3: Air Stripper Maintenance
  - Item 4: Granular Activated Carbon Removal and Replacement
  - Item 5: Submersible Wet Well Pump Maintenance and Inspection
  - Item 6: Non-routine Maintenance

**Description of Work:**

**Item 6: Non-routine Maintenance: Removal of dead tree**

Description of Waste Generated	Volume of Waste	Disposal Facility (Name & Address)	Waste Transporter (Name & Address)

In signing this report I hereby certify that to the best of my knowledge the maintenance and inspection activities performed during this event conform to the requirements specified under contract between STI and Dvirka and Bartilucci. *John Luke Sorensen* 1/17/08

**Signature / Print / Date**

**ATTACHMENT D**

**ANALYTICAL RESULTS**

**FRANKLIN CLEANERS SITE**  
**NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050**  
**RESULTS OF ANALYSIS OF EW-1 INFLUENT**

SAMPLE ID	SYSTEM INFLUENT (EW-1)	SYSTEM INFLUENT WATER	SYSTEM INFLUENT (EW-1)	SYSTEM INFLUENT WATER	SYSTEM INFLUENT (EW-1)	SYSTEM INFLUENT WATER	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES (ug/L)
SAMPLE TYPE							
DATE OF COLLECTION	9/5/2007	9/21/2007	10/31/2007	11/12/2007	1/26/2007		
COLLECTED BY	D&B	D&B	D&B	D&B	D&B		
UNITS	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)		
VOCs							
Dichlorodifluoromethane	U	U	U	U	U	U	5 ST
Chloromethane	U	U	U	U	U	U	–
Vinyl chloride	U	U	U	U	U	U	2 ST
Bromomethane	U	U	U	U	U	U	5 ST
Chloroethane	U	U	U	U	U	U	5 ST
Trichlorofluoromethane	U	U	U	U	U	U	5 ST
1,1-Dichloroethene	U	U	U	U	U	U	5 ST
1,1,2-Trichloro-1,2,2-trifluoroethane	U	U	U	U	U	U	5 ST
Acetone	U	U	U	U	U	U	50 GV
Carbon disulfide	U	U	U	U	U	U	60 GV
Methyl acetate	U	U	U	U	U	U	–
Methylene chloride	U	U	U	U	U	U	5 ST
trans 1,2-Dichloroethene	U	U	U	U	U	U	5 ST
Methyl-t-butyl ether	U	U	U	U	U	U	10 GV
1,1-Dichloroethane	U	U	U	U	U	U	5 ST
cis-1,2-Dichloroethene	U	U	U	U	U	U	5 ST
2-Butanone	U	U	U	U	U	U	50 GV
Chloroform	U	U	U	U	U	U	7 ST
1,1,1-Trichloroethane	U	U	U	U	U	U	5 ST
Cyclohexane	U	U	U	U	U	U	–
Carbon tetrachloride	U	U	U	U	U	U	5 ST
Benzene	U	U	U	U	U	U	1 ST
1,2-Dichloroethane	U	U	U	U	U	U	0.6 ST
Trichloroethene	U	U	U	U	U	U	5 ST
Methylcyclohexane	U	U	U	U	U	U	–
1,2-Dichloropropene	U	U	U	U	U	U	1 ST
Bromodichloromethane	U	U	U	U	U	U	50 GV
cis-1,3-Dichloropropene	U	U	U	U	U	U	0.4 ST
4-Methyl-2-pentanone	U	U	U	U	U	U	–
Toluene	U	U	U	U	U	U	5 ST
trans-1,3-Dichloropropene	U	U	U	U	U	U	0.4 ST
1,1,2-Trichloroethane	U	U	U	U	U	U	1 ST
Tetrachloroethene	U	U	U	U	U	U	5 ST
2-Hexanone	U	U	U	U	U	U	50 GV
Dibromochloromethane	U	U	U	U	U	U	50 GV
1,2-Dibromoethane	U	U	U	U	U	U	5 ST
Chlorobenzene	U	U	U	U	U	U	5 ST
Ethylbenzene	U	U	U	U	U	U	5 ST
Xylene (total)	U	U	U	U	U	U	5 ST
Styrene	U	U	U	U	U	U	5 ST
Bromoform	U	U	U	U	U	U	50 GV
Isopropylbenzene	U	U	U	U	U	U	5 ST
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	3 ST
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	0.04 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	5 ST

**ABBREVIATIONS:**

Concentration exceeds NYSDEC Class GA  
Groundwater Standards or Guidance Values  
 Not established

ST: Standard Value  
GV: Guidance Value

**QUALIFIERS:**

U: Compound analyzed for but not detected  
J: Compound found at a concentration below CRDL, value estimated  
B: Compound detected in method blank as well as sample, value estimated.

**NOTES:**

**FRANKLIN CLEANERS SITE  
NYSDEC CONTRACT No. D004446 / SITE No. 1-30-0500  
RESULTS OF ANALYSIS OF EW-2 INFLUENT**

NOTES

Concentration exceeds NYSDEC Class GA  
Groundwater Standards or Guidance Values

$\mu\text{g/L}$  = Micrograms per liter  
... = Not established

## QUALIFIERS:

U: Compound analyzed for but not detected  
J: Compound found at a concentration below

U: Compound analyzed for but not detected  
↓: Compound found at a concentration below CRDL; value estimated

U: Compound analyzed for but not detected  
↓: Compound found at a concentration below CRD; value estimated

**U:** Compound analyzed for but not detected  
**J:** Compound found at a concentration below CRDL- value estimated

**FRANKLIN CLEANERS SITE**  
**NYSDEC CONTRACT No. D00446/SITE No. 1-30-050**  
**RESULTS OF ANALYSIS OF AIR STRIPPER EFFLUENT FOR VOCs\***

SAMPLE ID SAMPLE TYPE	SYSTEM EFFLUENT (AS-1) WATER	EFFLUENT LIMITATIONS						
DATE OF COLLECTION	9/5/2007	9/21/2007	10/21/2007	10/31/2007	11/12/2007	11/26/2007	D&B	
COLLECTED BY	D&B	D&B	D&B	D&B	D&B	D&B	(ug/L)	(ug/L)
UNITS	(ug/L)	(ug/L)						
Dichlorodifluromethane	U	U	U	U	U	U	U	5 ST
Chloromethane	U	U	U	U	U	U	U	2 ST
Vinyl chloride	U	U	U	U	U	U	U	5 ST
Bromomethane	U	U	U	U	U	U	U	5 ST
Chloroethane	U	U	U	U	U	U	U	5 ST
Trichlorofluoromethane	U	U	U	U	U	U	U	5 ST
1,1-Dichlorethane	U	U	U	U	U	U	U	5 ST
1,1,2-Trichloro-1,2,2-trifluoroethane	U	U	U	U	U	U	U	5 ST
Acetone	U	U	U	U	U	U	U	50 GV
Carbon disulfide	U	U	U	U	U	U	U	60 GV
Methyl acetate	U	U	U	U	U	U	U	-
Methylene chloride	U	U	U	U	U	U	U	5 ST
trans - 2-Dichlorethene	U	U	U	U	U	U	U	5 ST
Methyl-tert butyl ether	U	U	U	U	U	U	U	10 GV
1,1-Dichlorethane	U	U	U	U	U	U	U	5 ST
cis-1,2-Dichlorethene	U	U	U	U	U	U	U	5 ST
2-Butanone	U	U	U	U	U	U	U	50 GV
Chloroform	U	U	U	U	U	U	U	7 ST
1,1,1-Trichloroethane	U	U	U	U	U	U	U	5 ST
Cyclohexane	U	U	U	U	U	U	U	5 ST
Carbon tetrachloride	U	U	U	U	U	U	U	-
Benzene	U	U	U	U	U	U	U	5 ST
1,2-Dichlorethane	U	U	U	U	U	U	U	1 ST
Trichloroethene	U	U	U	U	U	U	U	0.6 ST
Methylcyclohexane	U	U	U	U	U	U	U	5 ST
1,2-Dichloropropane	U	U	U	U	U	U	U	-
Bromodichromomethane	U	U	U	U	U	U	U	1 ST
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	50 GV
4-Methyl-2-pentanone	U	U	U	U	U	U	U	0.4 ST
Toluene	U	U	U	U	U	U	U	-
trans-1,3-Dichloropropene	U	U	U	U	U	U	U	5 ST
1,1,2-Trichloroethane	U	U	U	U	U	U	U	1 ST
Tetrachloroethene	U	U	U	U	U	U	U	5 ST
2-Hexanone	U	U	U	U	U	U	U	50 GV
Dibromochloromethane	U	U	U	U	U	U	U	5 ST
1,2-Dibromoethane	U	U	U	U	U	U	U	5 ST
Chlorobenzene	U	U	U	U	U	U	U	5 ST
Ethylbenzene	U	U	U	U	U	U	U	5 ST
Xylenes (total)	U	U	U	U	U	U	U	5 ST
Styrene	U	U	U	U	U	U	U	50 GV
Bromoform	U	U	U	U	U	U	U	5 ST
Isopropylbenzene	U	U	U	U	U	U	U	5 ST
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	U	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	U	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	U	3 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	0.04 ST

NOTES:

Concentration exceeds Site Specific Effluent Limitation  
 Not established

ABBREVIATIONS

ug/L = Micrograms per liter  
 -: Not established

QUALIFIERS:

U: Compound analyzed for but not detected  
 J: Compound found at a concentration below CRDL<sub>U</sub> value estimated  
 U\*: Result qualified as non-detect due to validation criteria.

**FRANKLIN CLEANERS SITE**  
**NYSDEC CONTRACT No. D00446 / SITE No. 1-30-050**  
**RESULTS OF ANALYSIS OF AIR STRIPPER EFFLUENT IRON, MANGANESE AND pH**

SAMPLE ID	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	WATER	WATER
DATE OF COLLECTION	9/5/2007	9/21/2007	10/21/2007	10/31/2007	11/12/2007	11/26/2007	
COLLECTED BY	D&B	D&B	D&B	D&B	D&B	D&B	
UNITS	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
<b>METALS</b>							
Iron	U	U	U	U	U	U	U
Manganese	31.7 B	31.8 B	28.4 B	29.0 B	33.0 B	31.6 B	31.6 B
pH (S.U.)	7.7	7.2	7.4	7.3	7.1	7.1	7.1
<b>ABBREVIATIONS:</b>	<b>QUALIFIERS:</b>						
ug/L: Micrograms per liter	B: Concentration is greater than the instrument detection limit (IDL) but less than the Contract Required Detection Limit (CRDL)						

**FRANKLIN CLEANERS SITE**  
**NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050**  
**VAPOR PHASE SAMPLE RESULTS**

SAMPLE ID	CARBON VESSEL NO. 1 INFLUENT	CARBON VESSEL NO. 1 EFFLUENT	CARBON VESSEL NO. 2 INFLUENT	CARBON VESSEL NO. 2 EFFLUENT
SAMPLE TYPE	AIR	AIR	AIR	AIR
COLLECTED BY	D&B	D&B	D&B	D&B
UNITS	(ppm)	(ppm)	(ppm)	(ppm)
DATE OF COLLECTION	PID Reading	PID Reading	PID Reading	PID Reading
September 5, 2007	0.0	0.0	0.0	0.0
September 12, 2007	0.0	0.0	0.0	0.0
September 21, 2007	0.0	0.0	0.0	0.0
September 26, 2007	0.0	0.0	0.0	0.0
October 14, 2007	0.0	0.0	0.0	0.0
October 21, 2007	0.0	0.0	0.0	0.0
October 27, 2007	0.0	0.0	0.0	0.0
October 31, 2007	0.0	0.0	0.0	0.0
November 5, 2007	0.0	0.0	0.0	0.0
November 12, 2007	0.0	0.0	0.0	0.0
November 19, 2007	0.0	0.0	0.0	0.0
November 26, 2007	0.0	0.0	0.0	0.0

**NOTES:**

Samples were collected by filling a Teflar bag at each of the sampling locations. Samples were tested using a handheld photoionization detector (PID).

**FRANKLIN CLEANERS SITE**  
**NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050**  
**RESULTS OF GROUNDWATER SAMPLING**

SAMPLE ID	SAMPLE TYPE	ASMW-1 WATER	ASMW-2 WATER	ASMW-3 WATER	ASMW-4 WATER	ASMW-5 WATER	ASMW-6 WATER	ASMW-7 WATER	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES	
									D&B	D&B
COLLECTED BY	UNITS	(ug/L)	(ug/L)							
Dichlorodifluoromethane	U	U	U	U	U	U	U	U	5 ST	5 ST
Chloromethane	U	U	U	U	U	U	U	U	—	2 ST
Vinyl chloride	U	U	U	U	U	U	U	U	5 ST	5 ST
Bromonethane	U	U	U	U	U	U	U	U	5 ST	5 ST
Chloroethane	U	U	U	U	U	U	U	U	5 ST	5 ST
Trichlorofluoromethane	U	U	U	U	U	U	U	U	5 ST	5 ST
1,1-Dichloroethene	U	U	U	U	U	U	U	U	5 ST	5 ST
1,1,2-Trichloro-1,2,2-trifluoroethane	U	U	U	U	U	U	U	U	5 ST	5 ST
Acetone	U	U	U	U	U	U	U	U	50 GV	50 GV
Carbon disulfide	U	U	U	U	U	U	U	U	80 GV	80 GV
Methyl acetate	U	U	U	U	U	U	U	U	—	—
Methylene chloride	U	U	U	U	U	U	U	U	5 ST	5 ST
trans 1,2-Dichloroethene	U	U	U	U	U	U	U	U	5 ST	5 ST
Methyl-tert butyl ether	U	U	U	U	U	U	U	U	10 GV	10 GV
1,1-Dichloroethane	U	U	U	U	U	U	U	U	5 ST	5 ST
cis-1,2-Dichloroethene	U	U	U	U	U	U	U	U	5 ST	5 ST
2-Butanone	U	U	U	U	U	U	U	U	50 GV	50 GV
Chloroform	U	U	U	U	U	U	U	U	7 ST	7 ST
1,1,1-Trichloroethane	U	U	U	U	U	U	U	U	5 ST	5 ST
Cyclohexane	U	U	U	U	U	U	U	U	—	—
Carbon tetrachloride	U	U	U	U	U	U	U	U	5 ST	5 ST
Benzene	U	U	U	U	U	U	U	U	1 ST	1 ST
1,2-Dichloroethane	U	U	U	U	U	U	U	U	0.6 ST	0.6 ST
Trichloroethene	U	U	U	U	U	U	U	U	5 ST	5 ST
Methylcyclohexane	U	U	U	U	U	U	U	U	—	—
1,2-Dichloropropane	U	U	U	U	U	U	U	U	1 ST	1 ST
Bromodichloromethane	U	U	U	U	U	U	U	U	50 GV	50 GV
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	U	0.4 ST	0.4 ST
4-Methyl-2-pentanone	U	U	U	U	U	U	U	U	5 ST	5 ST
Toluene	U	U	U	U	U	U	U	U	50 GV	50 GV
trans-1,3-Dichloropropene	U	U	U	U	U	U	U	U	5 ST	5 ST
1,1,2-Trichloroethane	U	U	U	U	U	U	U	U	5 ST	5 ST
Tetrachloroethene	U	U	U	U	U	U	U	U	5 ST	5 ST
2-Hexanone	U	U	U	U	U	U	U	U	5 ST	5 ST
Dibromochloromethane	U	U	U	U	U	U	U	U	5 ST	5 ST
1,2-Dibromoethane	U	U	U	U	U	U	U	U	50 GV	50 GV
Chlorobenzene	U	U	U	U	U	U	U	U	5 ST	5 ST
Ethylbenzene	U	U	U	U	U	U	U	U	5 ST	5 ST
Xylene (total)	U	U	U	U	U	U	U	U	3 ST	3 ST
Styrene	U	U	U	U	U	U	U	U	3 ST	3 ST
Bromoform	U	U	U	U	U	U	U	U	3 ST	3 ST
Isopropylbenzene	U	U	U	U	U	U	U	U	0.04 ST	0.04 ST
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	U	5 ST	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	—	—
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	—	—
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U	—	—
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	U	U	5 ST	5 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	U	—	—

**NOTES:**  Concentration exceeds NYSDEC Class GA  
Groundwater Standards or Guidance Values

**ABBREVIATIONS:**  
 ug/L = Micrograms per liter  
 ST = Standard Value  
 GV = Guidance Value  
 - = Not established

**QUALIFIERS:**  
 U: Compound analyzed for but not detected  
 J: Compound found at a concentration below CRDL, value estimated

**ATTACHMENT E**

**PERFORMANCE SUMMARY**

**FRANKLIN CLEANERS SITE**  
**NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050**  
**EXTRACTION AND TREATMENT SYSTEM PERFORMANCE RESULTS**

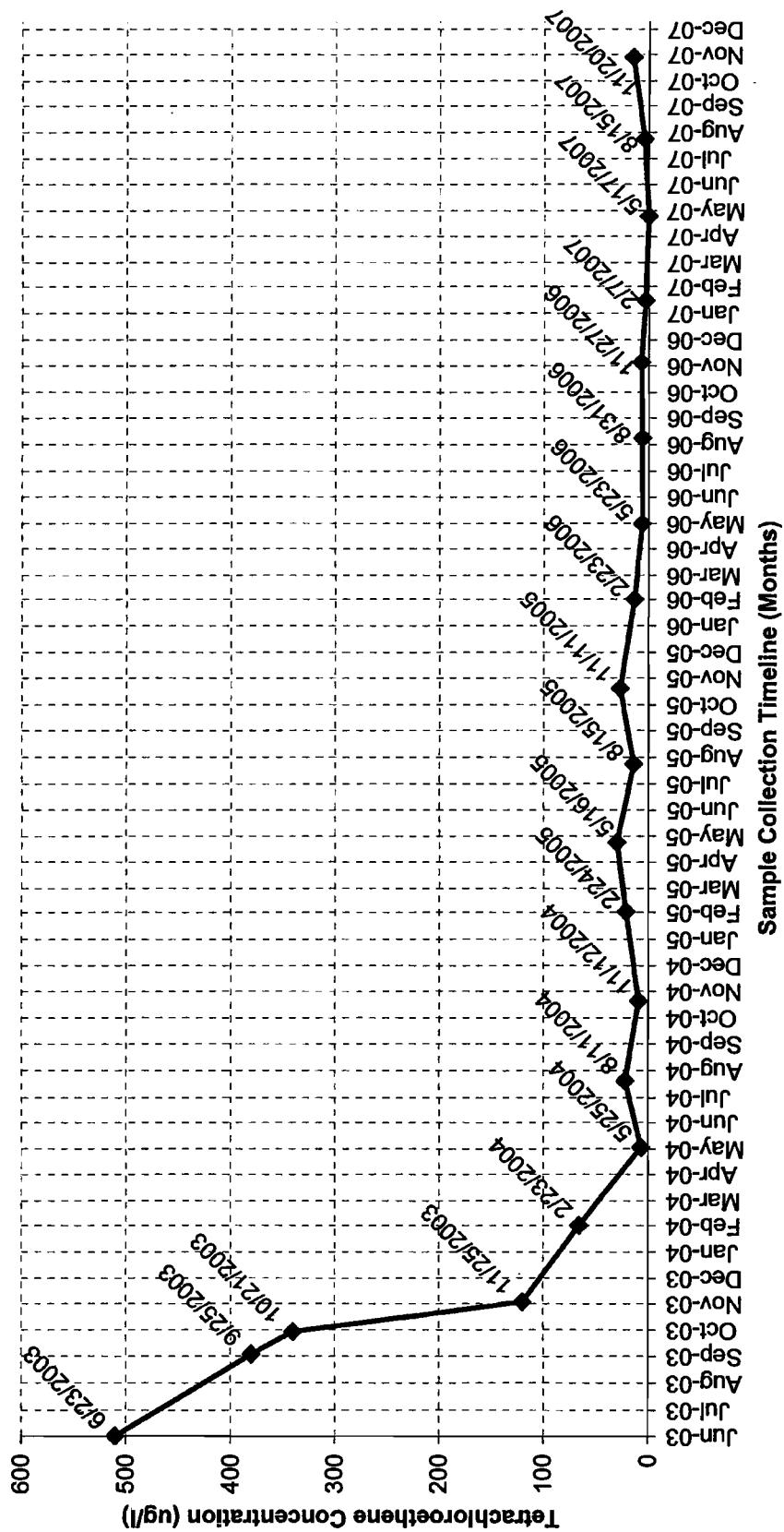
DATE OF SAMPLE COLLECTION (1)	SYSTEM INFLUENT (EW-1) AVERAGE EXTRACTION RATE (gpm)	SYSTEM INFLOW (EW-1) PCE CONCENTRATION (ug/l)	SYSTEM INFLOW (EW-2) AVERAGE EXTRACTION RATE (gpm)	SYSTEM INFLOW (EW-2) PCE CONCENTRATION (ug/l)	SYSTEM EFFLUENT (AS-1) PCE CONCENTRATION (ug/l)	PCE REMOVAL EFFICIENCY (%)	ESTIMATED AVERAGE PCE REMOVAL RATE (lb/hr)	ESTIMATED SYSTEM RUNTIME (hr)	ESTIMATED CUMULATIVE PCE REMOVAL (2) (lbs)		
									(EW-2) AVERAGE EXTRACTION RATE (gpm)	CUMULATIVE PCE REMOVAL (2) (lbs)	
11/21/05(6)	37.8	26	2.0	200	< 0.5	98.56	4.92E-04	2.00E-04	136	507	
12/5/2005	0.0	NS	1.6	170	< 0.5	98.71	1.36E-04	1.36E-04	26.42	26.43	
12/21/2005	0.0	NS	3.0	140	< 0.5	99.84	2.10E-04	2.10E-04	241	26.49	
1/4/2006	0.0	NS	2.8	180	< 0.5	99.72	2.52E-04	340	26.57		
1/24/2006	0.0	NS	2.8	180	< 0.5	99.89	2.24E-04	482	26.67		
2/6/2006	0.0	NS	2.4	160	< 0.5	99.69	1.92E-04	311	26.73		
2/21/2006	0.0	NS	3.1	180	< 0.5	99.72	2.78E-04	425	26.73	(4)	
3/7/2006	0.0	NS	2.9	140	< 0.5	99.84	2.03E-04	154	26.77		
3/22/2006	0.0	NS	3.0	160	< 0.5	99.69	2.40E-04	361	26.85		
4/3/2006	0.0	NS	2.8	82	< 0.5	99.39	1.15E-04	287	26.89		
4/18/2006	0.0	NS	2.9	120	< 0.5	99.58	1.74E-04	363	26.95		
5/9/2006	0.0	NS	3.1	100	< 0.5	99.50	1.55E-04	481	27.02		
5/22/2006	0.0	NS	3.0	130	< 0.5	99.62	1.95E-04	312	27.08	(4)	
6/5/2006	0.0	NS	2.6	120	< 0.5	99.58	1.56E-04	337	27.14		
6/19/2006	0.0	NS	2.7	120	< 0.5	99.58	1.62E-04	327	27.19		
7/6/2006	0.0	NS	3.1	110	< 0.5	99.55	1.71E-04	301	27.24		
7/17/2006	0.0	NS	3.0	130	< 0.5	99.62	1.95E-04	354	27.31	(4)	
9/12/2006	38.9	23	0.0	NS	< 0.5	97.83	4.48E-04	122	27.37		
9/25/2006	38.6	23	0.0	NS	< 0.5	97.83	4.45E-04	311	27.50		
10/2/2006	40.2	22	0.0	NS	< 0.5	97.73	4.43E-04	169	27.58		
10/16/2006	39.8	22	0.0	NS	< 0.5	97.73	4.38E-04	335	27.73		
10/30/2006	39.2	24	0.0	NS	< 0.5	97.92	4.71E-04	280	27.86		
11/13/2006	37.8	18	B	0.0	NS	< 0.5	97.22	3.41E-04	335	27.97	
11/28/2006	41.1	17	0.0	NS	< 0.5	97.06	3.50E-04	418	28.12	(4)	
12/15/2006	39.3	19	0.0	NS	< 0.5	97.37	3.74E-04	261	28.21		
12/28/2006	41.2	20	0.0	NS	< 0.5	97.50	4.13E-04	309	28.34		
1/17/2007	38.3	17	0.0	NS	< 0.5	97.06	3.26E-04	311	28.44		
1/22/2007	38.9	18	0.0	NS	< 0.5	97.22	3.51E-04	289	28.55		
2/7/2007	37.9	19	0.0	NS	< 0.5	97.37	3.61E-04	383	28.68		
2/23/2007	36.9	13	0.0	NS	< 0.5	96.16	2.40E-04	489	28.80	(4)	
3/5/2007	38.0	9	J	0.0	NS	< 0.5	94.44	1.71E-04	112	28.82	
3/23/2007	41.1	19	0.0	NS	< 0.5	97.37	3.91E-04	431	28.99		
4/3/2007	39.2	20	0.0	NS	< 0.5	97.50	3.93E-04	190	29.06		
4/16/2007	40.5	17	0.0	NS	< 0.5	97.06	3.45E-04	286	29.16		
5/1/2007	39.2	16	0.0	NS	< 0.5	96.88	3.14E-04	284	29.25		
5/16/2007	39.5	16	0.0	NS	< 0.5	96.88	3.16E-04	336	29.36		
5/29/2007	41.4	15	0.0	NS	< 0.5	96.67	3.11E-04	417	29.49	(4)	
6/14/2007	39.3	14	0.0	NS	< 0.5	96.43	2.76E-04	182	29.54		
6/24/2007	39.3	5	0.0	NS	< 0.5	90.00	9.84E-05	216	29.56		
7/10/2007	39.2	12	0.0	NS	< 0.5	95.83	2.36E-04	263	29.62		
7/22/2007	37.7	14	0.0	NS	< 0.5	96.43	2.64E-04	364	29.72		
8/23/2007	38.3	17	6.5	53	(6)	< 0.5	99.35	3.26E-04	191	29.81	
9/5/2007	30.1	10	0.0	NS	< 0.5	99.60	2.80E-04	112	29.88		
9/12/2007	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
9/19/2007	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
9/26/2007	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
10/3/2007	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
10/10/2007	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
10/17/2007	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
10/24/2007	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
10/31/2007	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
11/7/2007	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
11/14/2007	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
11/21/2007	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
11/28/2007	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
12/5/2007	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
12/12/2007	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
12/19/2007	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
12/26/2007	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
1/2/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
1/9/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
1/16/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
1/23/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
1/30/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
2/6/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
2/13/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
2/20/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
2/27/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
3/3/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
3/10/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
3/17/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
3/24/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
3/31/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
4/7/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
4/14/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
4/21/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
4/28/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
5/5/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
5/12/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
5/19/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
5/26/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
6/2/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
6/9/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
6/16/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
6/23/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
6/30/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
7/7/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
7/14/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
7/21/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
7/28/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
8/4/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
8/11/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
8/18/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
8/25/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
9/1/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
9/8/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
9/15/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
9/22/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
9/29/2008	30.1	10	0.0	NS	< 0.5	99.60	2.76E-04	112	29.88		
10/6/2008	30.1	10	0.0	NS	&lt						

**ATTACHMENT F**

**MONITORING WELL TREND LINE GRAPHS**

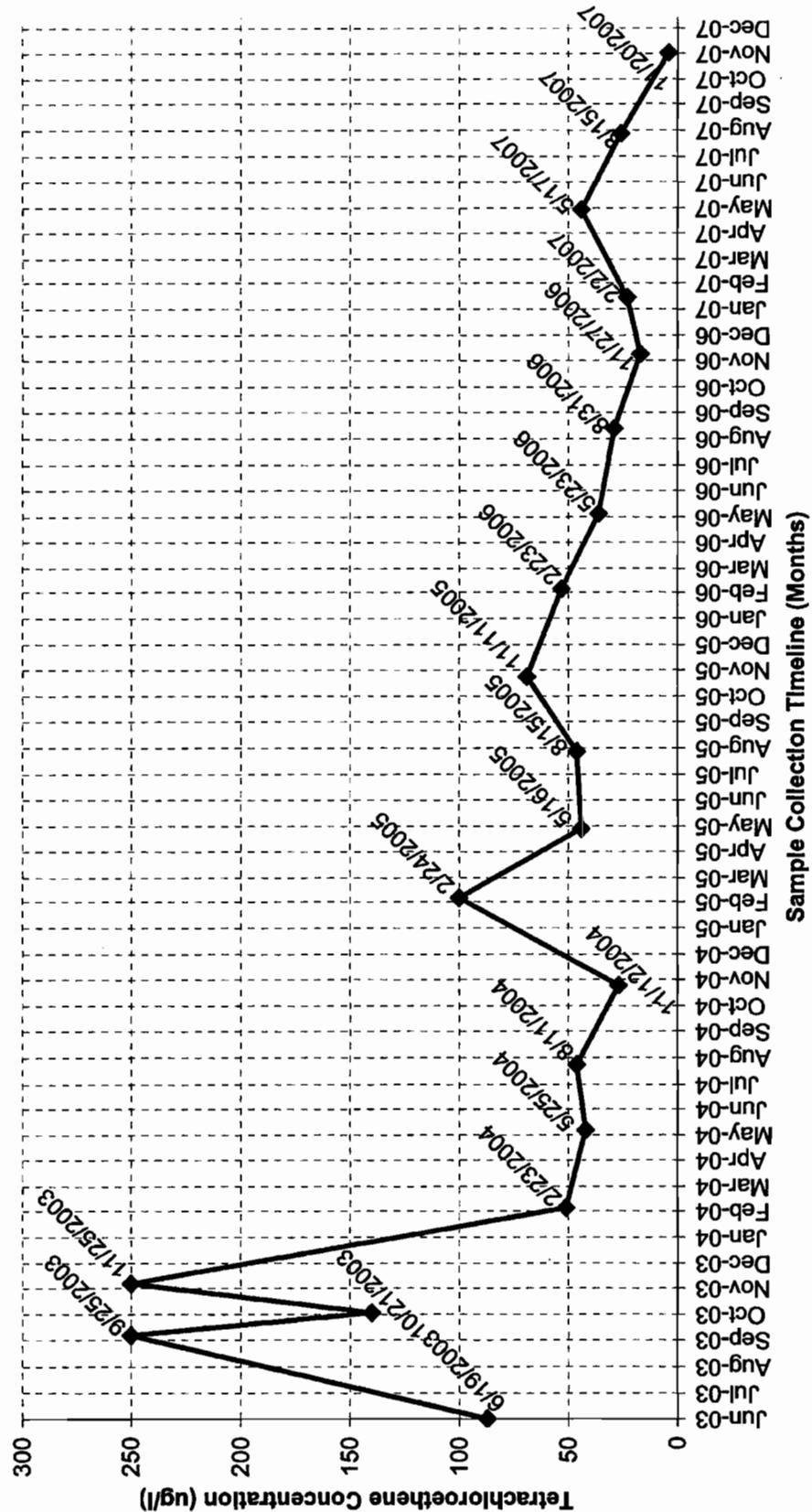
## GRAPH 1

**Franklin Cleaners Site  
NYSDEC Contract No. D004446 / Site No. 1-30-050  
Groundwater Monitoring Well ASMW-1**



## GRAPH 2

**Franklin Cleaners Site  
NYSDDEC Contract No. D004446 / Site No. 1-30-050  
Groundwater Monitoring Well ASMW-2**



### GRAPH 3

**Franklin Cleaners Site  
NYSDEC Contract No. D004446 / Site No. 1-30-050  
Groundwater Monitoring Well ASMW-3**

