



**Dvirka
and
Bartilucci**
CONSULTING ENGINEERS

330 Crossways Park Drive, Woodbury, New York 11797-2015
516-364-9890 • 718-460-3634 • Fax: 516-364-9045
e-mail: findingsolutions@db-eng.com

Board of Directors

Henry J. Chlupsa, P.E.
President

Steven A. Fangmann, P.E.
Executive Vice President

Nicholas J. Bartilucci, P.E.
Chairman

Vice Presidents

Richard M. Walka

Senior Vice President

Garrett M. Byrnes, P.E.

Vice President

Dennis F. Koehler, P.E.

Vice President

Joseph H. Marturano

Vice President

William D. Merklin, P.E.

Vice President

Kenneth J. Pritchard, P.E.

Vice President

Theodore S. Pytlar, Jr.

Vice President

Brian M. Veith, P.E.

Vice President

Senior Associates

Steven M. Cabrera

Christopher M. Clement

Robert J. DeGiorgio, P.E., CPESC

Thomas P. Fox, P.G.

Michael R. Hofgren

Michael Neuberger, P.E.

Philip R. Sachs, P.E.

Daniel Shabat, P.E.

Charles J. Wachsmuth, P.E.

Associates

Joseph F. Baader

Rudolph F. Cannavale

Ellen R. DeOrsay

Frank DeVita

Stefanos J. Eapen, R.A.

Joseph A. Fioraliso, P.E.

Christopher W. Francis

Christopher M. LeHanka

James J. Magda

Robbin A. Petrella

Edward J. Reilly

Jason R. Tonne

November 10, 2008

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. 16 (June 1, 2008 through August 31, 2008)
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 completed by Dvirka and Bartilucci Consulting Engineers (D&B) for the Franklin Cleaners Site for the period from June 1, 2008 through August 31, 2008. A site location map is presented as Figure 1 in Attachment A.

Presented below is a summary of system operations during the quarter, as well as the results of analytical testing completed in accordance with the approved 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 39.0 gallons per minute (gpm) and extraction well EW-2 operated at an average pumping rate of 6.0 gpm. Approximately 0.56 pounds of PCE were removed from the extracted groundwater by the low profile air stripper during the reporting period and approximately 32.09 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.

Mr. Payson Long
Division of Environmental Remediation
New York State Department of Environmental Conservation
November 10, 2008

Page 2

Based on measurements recorded at the treatment system discharge flow meter, approximately 5,808,436 gallons of treated groundwater 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 4,948,081 gallons of groundwater entering the treatment system. This inconsistency is most likely due to fouling of the influent flow meter paddle wheel.

During this period, the groundwater extraction and treatment system was inoperative for a total of approximately 356 hours due to system alarm conditions and routine system maintenance. Of the 356 hours, approximately 254 hours of "downtime" was due to a high-high wet well condition in the treatment system building and approximately 102 hours of "downtime" was due to a pressure blower failure. Note that the pressure blower failure was diagnosed to have been caused by a malfunctioning cooling fan. The cooling fan was subsequently replaced and the system was restarted without incident. In addition to the downtime caused by the pressure blower failure, the remaining "downtime" reported throughout the course of this reporting period involved nine alarm episodes due to a high wet well condition and one pressure blower maintenance event.

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.

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 each of the 3 months comprising this reporting period. Each sample was analyzed for volatile organic compounds (VOCs) utilizing United States Environmental Protection Agency (USEPA) Method OLMO4.2. The samples collected from the air stripper discharge sample tap were additionally analyzed for iron and manganese utilizing USEPA Method 200.7 and for pH utilizing 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. Based on the analytical results provided in Attachment D, extraction well EW-1 continues to exhibit concentrations of tetrachloroethene (PCE) in groundwater ranging from a low of 12 micrograms per liter (ug/l) detected on July 10, 2008, to a high of 24 ug/l detected on June 23, 2008. Extraction well EW-2 continues to exhibit concentrations of PCE ranging from a low of 61 ug/l detected on August 21, 2008, to a high of 130 ug/l detected on June 23, 2008. The discharge sample results for the period exhibited VOC, metals and pH concentrations below the effluent limitations.

A summary of the extraction and treatment system performance results since the system was placed in operation is provided in Attachment E.

Mr. Payson Long
Division of Environmental Remediation
New York State Department of Environmental Conservation
November 10, 2008

Page 3

In addition, vapor phase samples were collected from the two carbon adsorption unit influent and effluent sample taps at a general frequency of once per week. Each sample was collected by filling a Tedlar bag directly from each of the influent and effluent sample taps located on the two carbon adsorption units, and the samples were screened using a calibrated, handheld photoionization detector (PID). During the period of July 25, 2008 to August 28, 2008, PID readings collected from carbon vessel No. 1 ranged from 0.1 to 0.2 parts per million (ppm) for both the influent and effluent vapor samples. During this same period, the PID readings collected from carbon vessel No. 2 ranged from 0.1 to 0.4 ppm for the influent and effluent vapor samples. Note that the PID readings collected from carbon vessel outlets Nos. 1 and 2 were both below the NYSDEC effluent standard of 1 ppm.

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 groundwater monitoring wells ASMW-1 through ASMW-7 on August 18 and 19, 2008. Samples were analyzed for VOCs utilizing USEPA Method OLMO4.2. The locations of the monitoring wells are depicted in Figure 2 in Attachment A.

The results of the analyses of the groundwater samples collected from the monitoring wells are provided in Attachment D and summarized on Figure 2 provided in Attachment A. The results are compared to the NYSDEC Class GA Groundwater Standards and Guidance Values. Tetrachloroethene (PCE), at a concentration of 5.6 ug/l, was detected at a concentration exceeding its Class GA Standard of 5.0 ug/l in groundwater monitoring well ASMW-1. However, note that the PCE concentration represents a decrease from the 17.0 ug/l concentration detected in the previous quarter (May 20, 2008) and is consistent with the relatively low concentrations detected in this monitoring well since 2004. The concentration of PCE detected in groundwater sample ASMW-2 (3.5 ug/l) decreased from 16 ug/l detected in the previous quarter (May 20, 2008) and continues to maintain a decreasing trend since 2003. In addition, note that the PCE concentration detected in monitoring well ASMW-3 continues to exhibit a concentration below its Class GA standard. VOCs were not detected in the groundwater samples collected from groundwater monitoring wells 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.

Groundwater sampling for Quarter 17 is scheduled for November 2008.

Data Validation

The biweekly system samples and groundwater samples have been analyzed for VOCs by Mitkem Corporation (Mitkem). The effluent sample (AS-1) was additionally 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

Mr. Payson Long
Division of Environmental Remediation
New York State Department of Environmental Conservation
November 10, 2008

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.

Findings/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.
- Concentrations of PCE detected in groundwater monitoring well ASMW-1 decreased from 17 ug/l (May 20, 2008) to 5.6 ug/l (August 19, 2008), and continues to exhibit a decreasing trend from a high of 30 ug/l (May 16, 2005) for the past 3-year period.
- Concentrations of PCE detected in groundwater monitoring well ASMW-2 decreased from 16 ug/l (May 20, 2008) to 3.5 ug/l (August 19, 2008) and continues to exhibit a decreasing trend from a high of 100 ug/l (February 24, 2005) for the past 3-year period.
- The inconsistency noted between the influent flow meters for EW-1 and EW-2, and the treatment system discharge flow meter, is most likely due to fouling at the influent flow meter paddle wheel.
- The recurring alarm conditions at the treatment system building are most likely due to a backup of the system effluent piping which frequently occurs following a large storm event.

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.

Dvirka and Bartilucci
CONSULTING ENGINEERS

Mr. Payson Long
Division of Environmental Remediation
New York State Department of Environmental Conservation
November 10, 2008

Page 5

- 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.
- Disassemble and clean the influent flow meter paddle wheels on a monthly basis in an attempt to resolve the inconsistencies noted between the influent and effluent meters. If this is not effective, replacement of the influent meters with a type less susceptible to fouling may be necessary.
- Diagnose the recurring high-high wet well conditions to prevent future system alarm conditions.

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

Very truly yours,



Stephen Tauss
Project Manager

SET/PM/jmy

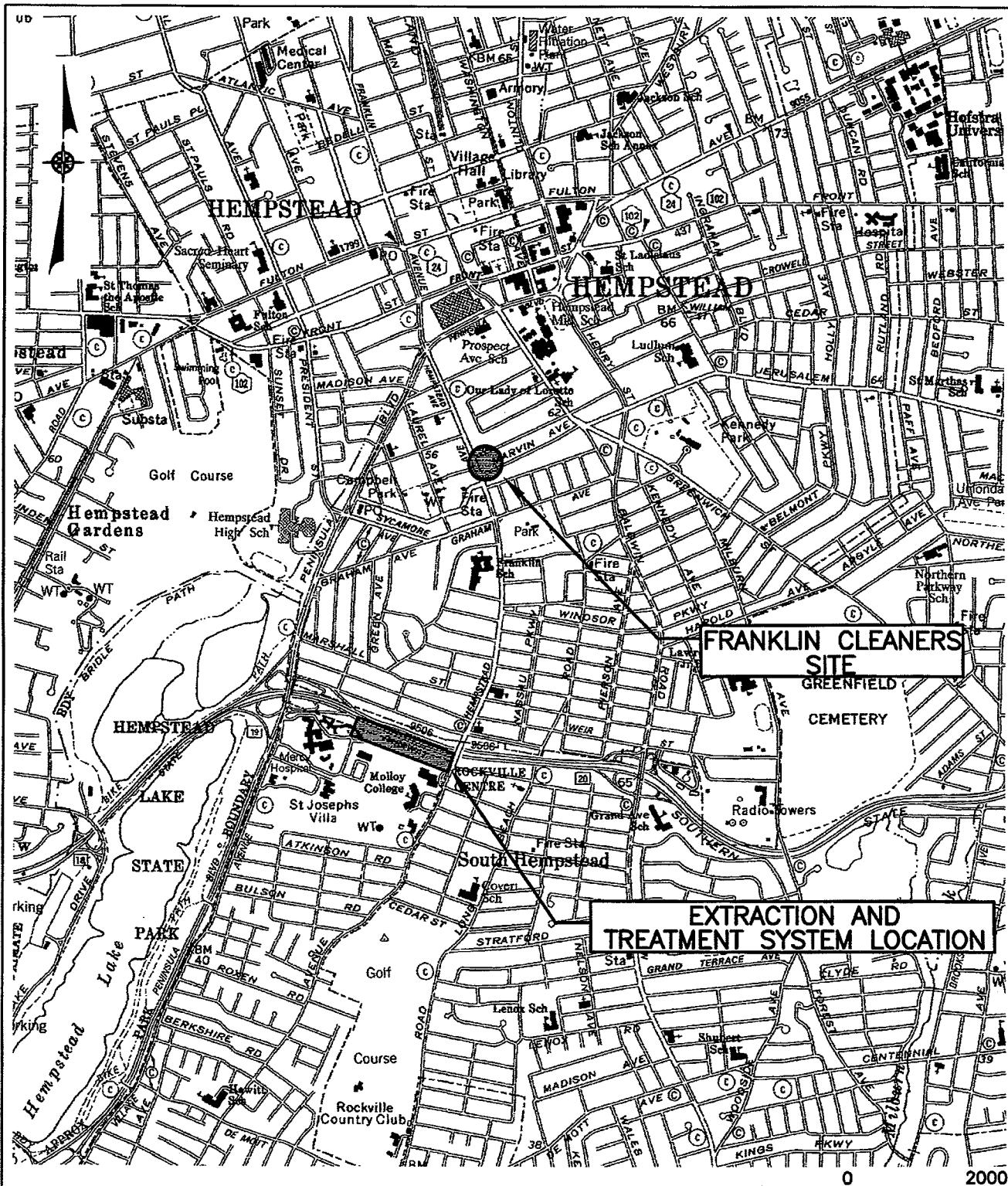
Attachments

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

♦2531\SET09308-PL.doc(R06)

ATTACHMENT A

FIGURES



SOURCE: USGS FREEPORT AND LYNBROOK QUADRANGLES

SCALE IN FEET

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**

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: 6/17/08				
Name of Personnel Onsite	Title	Time Arrived	Time Departed	Total Hours
L. Sorensen	President	0945	1245	5 (incl. trvl.)
E. Sorensen	Technician	0945	1245	5 (incl. trvl.)

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:

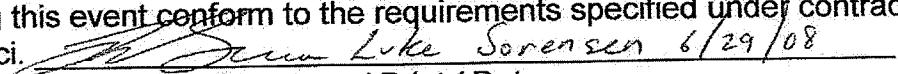
Item 2A: Pressure Blower Maintenance (0.5 hrs)

1. Inspected fan wheel for any wear or corrosion; 2. Inspected fan wheel for buildup of materials and cleaned;
3. Inspected motor winding for dust and dirt and cleaned; 4. Inspected V-belt drive for proper alignment and tension
5. Lubricated motor bearings and fan bearings; 6. Inspected all setscrews and bolts for tightness

Item 6: Non-Routine Maintenance (2.5 hrs): Diagnosed inoperable blower, found short circuit in motor starter's cooling fan. Removed fan, will order replacement with overnight delivery. Left system off line. Estimated return date 6/20.

Name of Part / Supply / Material	Manufacturer	Model Number	Quantity Used
Bearing grease	ExxonMobil	Mobilith SHC-100	Not measurable
Miniature Fuse	Amtrap	AMTR1	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

Date: 6/20/08				
Name of Personnel Onsite	Title	Time Arrived	Time Departed	Total Hours
L. Sorensen	President	1245	1445	4 (incl. trvl.)
E. Sorensen	Technician	1245	1445	4 (incl. trvl.)

Check off Items that were completed:

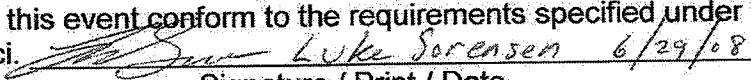
- Item 1: Snow Removal
- Item 2A: Pressure Blower Maintenance
- Item 2B: Pressure Blower Fan Wheel Replacement
- Item 3: Air Stripper Maintenance
- Item 4: Granular Activated Carbon Removal and Replacement
- Item 5: Submersible Wet Well Pump Maintenance and Inspection
- Item 6: Non-routine Maintenance

Description of Work:

Item 6: Non-Routine Maintenance: 1.) Installed new cooling fan on blower motor starter, re-started system – problem corrected. System shut down on high wet well level; 2.) Investigated high wet well condition, found gate valves on wet well pump discharges throttled down to ~25% open. Opened both valves to 100%, re-started system, measured motor current (OK) – problem corrected.

Name of Part / Supply / Material	Manufacturer	Model Number	Quantity Used
Cooling Fan	Siemens	SIKOSTART ...	1
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.

 Luke Sorensen 6/29/08

Signature / Print / Date

MAINTENANCE AND INSPECTION REPORT

FRANKLIN CLEANERS SITE, ROCKVILLE CENTRE, NY

Date: 8/5/08

Name of Personnel Onsite	Title	Time Arrived	Time Departed	Total Hours
L. Sorensen	President	1345	1715	5 (incl. travel, eq. pickup, dropoff)
E. Sorensen	Technician	1345	1715	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 – Vegetation Removal

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. *John Luke Sorensen* 8/15/08

ATTACHMENT D

ANALYTICAL RESULTS

FRANKLIN CLEANERS SITE
NYSDEC CONTRACT No. D04446 / SITE No. 1-30-050
RESULTS OF ANALYSIS OF EW-1 INFLUENT

SAMPLE ID	SYSTEM INFLOW (EW-1)	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES				
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	
DATE OF COLLECTION	6/5/2008	6/23/2008	7/10/2008	7/23/2008	8/7/2008	8/7/2008
COLLECTED BY UNITS	D&B	D&B	D&B	D&B	D&B	D&B
VOCS	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Dichlorodifluoromethane	U	U	U	U	U	5 ST
Chloromethane	U	U	U	U	U	—
Vinyl chloride	U	U	U	U	U	2 ST
Bromomethane	U	U	U	U	U	5 ST
Chloroethane	U	U	U	U	U	5 ST
Trichlorofluoromethane	U	U	U	U	U	5 ST
1,1-Dichloroethene	U	U	U	U	U	5 ST
1,1,2-Trichloro-1,2,2-trifluoroethane	U	U	U	U	U	5 ST
Acetone	U	U	U	U	U	50 GV
Carbon disulfide	U	U	U	U	U	60 GV
Methyl acetate	U	U	U	U	U	—
Methylene chloride	U	U	U	U	U	5 ST
trans 1,2-Dichloroethene	U	U	U	U	U	5 ST
Methyl-tert butyl ether	U	U	U	U	U	10 GV
1,1-Dichloroethane	U	U	U	U	U	5 ST
cis-1,2-Dichloroethene	U	U	U	U	U	5 ST
2-Butanone	U	U	U	U	U	50 GV
Chloroform	U	U	U	U	U	7 ST
1,1,1-Trichloroethane	U	U	U	U	U	5 ST
Cyclohexane	U	U	U	U	U	—
Carbon tetrachloride	U	U	U	U	U	5 ST
Benzene	U	U	U	U	U	1 ST
1,2-Dichloroethane	U	U	U	U	U	0.6 ST
Trichloroethene	U	U	U	U	U	5 ST
Methylcyclohexane	U	U	U	U	U	—
1,2-Dichloropropane	U	U	U	U	U	1 ST
Bromodichloromethane	U	U	U	U	U	50 GV
cis-1,3-Dichloropropene	U	U	U	U	U	0.4 ST
4-Methyl-2-pentanone	U	U	U	U	U	—
Toluene	U	U	U	U	U	5 ST
trans-1,3-Dichloropropene	U	U	U	U	U	0.4 ST
1,1,2-Trichloroethane	U	U	U	U	U	1 ST
Tetrachloroethene	U	U	U	U	U	5 ST
2-Hexanone	U	U	U	U	U	50 GV
Dibromochloromethane	U	U	U	U	U	5 ST
1,2-Dibromoethane	U	U	U	U	U	5 ST
Chlorobenzene	U	U	U	U	U	5 ST
Ethylbenzene	U	U	U	U	U	5 ST
Xylene (total)	U	U	U	U	U	50 GV
Styrene	U	U	U	U	U	5 ST
Bromoform	U	U	U	U	U	5 ST
Isopropylbenzene	U	U	U	U	U	3 ST
1,1,2,2-Tetrachloroethane	U	U	U	U	U	3 ST
1,3-Dichlorobenzene	U	U	U	U	U	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	0.04 ST
1,2-Dibromo-3-chloropropane	U	U	U	U	U	5 ST

ABBREVIATIONS:

ug/L = Micrograms per liter
--: Not established

QUALIFIERS:

U: Compound analyzed for but not detected

Concentration exceeds NYSDEC Class GA Groundwater Standards or Guidance Values

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

ABBREVIATIONS:

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

ST: Standard Value
GV: Guidance Value

U: Compound analyzed for but not detected

Groundwater Standards or Guidance Values

GV: Guidance Value

FRANKLIN CLEANERS SITE
NYSDEC CONTRACT No. D00446 / SITE No. 1-30-050

RESULTS OF ANALYSIS OF AIR STRIPPER EFFLUENT FOR VOCs

SAMPLE ID	SYSTEM EFFLUENT (AS-1)	EFFLUENT LIMITATIONS	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES					
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	WATER		
DATE OF COLLECTION	6/23/2008	6/23/2008	7/10/2008	7/25/2008	8/7/2008	8/21/2008		
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)	(ug/L)
Dichlorodifluoromethane	U	U	U	U	U	U	5 ST	5 ST
Chloromethane	U	U	U	U	U	U	--	--
Vinyl chloride	U	U	U	U	U	U	2 ST	2 ST
Bromomethane	U	U	U	U	U	U	5 ST	5 ST
Chloroethane	U	U	U	U	U	U	5 ST	5 ST
Trichlorofluoromethane	U	U	U	U	U	U	5 ST	5 ST
1,1-Dichloroethene	U	U	U	U	U	U	5 ST	5 ST
1,1,2-Trichloro-1,2,2-trifluoroethane	U	U	U	U	U	U	5 ST	5 ST
Acetone	U	U	U	U	U	U	50 GV	50 GV
Carbon disulfide	U	U	U	U	U	U	60 GV	60 GV
Methyl acetate	U	U	U	U	U	U	--	--
Methylene chloride	U	U	U	U	U	U	5 ST	5 ST
trans-1,2-Dichloroethene	U	U	U	U	U	U	10 GV	10 GV
Methyl-t-ent-butyl ether	U	U	U	U	U	U	5 ST	5 ST
1,1-Dichloroethane	U	U	U	U	U	U	5 ST	5 ST
cis-1,2-Dichloroethene	U	U	U	U	U	U	50 GV	50 GV
2-Butanone	U	U	U	U	U	U	7 ST	7 ST
Chloroform	U	U	U	U	U	U	5 ST	5 ST
1,1,1-Trichloroethane	U	U	U	U	U	U	--	--
Cyclohexane	U	U	U	U	U	U	5 ST	5 ST
Carbon tetrachloride	U	U	U	U	U	U	1 ST	1 ST
Benzene	U	U	U	U	U	U	0.6 ST	0.6 ST
1,2-Dichloroethane	U	U	U	U	U	U	5 ST	5 ST
Trichloroethene	U	U	U	U	U	U	--	--
Methylcyclohexane	U	U	U	U	U	U	1 ST	1 ST
1,2-Dichloropropane	U	U	U	U	U	U	50 GV	50 GV
Bromodichloromethane	U	U	U	U	U	U	0.4 ST	0.4 ST
cis-1,3-Dichloropropene	U	U	U	U	U	U	--	--
4-Methyl-2-pentanone	U	U	U	U	U	U	5 ST	5 ST
Toluene	U	U	U	U	U	U	0.4 ST	0.4 ST
trans-1,3-Dichloropropene	U	U	U	U	U	U	1 ST	1 ST
1,1,2-Trichloroethane	U	U	U	U	U	U	5	5
Tetrachloroethene	U	U	U	U	U	U	50 GV	50 GV
2-Hexanone	U	U	U	U	U	U	5 ST	5 ST
Dibromochloromethane	U	U	U	U	U	U	5 ST	5 ST
1,2-Dibromoethane	U	U	U	U	U	U	5 ST	5 ST
Chlorobenzene	U	U	U	U	U	U	5 ST	5 ST
Ethylbenzene	U	U	U	U	U	U	5 ST	5 ST
Xylene (total)	U	U	U	U	U	U	50 GV	50 GV
Styrene	U	U	U	U	U	U	--	--
Bromoform	U	U	U	U	U	U	5 ST	5 ST
Isopropylbenzene	U	U	U	U	U	U	5 ST	5 ST
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	3 ST	3 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	3 ST	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	3 ST	3 ST
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	0.04 ST	0.04 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	5 ST	5 ST

ABBREVIATIONS

Concentration exceeds Site Specific Effluent

Standard Value

Guidance Value

Not established

Limitation

QUALIFIERS:

U: Compound analyzed for but not detected

FRANKLIN CLEANERS SITE
NYSDEC 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)						
SAMPLE TYPE	WATER						
DATE OF COLLECTION	6/5/2008	6/23/2008	7/10/2008	7/25/2008	8/7/2008	8/21/2008	
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)	
METALS							
Iron	88.7 B	158 B	U	U	U	U	
Manganese	28.0 B	34.4 B	27.6 B	27.0 B	28.3 B	26.2 B	
pH (S.U.)	7.5	7.2	7.3	6.8	7.4	7.3	6.5 to 8.5

QUALIFIERS:

ug/L: Micrograms per liter

- Concentration exceeds Site Specific Effluent Limitation

NOTES:

- U: Compound analyzed for but not detected
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
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 (ug/L)
DATE OF COLLECTION	8/19/2008	8/19/2008	8/18/2008	8/18/2008	8/18/2008	8/18/2008	8/18/2008	8/18/2008	
COLLECTED BY	D&B	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	U	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
Bromomethane	U	U	U	U	U	U	U	U	5 ST
Chloroethane	U	U	U	U	U	U	U	U	5 ST
Trichlorofluoromethane	U	U	U	U	U	U	U	U	5 ST
1,1-Dichloroethene	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	5 ST
Acetone	U	U	U	U	U	U	U	U	50 GV 60 GV
Carbon disulfide	U	U	U	U	U	U	U	U	-
Methyl acetate	U	U	U	U	U	U	U	U	5 ST
Methylene chloride	U	U	U	U	U	U	U	U	5 ST
trans 1,2-Dichloroethene	U	U	U	U	U	U	U	U	10 GV
Methyl-tert butyl ether	U	U	U	U	U	U	U	U	5 ST
1,1-Dichloroethane	U	U	U	U	U	U	U	U	5 ST
cis-1,2-Dichloroethene	U	U	U	U	U	U	U	U	5 ST
2-Butanone	U	U	U	U	U	U	U	U	50 GV
Chloroform	U	U	U	U	U	U	U	U	7 ST
1,1,1-Trichloroethane	U	U	U	U	U	U	U	U	5 ST
Cyclohexane	U	U	U	U	U	U	U	U	5 ST
Carbon tetrachloride	U	U	U	U	U	U	U	U	1 ST
Benzene	U	U	U	U	U	U	U	U	0.6 ST
1,2-Dichloroethane	U	U	U	U	U	U	U	U	5 ST
Trichloroethene	U	U	U	U	U	U	U	U	-
Methylcyclohexane	U	U	U	U	U	U	U	U	1 ST
1,2-Dichloropropane	U	U	U	U	U	U	U	U	50 GV
Bromodichloromethane	U	U	U	U	U	U	U	U	0.4 ST
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	U	-
4-Methyl-2-pentanone	U	U	U	U	U	U	U	U	5 ST
Toluene	U	U	U	U	U	U	U	U	0.4 ST
trans-1,3-Dichloropropene	U	U	U	U	U	U	U	U	1 ST
1,1,2-Trichloroethane	U	U	U	U	U	U	U	U	5 ST
Tetrachloroethene	U	U	U	U	U	U	U	U	50 GV
2-Hexanone	U	U	U	U	U	U	U	U	50 GV
Dibromochloromethane	U	U	U	U	U	U	U	U	5 ST
1,2-Dibromoethane	U	U	U	U	U	U	U	U	5 ST
Chlorobenzene	U	U	U	U	U	U	U	U	5 ST
Ethylbenzene	U	U	U	U	U	U	U	U	5 ST
Xylene (total)	U	U	U	U	U	U	U	U	5 ST
Styrene	U	U	U	U	U	U	U	U	50 GV
Bromoform	U	U	U	U	U	U	U	U	5 ST
Isopropylbenzene	U	U	U	U	U	U	U	U	5 ST
1,1,2-Tetrachloroethane	U	U	U	U	U	U	U	U	3 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U	0.04 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	U	5 ST

ABBREVIATIONS:

ug/L = Micrograms per liter
 - = Not established

QUALIFIERS:

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

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

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>
6/5/08 1:40 PM	0.0	0.0	0.0	0.0
6/12/08 11:05 AM	0.0	0.0	0.0	0.0
6/23/08 3:15 PM	0.0	0.0	0.0	0.0
7/25/08 4:45 PM	0.2	0.2	0.4	0.2
7/31/08 4:50 PM	0.1	0.2	0.2	0.2
8/7/08 3:20 PM	0.2	0.2	0.3	0.4
8/14/08 2:00 PM	0.1	0.1	0.1	0.1
8/15/08 4:00 PM	0.2	0.2	0.2	0.2
8/21/08 4:25 PM	0.2	0.2	0.2	0.2
8/28/08 4:35 PM	0.1	0.2	0.2	0.2

NOTES:

Samples were collected by filling a Tedlar bag at each of the sampling locations. Samples were tested using a handheld photoionization detector (PID).
 * Sample not taken due to sporadic and inconsistent readings from PID, possibly due to very cold weather and possible condensation on the bulb.

ATTACHMENT E

PERFORMANCE SUMMARY

FRANKLIN CLEANERS SITE
NYSDEC CONTRACT No. D00446 / 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/h)	ESTIMATED SYSTEM RUNTIME (hr)	ESTIMATED CUMULATIVE PCE REMOVAL ⁽²⁾ (lbs)	
12/21/2005	0.0	NS	1.6	170	< 0.5	99.71	1.38E-04	106	26.43	
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	26.67	
2/6/2006	0.0	NS	2.4	180	< 0.5	99.69	1.92E-04	311	26.73	
2/21/2006	0.0	NS	3.1	180	< 0.5	99.72	2.79E-04	425	26.73	
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	180	< 0.5	99.69	2.40E-04	381	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	
5/19/2006	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	1.55E-04	312	27.08	
6/5/2006	0.0	NS	2.6	120	< 0.5	99.58	1.58E-04	337	27.14	
6/19/2006	0.0	NS	2.7	120	< 0.5	99.58	1.62E-04	327	27.14	
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	
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	
10/22/2006	40.2	22	0.0	NS	< 0.5	97.73	4.43E-04	169	27.55	
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	336	27.97
11/28/2006	41.1	17	0.0	NS	< 0.5	97.06	3.50E-04	418	28.12	
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	
1/7/2007	38.3	17	0.0	NS	< 0.5	97.06	3.76E-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	96.15	2.40E-04	489	28.80	
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	3.98E-04	190	29.06	
4/16/2007	40.5	17	0.0	NS	< 0.5	97.06	3.48E-04	286	29.16	
5/1/2007	39.2	16	0.0	NS	< 0.5	96.98	3.14E-04	284	29.25	
5/16/2007	39.5	16	0.0	NS	< 0.5	96.98	3.16E-04	336	29.36	
5/29/2007	41.4	15	0.0	NS	< 0.5	96.87	3.11E-04	417	29.49	
6/14/2007	39.3	14	0.0	NS	< 0.5	96.43	2.76E-04	284	29.56	
6/24/2007	39.3	5	0.0	NS	< 0.5	90.00	9.84E-05	336	29.60	
7/10/2007	39.2	12	0.0	NS	< 0.5	98.83	2.38E-04	283	29.66	
7/17/2007	39.2	12	0.0	NS	< 0.5	98.83	3.48E-04	286	29.71	
7/22/2007	37.7	14	0.0	NS	< 0.5	96.13	3.14E-04	284	29.75	
8/23/2007	38.3	17	6.5	130	< 0.5	97.35	3.26E-04	191	29.88	
9/5/2007	40.0	14	6.3	53	< 0.5	96.87	3.11E-04	417	29.97	
9/12/2007	39.0	9	J	6.3	< 0.5	99.06	1.76E-04	359	29.98	
10/21/2007	38.4	10	6.1	51	< 0.5	99.18	1.92E-04	484	29.97	
10/31/2007	39.9	14	5.9	73	< 0.5	99.40	2.80E-04	233	30.03	
11/17/2007	39.4	15	B	5.7	80	B	2.86E-04	289	30.12	
11/22/2007	38.3	13	6.0	64	< 0.5	99.32	2.51E-04	407	30.22	
12/10/2007	40.6	16	6.5	100	< 0.5	99.50	3.23E-04	217	30.29	
12/27/2007	40.3	13	6.1	73	< 0.5	99.37	2.62E-04	348	30.38	
1/7/2008	40.4	12	6.7	75	< 0.5	99.32	2.42E-04	265	30.45	
1/21/2008	38.3	14	6.3	86	< 0.5	99.45	2.68E-04	327	30.54	
2/7/2008	40.7	15	6.3	81	< 0.5	99.46	2.86E-04	289	30.65	
2/19/2008	38.5	16	6.5	90	< 0.5	99.46	3.12E-04	407	30.82	
3/5/2008	40.1	20	5.9	100	< 0.5	99.58	4.02E-04	60	30.84	
3/17/2008	40.5	16	6.2	100	< 0.5	99.51	3.24E-04	317	30.94	
4/27/2008	39.8	17	6.2	100	< 0.5	99.32	3.38E-04	374	31.07	
4/18/2008	38.9	16	6.5	86	< 0.5	99.45	3.12E-04	371	31.19	
5/1/2008	38.3	19	6.4	89	< 0.5	99.51	3.86E-04	280	31.29	
5/13/2008	40.9	17	6.4	95	< 0.5	99.51	3.48E-04	716	31.54	
6/5/2008	38.8	20	6.5	100	< 0.5	99.54	3.87E-04	315	31.58	
6/23/2008	39.9	24	5.9	100	< 0.5	99.55	4.90E-04	247	31.70	
7/10/2008	39.8	12	6.0	64	< 0.5	99.31	2.38E-04	394	31.79	
7/27/2008	39.6	14	7.1	71	< 0.5	99.39	2.78E-04	327	31.88	
8/7/2008	40.2	14	5.9	66	< 0.5	99.38	2.82E-04	279	31.98	
8/21/2008	40.3	13	6.0	61	< 0.5	99.33	2.62E-04	510	32.09	

NOTES:

ABBREVIATIONS:

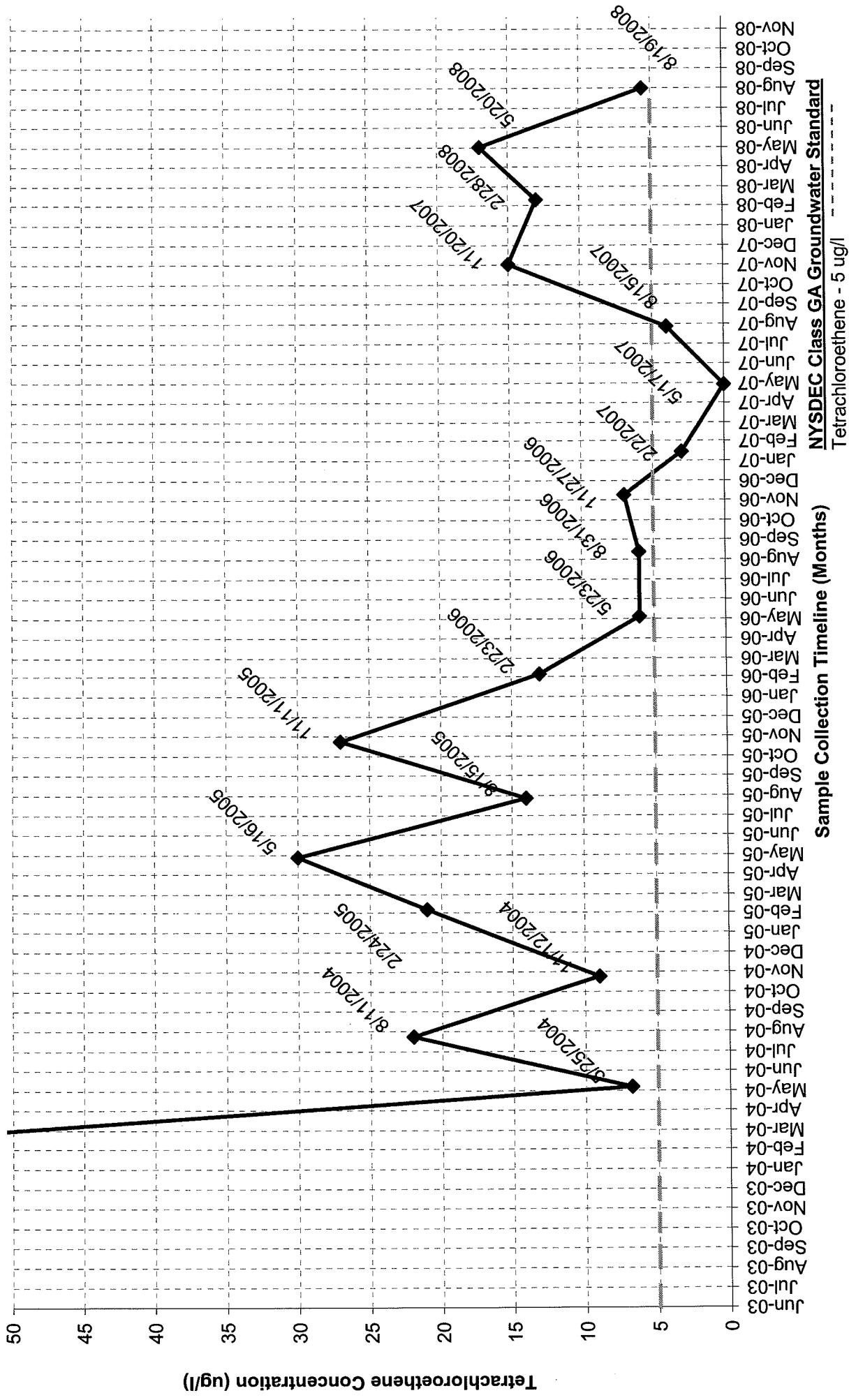
- 1. Data from 9/23/03 through 8/25/04 reported by URS Corporation.
- 2. PCE removal calculations as of September 8, 2003 system start-up date.
- 3. Performance results for the reporting period are shaded.
- 4. Estimated through the end of the reporting period.
- 5. Results show removal efficiency and runtimes for both EW-1 and EW-2
- gpm: gallons per minute
- ugL: micrograms per liter
- lb/hr: pounds per hour
- NS: Not sampled
- 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

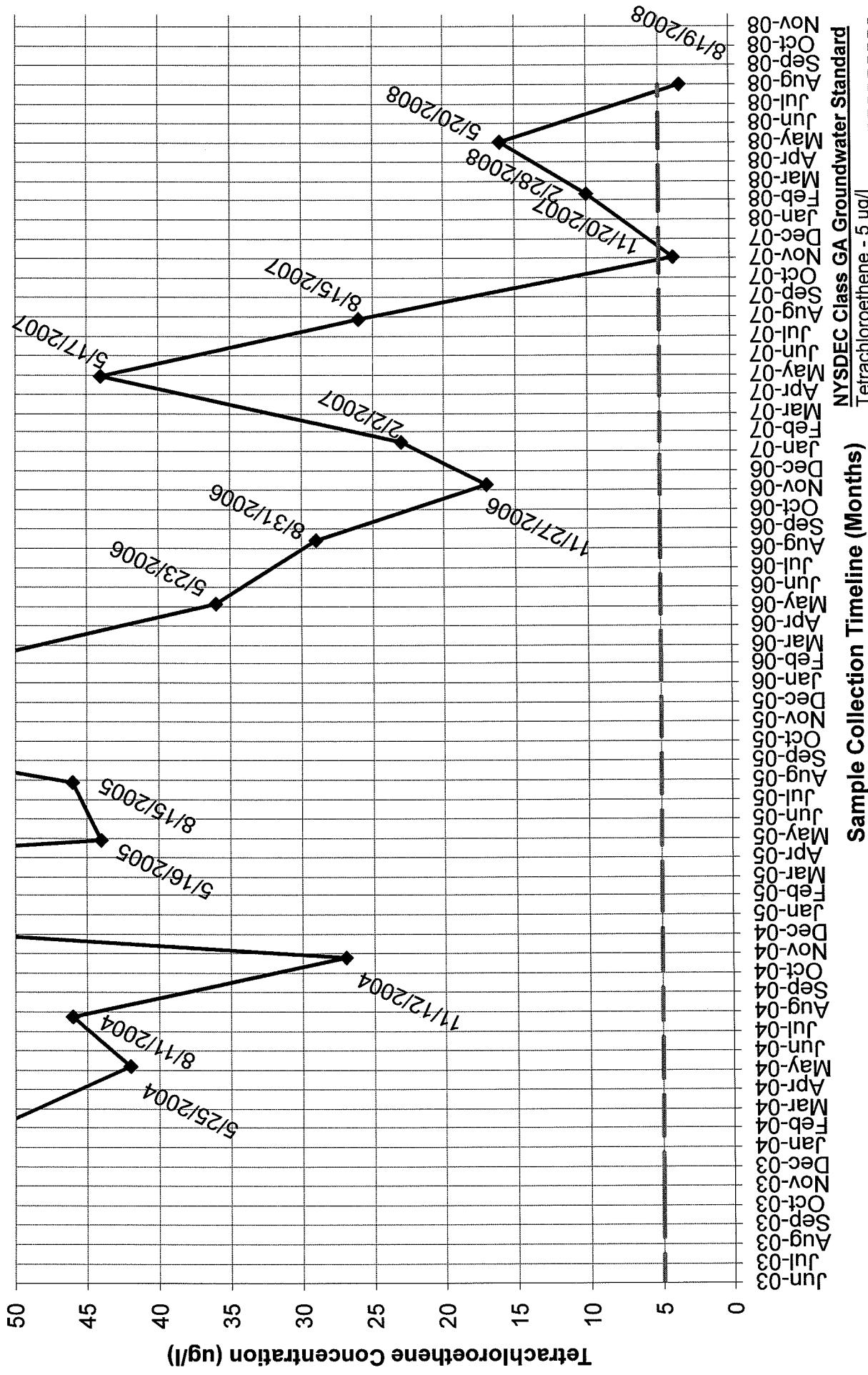
GRAPH 1

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



(1) See historical quarterly reports for GW data collected prior to 5/25/04.

(2) Off-scale PCE concentrations of 100 ug/l, 69 ug/l and 53 ug/l detected on 2/24/05, 1/11/05 and 2/23/06, respectively.

GRAPH 3

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

