



**Dvirka  
and  
Bartilucci**  
CONSULTING ENGINEERS

AUG 10 2007

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August 7, 2007

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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. 9 (September 1, 2006 through November 30, 2006)  
D&B No. 2531-03

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, 2006 through November 30, 2006. 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 pump rate of 39.0 gallons per minute. Extraction well EW-2 was not in operation for the duration of the quarter, due to an overload failure of variable frequency drive (VFD) No. 2. Under the new subcontract for maintenance services executed on November 12, 2006, Systematic Technologies diagnosed the problem with EW-2 on December 6, 2006 as a short circuit to the ground in the down-well/pump power cable assembly. A Scope of Work to pull the extraction well pump and replace it is currently being prepared to submit to the New York State Department of Environmental Conservation (NYSDEC) for review.

Approximately 5,019,700 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 should be noted that this volume is in consistent with the influent flow meter which recorded approximate 4,600,700 gallons of groundwater entering the treatment system.

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During this period, the groundwater extraction and treatment system was inoperative for a total of approximately 216 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 two alarm episodes and one maintenance event. A summary of system downtime is presented in Attachment B. Copies of routine system maintenance reports, as prepared by EnviroTrac, are presented in Attachment C.

### **Groundwater Extraction and Treatment System Sampling**

Samples were collected from the EW-1 well influent line sample tap, as well as from the air stripper (liquid) discharge sample tap, at a frequency of twice per month during the months of this period. No samples were collected from extraction well EW-2 during the period as the extraction well was inoperable. 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 17 micrograms per liter (ug/l) on November 28, 2006, to a high of 24 ug/l on October 30, 2006, which are both above the PCE Class GA groundwater standard of 5 ug/l. 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.

Approximately 0.81 pounds of PCE were removed from the extracted groundwater by the low profile air stripper during the reporting period. The average PCE removal efficiency for this quarter was greater than 97 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 were 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 27, 2006, and 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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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 samples collected from wells ASMW-1 and ASMW-2 contained concentrations of PCE above the standard of 5 ug/l. Concentrations of PCE detected in monitoring well ASMW-1 increased from 6 ug/l (August 31, 2006) to 7 ug/l (November 27, 2006). Concentrations of PCE detected in monitoring well ASMW-2 decreased from 29 ug/l (August 31, 2006) to 17 ug/l (November 27, 2006). VOCs were not detected at concentrations above 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. No 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 well EW-1 continues to capture VOC-contaminated groundwater.
- The analytical results of the liquid discharge samples show that the air stripper is effectively removing the captured VOCs and reducing concentrations to below the discharge criteria.
- Concentrations of PCE detected in groundwater monitoring well ASMW-1 continue to remain at historically low levels, while concentrations of PCE detected in groundwater monitoring well ASMW-2 continue to decrease from a high of 69 ug/l (November 11, 2005) to a low of 17 ug/l (November 27, 2006).

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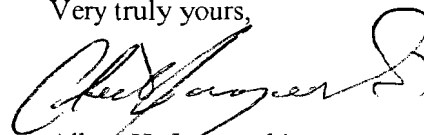
## Recommendations

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.
- Continue evaluating the accuracy of the influent and effluent flow meters due to inconsistencies detected between influent and effluent calculated total flows.
- Pull and replace extraction well EW-2 well pump. A scope of work to perform the work is currently being prepared to submit to the NYSDEC for review.

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

Very truly yours,



Albert H. Jaroszeski  
Project Manager

AHJ/FD/PSM/all  
Attachments

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

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**ATTACHMENT A**

**FIGURES**



ASMW-1							
DATE SAMPLED	05/16/05	08/15/05	11/11/05	02/23/06	05/23/06	08/31/06	11/27/06
GW ELEVATION (ft)	26.28	24.14	26.70	27.68	26.89	25.89	26.28
COLLECTED BY	D&B	D&B	D&B	D&B	D&B	D&B	D&B
Constituent							
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND
Chloroform	JJ	2J	2J	2J	ND	ND	ND
1,1,1-Trichloroethane	JJ	ND	2J	2J	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	30	14	27	13	6J	6J	7J
Xylene (total)	ND	ND	ND	3J	ND	ND	ND

ASMW-2							
DATE SAMPLED	05/16/05	08/15/05	11/11/05	02/23/06	05/23/06	08/31/06	11/27/06
GW ELEVATION (ft)	26.37	24.16	26.33	28.30	27.34	26.30	25.91
COLLECTED BY	D&B	D&B	D&B	D&B	D&B	D&B	D&B
Constituent							
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND
Methyl acetate	ND	1J	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	44	46	69	53	36	29	17
Xylene (total)	ND	ND	ND	ND	ND	ND	ND

ASMW-3							
DATE SAMPLED	05/16/05	08/15/05	11/11/05	02/23/06	05/23/06	08/31/06	11/27/06
GW ELEVATION (ft)	27.16	25.01	26.99	25.76	27.69	26.54	26.51
COLLECTED BY	D&B	D&B	D&B	D&B	D&B	D&B	D&B
Constituent							
Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	1J	ND	1J	ND	ND
Xylene (total)	ND	ND	ND	ND	ND	ND	ND

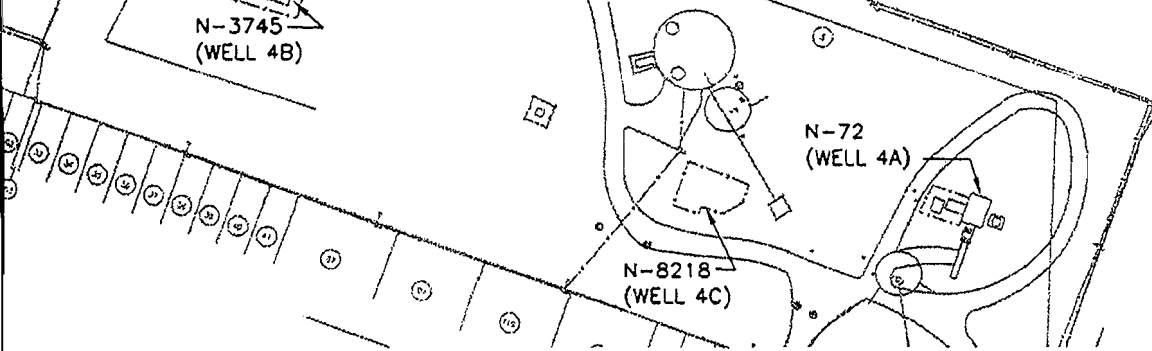
ASMW-4							
DATE SAMPLED	05/16/05	08/15/05	11/11/05	02/23/06	05/23/06	08/31/06	11/27/06
GW ELEVATION (ft)	25.02	22.64	25.51	26.21	25.18	24.03	24.70
COLLECTED BY	D&B	D&B	D&B	D&B	D&B	D&B	D&B
Constituent							
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	ND	ND	ND	2J	ND	ND	ND
2-Butanone	4J	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	1J	ND	ND	ND

ASMW-5							
DATE SAMPLED	05/16/05	08/15/05	11/11/05	02/23/06	05/23/06	08/31/06	11/27/06
GW ELEVATION (ft)	23.75	21.62	24.81	25.47	25.37	23.15	24.04
COLLECTED BY	D&B	D&B	D&B	D&B	D&B	D&B	D&B
Constituent							
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	ND	ND	ND	ND	ND	ND	ND

ASMW-6						
DATE SAMPLED	08/15/05	11/11/05	02/23/06	05/23/06	08/31/06	11/27/06
GW ELEVATION (ft)	21.11	24.75	25.01	23.61	22.92	24.04
COLLECTED BY	D&B	D&B	D&B	D&B	D&B	D&B
Constituent						
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND
Xylene (total)	ND	ND	ND	ND	ND	ND

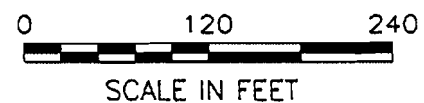
ASMW-7						
DATE SAMPLED	08/15/05	11/11/05	02/23/06	05/23/06	08/31/06	11/27/06
GW ELEVATION (ft)	17.23	24.01	21.80	21.97	21.78	22.83
COLLECTED BY	D&B	D&B	D&B	D&B	D&B	D&B
Constituent						
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND
Xylene (total)	ND	ND	ND	ND	ND	ND

GROUNDWATER MONITORING WELLS				
WELL NUMBER	WELL DEPTH (TOC)	SCREEN LENGTH	GROUND SURFACE ELEVATION (ft)	TOP OF CASING ELEVATION (ft)
ASMW-1	90'-0"	10'-0"	48.09	47.29
ASMW-2	90'-0"	10'-0"	46.91	46.25
ASMW-3	90'-0"	10'-0"	47.37	46.99
ASMW-4	110'-0"	10'-0"	44.50	44.06
ASMW-5	133'-0"	10'-0"	44.64	44.25
ASMW-6	132'-0"	10'-0"	43.64	43.33
ASMW-7	250'-0"	20'-0"	43.56	43.21



**LEGEND:**

- ⊕ GROUNDWATER MONITORING WELL
- ⊞ GROUNDWATER EXTRACTION WELL
- ⊙ IRRIGATION WELL
- ⊗ FORMER GROUNDWATER PROBE



**NOTES:**

1. GROUNDWATER SAMPLES ANALYZED BY USEPA METHOD OLMO 4.2
2. RESULTS REPORTED ONLY FOR COMPOUNDS DETECTED ABOVE MDL
3. RESULTS ARE REPORTED IN MICROGRAMS PER LITER (ug/l)
4. MEASURED IN FEET ABOVE MEAN SEA LEVEL

**ABBREVIATIONS:**

- D - DILUTED
- J - ESTIMATED
- ND - NOT DETECTED

FRANKLIN CLEANERS SITE  
VILLAGE OF HEMPSTEAD, NEW YORK

**MONITORING WELL LOCATION MAP AND SUMMARY OF SAMPLE RESULTS THROUGH NOVEMBER 2006**



FIGURE 2

**ATTACHMENT B**

**DESCRIPTION OF SYSTEM ALARM CONDITIONS**





**ATTACHMENT C**

**SYSTEM MAINTENANCE REPORTS**

**MAINTENANCE AND INSPECTION REPORT**  
**FRANKLIN CLEANERS SITE, ROCKVILLE CENTRE, NY**

Date: **September 7, 2006**

Name of Personnel Onsite	Title	Time Arrived	Time Departed	Total Hours
James Van Horn	Field Eng.	7:30	11:30	6
Steve Sussman	Sr. Technician	7:30	11:30	6
Delta Well and Pump	Driller	8:00	4:00	8 + travel to and from

Check off Items that were completed:

- |   |   |
|---|---|
| <input type="checkbox"/> Item 1: Snow Removal                           | <input type="checkbox"/> Item 3: Air Stripper Maintenance           |
| <input type="checkbox"/> Item 2: Pressure Blower Maintenance            | <input type="checkbox"/> Item 4: Carbon Removal and Replacement     |
| <input type="checkbox"/> Item 2A: Pressure Blower Fan Wheel Replacement | <input checked="" type="checkbox"/> Item 5: Non-routine Maintenance |

Description of Work:

EnviroTrac subcontracted Delta Well and Pump to pull the submersible pump from the recovery well EW-1, and replace the submersible pump and motor with new ones.

Name of Part / Supply / Material	Manufacturer	Model Number	Quantity Used
EW-1 submersible pump end	Grundfos	25E3	1
EW-1 submersible motor	Franklin	2 hp 200 volt 3 phase	1

Description of Waste	Volume of Waste	Disposal Facility Name & Address	Transporter Name & Address	Method of Disp.
No Waste				

In signing this 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 EnviroTrac Ltd., and Dvirka and Bartilucci.

*Anthony F. Forentine* 9/7/06 . Signature / Print / Date *Anthony F. Forentine*

**MAINTENANCE AND INSPECTION REPORT**  
**FRANKLIN CLEANERS SITE, ROCKVILLE CENTRE, NY**

Date: <b>September 19, 2006</b>				
Name of Personnel Onsite	Title	Time Arrived	Time Departed	Total Hours
Steve Sussman	Sr. Technician	9:00	11:00	2 onsite / 1.5hour prep /travel

Check off Items that were completed:

<input type="checkbox"/> Item 1: Snow Removal	<input type="checkbox"/> Item 3: Air Stripper Maintenance
<input checked="" type="checkbox"/> Item 2: Pressure Blower Maintenance	<input type="checkbox"/> Item 4: Carbon Removal and Replacement
<input type="checkbox"/> Item 2A: Pressure Blower Fan Wheel Replacement	<input type="checkbox"/> Item 5: Non-routine Maintenance

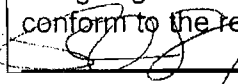
Description of Work:

Checked "V" belts on shaft pulley, three belts total, checked tension of "V" belts. Belts found to be in good condition and proper tension. Greased fittings for belt to blower shaft. Greased fitting on Baldor motor. Secured bolts at the belt guard. Removed butterfly valve and flange at blower inlet, inspected fan wheel for rotation and cleanliness. Checked all center mount bolts. Restarted blower.

Name of Part / Supply / Material	Manufacturer	Model Number	Quantity Used
Grease	Mobil	Mobilith AW2	Approx. 0.12oz

Description of Waste	Volume of Waste	Disposal Facility Name & Address	Transporter Name & Address	Method of Disp.
No Waste				

In signing this 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 EnviroTrac Ltd., and Dvirka and Bartilucci.

 / STEVEN SUSSMAN / 9.19.06. Signature / Print / Date

**ATTACHMENT D**

**ANALYTICAL RESULTS**

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

SAMPLE ID	ASMW-1	ASMW-2	ASMW-3	ASMW-4	ASMW-5	ASMW-6	ASMW-7	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	WATER	WATER	
DATE OF COLLECTION	11/27/2006	11/27/2006	11/27/2006	11/27/2006	11/27/2006	11/27/2006	11/27/2006	
COLLECTED BY	D&B	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)	(ug/L)
Dichlorodifluoromethane	U	U	U	U	U	U	U	5 ST
Chloromethane	U	U	U	U	U	U	U	--
Vinyl chloride	U	U	U	U	U	U	U	2 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-Dichloroethene	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 1,2-Dichloroethene	U	U	U	U	U	U	U	5 ST
Methyl-tert butyl ether	U	U	U	U	U	U	U	10 GV
1,1-Dichloroethane	U	U	U	U	U	U	U	5 ST
cis-1,2-Dichloroethene	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	--
Carbon tetrachloride	U	U	U	U	U	U	U	5 ST
Benzene	U	U	U	U	U	U	U	1 ST
1,2-Dichloroethane	U	U	U	U	U	U	U	0.6 ST
Trichloroethene	U	U	U	U	U	U	U	5 ST
Methylcyclohexane	U	U	U	U	U	U	U	--
1,2-Dichloropropane	U	U	U	U	U	U	U	1 ST
Bromodichloromethane	U	U	U	U	U	U	U	50 GV
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	0.4 ST
4-Methyl-2-pentanone	U	U	U	U	U	U	U	--
Toluene	U	U	U	U	U	U	U	5 ST
trans-1,3-Dichloropropene	U	U	U	U	U	U	U	0.4 ST
1,1,2-Trichloroethane	U	U	U	U	U	U	U	1 ST
Tetrachloroethene	7 J	17	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	50 GV
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
Xylene (total)	U	U	U	U	U	U	U	5 ST
Styrene	U	U	U	U	U	U	U	5 ST
Bromoform	U	U	U	U	U	U	U	50 GV
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-Dibromo-3-chloropropane	U	U	U	U	U	U	U	0.04 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	5 ST

**NOTES:**

Concentration exceeds NYSDEC Class GA  
Groundwater Standards or Guidance Values

**ABBREVIATIONS:**

ug/L = Micrograms per liter  
 --: 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

LIN O ERS S  
 NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050  
 RESULTS OF ANALYSIS OF EW-1 INFLUENT

SAMPLE ID	SYSTEM INFLUENT (EW-1)	SYSTEM INFLUENT (EW-1)	SYSTEM INFLUENT (EW-1)	SYSTEM INFLUENT (EW-1)	SYSTEM INFLUENT (EW-1)	SYSTEM INFLUENT (EW-1)	SYSTEM INFLUENT (EW-1)	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	WATER	WATER	
DATE OF COLLECTION	9/12/2006	9/25/2006	10/2/2006	10/16/2006	10/30/2006	11/13/2006	11/28/2006	
COLLECTED BY	D&B	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)	(ug/L)
<b>VOCs</b>								
Dichlorodifluoromethane	U	U	U	U	U	U	U	5 ST
Chloromethane	U	U	U	U	U	U	U	--
Vinyl chloride	U	U	U	U	U	U	U	2 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-Dichloroethene	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 1,2-Dichloroethene	U	U	U	U	U	U	U	5 ST
Methyl-tert butyl ether	U	U	U	U	U	U	U	10 GV
1,1-Dichloroethane	U	U	U	U	U	U	U	5 ST
cis-1,2-Dichloroethene	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	--
Carbon tetrachloride	U	U	U	U	U	U	U	5 ST
Benzene	U	U	U	U	U	U	U	1 ST
1,2-Dichloroethane	U	U	U	U	U	U	U	0.6 ST
Trichloroethene	U	U	U	U	U	U	U	5 ST
Methylcyclohexane	U	U	U	U	U	U	U	--
1,2-Dichloropropane	U	U	U	U	U	U	U	1 ST
Bromodichloromethane	U	U	U	U	U	U	U	50 GV
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	0.4 ST
4-Methyl-2-pentanone	U	U	U	U	U	U	U	--
Toluene	U	U	U	U	U	U	U	5 ST
trans-1,3-Dichloropropene	U	U	U	U	U	U	U	0.4 ST
1,1,2-Trichloroethane	U	U	U	U	U	U	U	1 ST
Tetrachloroethene	23	23	22	22	24	18 B	17	5 ST
2-Hexanone	U	U	U	U	U	U	U	50 GV
Dibromochloromethane	U	U	U	U	U	U	U	50 GV
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
Xylene (total)	U	U	U	U	U	U	U	5 ST
Styrene	U	U	U	U	U	U	U	5 ST
Bromoform	U	U	U	U	U	U	U	50 GV
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-Dibromo-3-chloropropane	U	U	U	U	U	U	U	0.04 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	5 ST

**NOTES:**

Concentration exceeds NYSDEC Class GA Groundwater Standards or Guidance Values  
 1. EW-1 turned off on 11/15/05 due to a high load on the pump.  
 Pump scheduled to be pulled and cleaned at a future date.

**ABBREVIATIONS:**

ug/L = Micrograms per liter  
 --: 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.

**FRANKLIN CLEANERS SITE**  
**NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050**  
**RESULTS OF ANALYSIS OF AIR STRIPPER EFFLUENT FOR VOCs**

SAMPLE ID	SYSTEM EFFLUENT (AS-1)		SYSTEM EFFLUENT (AS-1)		SYSTEM EFFLUENT (AS-1)		SYSTEM EFFLUENT (AS-1)		SYSTEM EFFLUENT (AS-1)		EFFLUENT LIMITATIONS (ug/L)	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES (ug/L)
	WATER	D&B	WATER	D&B	WATER	D&B	WATER	D&B	WATER	D&B		
DATE OF COLLECTION	9/7/2006	9/26/2006	10/2/2006	10/16/2006	10/30/2006	11/13/2006	11/28/2006					
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	WATER	WATER					
COLLECTED BY	D&B	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)					
Dichlorodifluoromethane	U	U	U	U	U	U	U	U	U	U	U	5 ST
Chloromethane	U	U	U	U	U	U	U	U	U	U	U	--
Vinyl chloride	U	U	U	U	U	U	U	U	U	U	U	2 ST
Bromomethane	U	U	U	U	U	U	U	U	U	U	U	5 ST
Chloroethane	U	U	U	U	U	U	U	U	U	U	U	5 ST
Trichlorofluoromethane	U	U	U	U	U	U	U	U	U	U	U	5 ST
1,1-Dichloroethene	U	U	U	U	U	U	U	U	U	U	U	5 ST
1,1,2-Trichloro-1,2,2-trifluoroethane	U	U	U	U	U	U	U	U	U	U	U	50 GV
Acetone	U	U	U	U	U	U	U	U	U	U	U	60 GV
Carbon disulfide	U	U	U	U	U	U	U	U	U	U	U	--
Methyl acetate	U	U	U	U	U	U	U	U	U	U	U	5 ST
Methylene chloride	U	U	U	U	U	U	U	U	U	U	U	5 ST
trans 1,2-Dichloroethene	U	U	U	U	U	U	U	U	U	U	U	10 GV
Methyl-tert butyl ether	U	U	U	U	U	U	U	U	U	U	U	5 ST
1,1-Dichloroethane	U	U	U	U	U	U	U	U	U	U	U	5 ST
cis-1,2-Dichloroethene	U	U	U	U	U	U	U	U	U	U	U	50 GV
2-Butanone	U	U	U	U	U	U	U	U	U	U	U	7 ST
Chloroform	U	U	U	U	U	U	U	U	U	U	U	5 ST
1,1,1-Trichloroethane	U	U	U	U	U	U	U	U	U	U	U	--
Cyclohexane	U	U	U	U	U	U	U	U	U	U	U	5 ST
Carbon tetrachloride	U	U	U	U	U	U	U	U	U	U	U	1 ST
Benzene	U	U	U	U	U	U	U	U	U	U	U	0.6 ST
1,2-Dichloroethane	U	U	U	U	U	U	U	U	U	U	U	5 ST
Trichloroethene	U	U	U	U	U	U	U	U	U	U	U	--
Methylcyclohexane	U	U	U	U	U	U	U	U	U	U	U	1 ST
1,2-Dichloropropane	U	U	U	U	U	U	U	U	U	U	U	50 GV
Bromodichloromethane	U	U	U	U	U	U	U	U	U	U	U	0.4 ST
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	U	U	U	U	--
4-Methyl-2-pentanone	U	U	U	U	U	U	U	U	U	U	U	5 ST
Toluene	U	U	U	U	U	U	U	U	U	U	U	0.4 ST
trans-1,3-Dichloropropene	U	U	U	U	U	U	U	U	U	U	U	5 ST
1,1,2-Trichloroethane	U	U	U	U	U	U	U	U	U	U	U	1 ST
Tetrachloroethene	U	U	U	U	U	U	U	U	U	U	U	50 GV
2-Hexanone	U	U	U	U	U	U	U	U	U	U	U	0.4 ST
Dibromochloromethane	U	U	U	U	U	U	U	U	U	U	U	--
1,2-Dibromoethane	U	U	U	U	U	U	U	U	U	U	U	5 ST
Chlorobenzene	U	U	U	U	U	U	U	U	U	U	U	5 ST
Ethylbenzene	U	U	U	U	U	U	U	U	U	U	U	5 ST
Xylene (total)	U	U	U	U	U	U	U	U	U	U	U	5 ST
Styrene	U	U	U	U	U	U	U	U	U	U	U	5 ST
Bromoform	U	U	U	U	U	U	U	U	U	U	U	50 GV
Isopropylbenzene	U	U	U	U	U	U	U	U	U	U	U	50 GV
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	U	U	U	U	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	U	U	U	5 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	U	U	U	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U	U	U	U	3 ST
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	U	U	U	U	U	3 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	U	U	U	U	0.04 ST
	U	U	U	U	U	U	U	U	U	U	U	5 ST

**NOTES:**  
 Concentration exceeds NYSDEC Class GA Groundwater Standards or Guidance Values  
 U: Compound analyzed for but not detected  
 J: Compound found at a concentration below CRDL, value estimated  
 U\*: Result qualified as non-detect due to validation criteria.



FRANKLIN CLEANERS SITE  
 NYSDCE CONTRACT No. D004446 / 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)		EFFLUENT LIMITATIONS	
	WATER	D&B	WATER	D&B	WATER	D&B	WATER	D&B	WATER	D&B		
DATE OF COLLECTION	9/12/2006		9/25/2006		10/2/2006		10/16/2006		10/30/2006		11/13/2006	11/28/2006
COLLECTED BY												
UNITS	(ug/L)		(ug/L)		(ug/L)		(ug/L)		(ug/L)		(ug/L)	(ug/L)
METALS												
Iron	72.2 B		71.6 B		51.9 B		68.3 B		40.6 B		19.2 B	25.5 B
Manganese	31.2 B		31.9 B		38.2 B		32.6 B		40.6 B		37.5 B	37.5 B
pH (S.U.)	7.5		7.3		7.3		7.4		7.5		7.3	7.5

**ABBREVIATIONS:**  
 ug/L: Micrograms per liter

**QUALIFIERS:**  
 B: Concentration is greater than the instrument detection limit (IDL) but less than the Contract Required Detection Limit (CRDL)  
 \*: Result qualified as suspect based on validation criteria.

**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	<i>PID Reading</i>	<i>PID Reading</i>	<i>PID Reading</i>	<i>PID Reading</i>
September 12, 2006	0.0	0.0	0.0	0.0
September 19, 2006	0.0	0.0	0.0	0.0
September 25, 2006	0.0	0.0	0.0	0.0
October 2, 2006	0.0	0.0	0.0	0.0
October 12, 2006	0.0	0.0	0.0	0.0
October 16, 2006	0.0	0.0	0.0	0.0
October 23, 2006	0.0	0.0	0.0	0.0
October 30, 2006	0.0	0.0	0.0	0.0
November 6, 2006	0.0	0.0	0.0	0.0
November 13, 2006	0.0	0.0	0.0	0.0
November 20, 2006	0.0	0.0	0.0	0.0
November 28, 2006	0.0	0.0	0.0	0.0

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

**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 <sup>(1)</sup>	SYSTEM INFLUENT (EW-1) AVERAGE EXTRACTION RATE (gpm)	SYSTEM INFLUENT (EW-1) PCE CONCENTRATION (ug/l)	SYSTEM INFLUENT (EW-2) AVERAGE EXTRACTION RATE (gpm)	SYSTEM INFLUENT (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 <sup>(2)</sup> (lbs)
12/13/2004	36.3	36	3.1	68	< 0.5	98.70	7.60E-04	502	20.34
12/27/2004	36.0	36	2.7	260 D	< 0.5	99.03	1.00E-03	343	20.68
1/10/2005	35.8	42	3.3	370 D	< 0.5	99.28	1.36E-03	328	21.13
1/25/2005	36.4	38	3.1	280 D	1 J	98.25	1.11E-03	307	21.47
2/8/2005	36.5	32	3.0	240	< 0.5	98.95	9.45E-04	331	21.78
2/23/2005	36.2	44	2.8	220 D	< 0.5	99.12	1.11E-03	328	22.30 <sup>(2)</sup>
3/7/2005	35.8	41	2.8	290 D	< 0.5	99.15	1.14E-03	154	22.48
3/21/2005	36.6	34	3.0	190 D	< 0.5	98.91	9.09E-04	227	22.68
4/5/2005	35.8	29	3.2	190	< 0.5	98.82	8.24E-04	282	22.91
4/19/2005	35.6	33	2.7	210 D	< 0.5	98.90	8.72E-04	337	23.21
5/2/2005	36.2	31	2.6	230 D	< 0.5	98.87	8.61E-04	310	23.48
5/16/2005	37.0	33	2.4	220	< 0.5	98.87	8.76E-04	710	24.10 <sup>(4)</sup>
6/6/2005	34.7	27	2.8	190	< 0.5	98.72	7.36E-04	74	24.15
6/20/2005	36.9	32	2.6	150 D	< 0.5	98.74	7.87E-04	279	24.37
7/5/2005	35.7	26	2.5	220 E	1 J	97.42	7.20E-04	358	24.63
7/25/2005	36.2	26	2.2	180 D	< 0.5	98.56	6.70E-04	392	24.89
8/8/2005	36.2	21 B	2.7	120 B	< 0.5	98.21	5.43E-04	239	25.02
8/31/2005	35.3	24	2.5	180	< 0.5	98.54	6.50E-04	525	25.36 <sup>(2)</sup>
9/12/2005	38.0	21	2.4	170	< 0.5	98.33	6.04E-04	192	25.48
9/26/2005	37.0	26	2.0	160 D	< 0.5	98.48	6.42E-04	310	25.68
10/10/2005	36.5	19	2.0	160	< 0.5	98.10	5.08E-04	313	25.84
10/24/2005	37.4	24	2.4	150	< 0.5	98.42	6.30E-04	300	26.03
11/8/2005	37.8	26	2.6	190 D	< 0.5	98.63	7.40E-04	306	26.25
11/21/05 <sup>(3)</sup>	37.8	26	2.0	200	< 0.5	98.56	4.92E-04 2.00E-04	136 507	26.42 <sup>(2)</sup>
12/5/2005	0.0	NS	1.6	170	< 0.5	99.71	1.36E-04	106	26.44
12/21/2005	0.0	NS	3.0	140	< 0.5	99.64	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	160	< 0.5	99.69	2.24E-04	462	26.68
2/6/2006	0.0	NS	2.4	160	< 0.5	99.69	1.92E-04	311	26.74
2/21/2006	0.0	NS	3.1	180	< 0.5	99.72	2.79E-04	425	26.74 <sup>(2)</sup>
3/7/2006	0.0	NS	2.9	140	< 0.5	99.64	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	27.09 <sup>(2)</sup>
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 <sup>(2)</sup>
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 <sup>(2)</sup>

**NOTES:**

1. Performance results for the reporting period are shaded.
2. Estimated through the end of the reporting period.
3. Results show removal efficiency and runtimes for both EW-1 and EW-2

**ABBREVIATIONS:**

gpm: gallons per minute  
ug/L: micrograms per liter  
lb/hr: pounds per hour  
NS: Not sampled

**QUALIFIERS:**

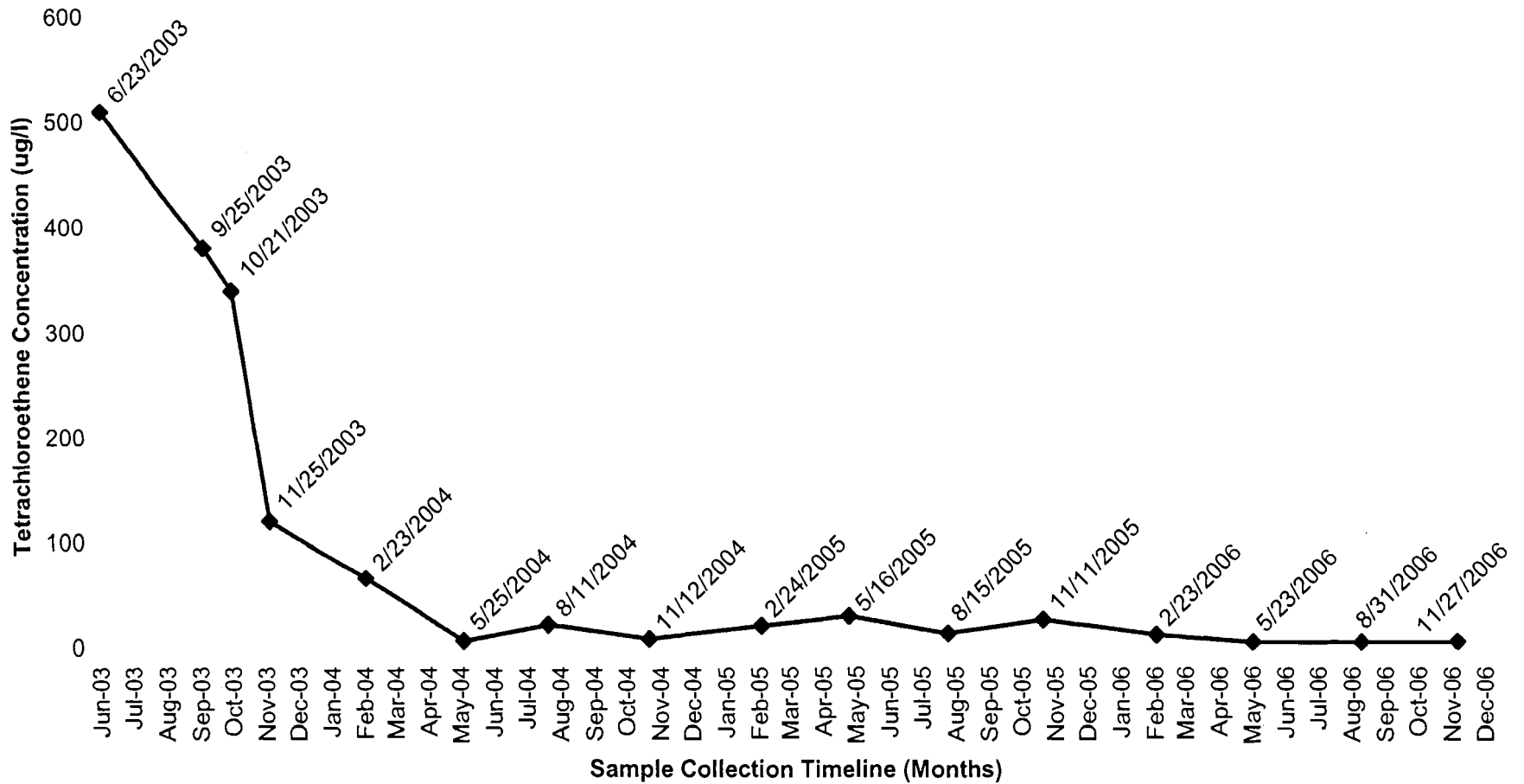
D: Result taken from reanalysis at a secondary dilution  
J: Compound found at a concentration below CRDL, value estimated  
B: Compound detected in method blank as well as the sample, value estimated  
E: Compound concentration exceeds instrument calibration range, value estimated

**ATTACHMENT F**

**MONITORING WELL TREND LINE GRAPHS**

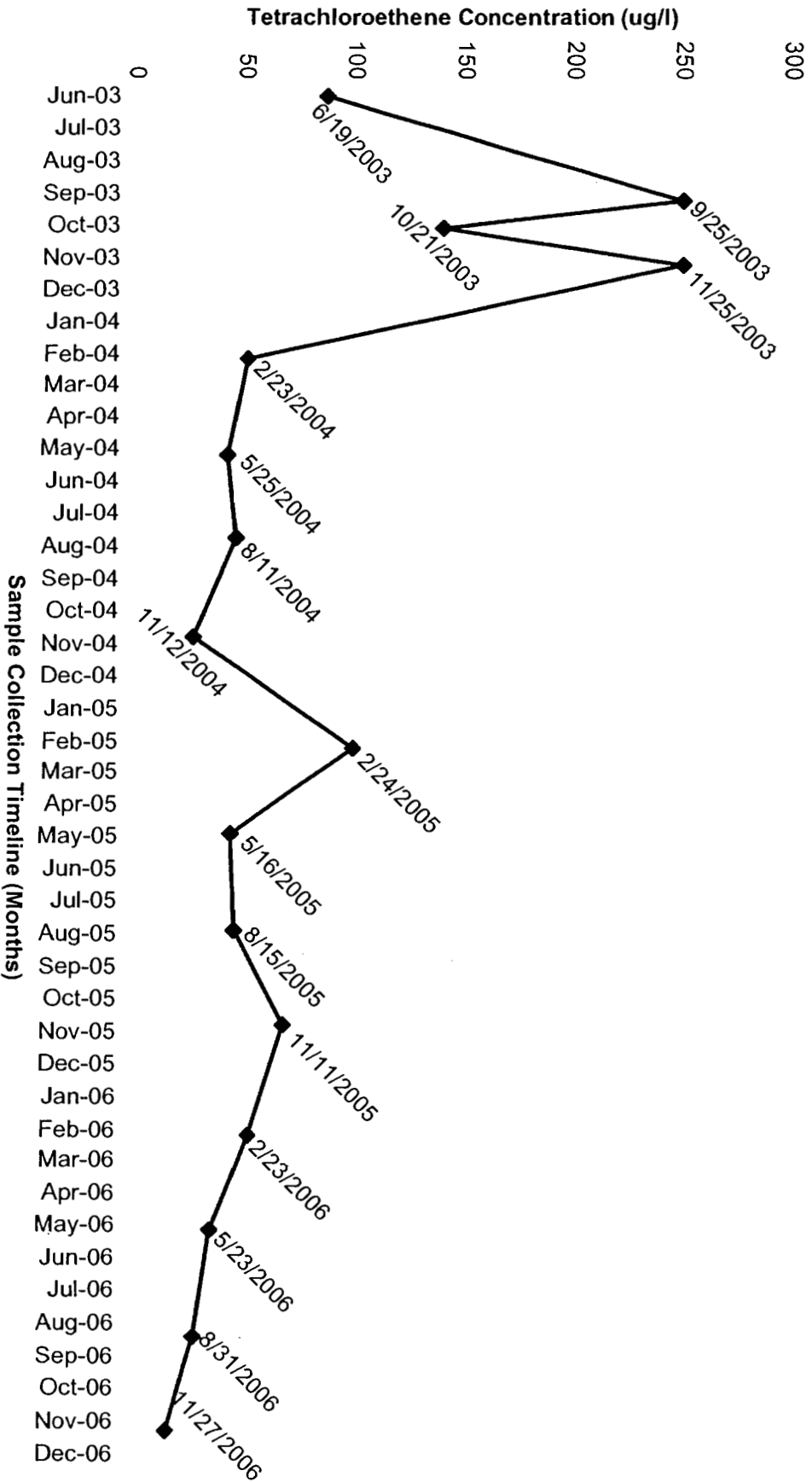
GRAPH 1

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



GRAPH 2

Franklin Cleaners Site  
 NYSDEC 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

