

**Dvirka
and
Bartilucci**
CONSULTING ENGINEERS

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July 8, 2009

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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. 18 (December 1, 2008 through February 28, 2009)
D&B No. 2531

Dear Mr. Long:

The purpose of this letter is to summarize the performance monitoring activities completed by Dvirka and Bartilucci Consulting Engineers (D&B) associated with the groundwater extraction and treatment system at the Franklin Cleaners Site. This report addresses the period from December 1, 2008 through February 28, 2009. 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 Operation

During this period, extraction well EW-1 operated at an average pumping rate of 40.0 gallons per minute (gpm) and extraction well EW-2 operated at an average pumping rate of 6.0 gpm. Approximately 0.57 pounds of PCE were removed from the extracted groundwater by the low profile air stripper during the reporting period and approximately 33.21 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.

Based on measurements recorded at the treatment system discharge flow meter, approximately 6,792,620 gallons of treated groundwater were discharged to the Nassau County Department of Public Works (NCDPW) storm sewer system. Note that this volume is inconsistent with the influent flow meters for EW-1 and EW-2 which recorded approximately 5,523,282 gallons of groundwater entering the treatment system. This inconsistency is possibly due to fouling of the influent flow meter paddle wheel.

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During this period, the groundwater extraction and treatment system was inoperative for a total of approximately 119.25 hours due to system alarm conditions and routine system maintenance. Of the 119.25 hours, approximately 117.85 hours of "downtime" was due to a high-high wet well condition in the treatment system building, approximately 0.6 hours of "downtime" was due to routine pressure blower maintenance and approximately 0.8 hours of "downtime" was due to cleaning of the influent flow meters. In response to the significant amount of downtime associated with high-high wet well conditions, D&B observed the condition of the system immediately following shutdown due to high wet well conditions and during above average precipitation events. In addition, the treatment system discharge piping outlet and discharge basin, located to the east of the treatment system building on Franklin Avenue, were inspected for blockage. The basin and piping were found to be free of debris and flow did not appear to be impeded in any manner. However, D&B did observe that the treatment system discharge pipe was often submerged beneath the water level of the basin following these above average precipitation 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.

Groundwater Extraction and Treatment System Sampling

Groundwater samples were collected from the EW-1 and EW-2 well influent piping 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 exhibited concentrations of tetrachloroethene (PCE) in groundwater ranging from a low of 12.0 micrograms per liter ($\mu\text{g/l}$) detected on January 8 and February 2, 2009, to a high of 16.0 $\mu\text{g/l}$ detected on December 9, 2008 and February 26, 2009. Extraction well EW-2 exhibited concentrations of PCE ranging from a low of 53.0 $\mu\text{g/l}$ detected on January 8, 2009, to a high of 78.0 $\mu\text{g/l}$ detected on December 9, 2008. The discharge sample results for the period exhibited VOC, metals and pH concentrations below the effluent limitations, with the exception of the pH sample results collected on January 19 and February 2, 2009. The pH detected during each sampling event was less than the effluent range of 6.5 to 8.5. Immediately following receipt of the pH results, a sample was collected and tested at the site with a dedicated pH meter. Both follow-up field samples exhibited a pH within the effluent range; therefore, the system was not shut down.

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

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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. The samples were screened using a calibrated, handheld photoionization detector (PID). During the reporting period, PID readings collected from both carbon vessels were 0.0 parts per million (ppm) for both the influent and effluent vapor samples at each carbon adsorption unit. Note that the PID readings collected from carbon vessel outlets Nos. 1 and 2 were both below the NYSDEC site-specific effluent limit of 1.0 ppm for total VOCs.

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 March 19, 2009. Samples were analyzed for VOCs utilizing USEPA Method OLMO4.2. The locations of the monitoring wells are depicted on Figure 2 provided 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 9.1 ug/l, was detected at a concentration exceeding its Class GA Standard of 5.0 ug/l in groundwater monitoring wells ASMW-1 and ASMW-2. The concentration of PCE detected in groundwater monitoring well ASMW-1 (16 ug/l) and ASMW-2 (16 ug/l) increased from 9.1 ug/l to 5 ug/l, respectively, as compared to the previous quarter (December 3, 2008). PCE concentrations have continued to maintain a decreasing trend since 2003. VOCs were not detected in the groundwater 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 F, which summarize PCE concentrations detected in samples collected from ASMW-1, ASMW-2 and ASMW-3 since June 2003.

Groundwater sampling for Quarter 19 is scheduled for May 2009.

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 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.

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- No problems were noted with sample results and qualification of the data was not required.

Data Validation Checklists are presented in Attachment G.

Findings/Conclusions

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

- The analytical results of the system influent samples show that groundwater extraction wells EW-1 and EW-2 continue to capture VOC-contaminated groundwater at a combined total flow rate of 46.0 gpm, which is greater than the minimum required pumping rate of 20 gpm, as specified in the December 2000 Groundwater Extraction and Treatment System Design Report.
- 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 effluent discharge criteria.
- Concentrations of PCE detected in groundwater monitoring well ASMW-1 increased from 9.1 ug/l (December 3, 2008) to 16.0 ug/l (March 19, 2009); however, ASMW-1 continues to exhibit an overall 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 increased from 5.0 ug/l (December 3, 2008) to 16.0 ug/l (March 19, 2009); however, ASMW-2 continues to exhibit an overall decreasing trend from a high of 100 ug/l (February 24, 2005) for the past 3-year period.
- PCE concentrations remain non-detect in the downgradient groundwater monitoring wells (ASMW-4, ASMW-5, ASMW-6 and ASMW-7) and upgradient monitoring well ASMW-3.
- The inconsistency noted between the influent flow meters for EW-1 and EW-2, and the treatment system discharge flow meter, is possibly due to fouling at the influent flow meter paddle wheels. However, note that the influent flow meters are a paddle wheel design and the effluent flow meter is a magnetic design and, as such, these meters will present slightly different accuracies.
- The recurring high wet well alarm conditions are likely the result of storm water backup in the storm water discharge basin, which frequently occurs following an above average precipitation event. Note that the discharge piping outlet and the discharge basin, located to the east of the treatment system building on Franklin Avenue, do not appear to be blocked in any manner.
- As the downgradient early warning groundwater monitoring wells continue to exhibit non-detect VOC concentrations, we conclude that the selected remedy is functioning as intended by the Record of Decisions (ROD). In addition, please note that the Village of

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Rockville Centre Public Supply Well located at Molloy College continues to exhibit non-detect concentrations of chlorinated VOCs.

- According to information received from the Director of Facilities at Molloy College, no new groundwater extraction wells have been installed on the Molloy College property, which is located immediately downgradient of the Franklin Cleaners off-site groundwater extraction and treatment system.
- A new DER-10 document, dated December 2002, has been implemented since the March 1998 ROD was issued.
- The toxicity data, cleanup levels and remedial action objectives, as defined in the March 1998 ROD, remain unchanged.

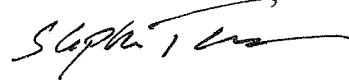
Recommendations

Based on the results of performance monitoring conducted during this 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.
- 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.

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

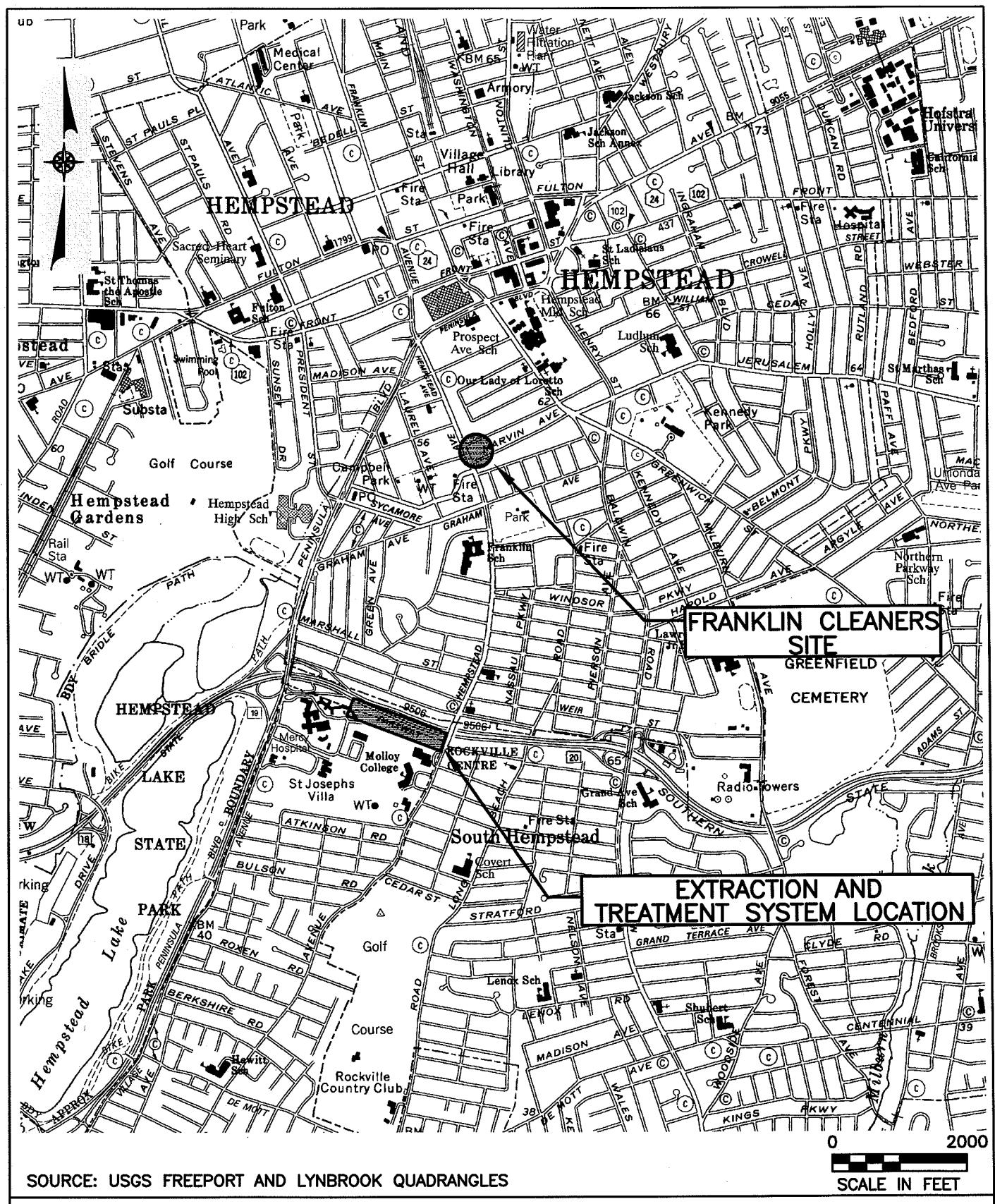
Attachments

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

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ATTACHMENT A

FIGURES



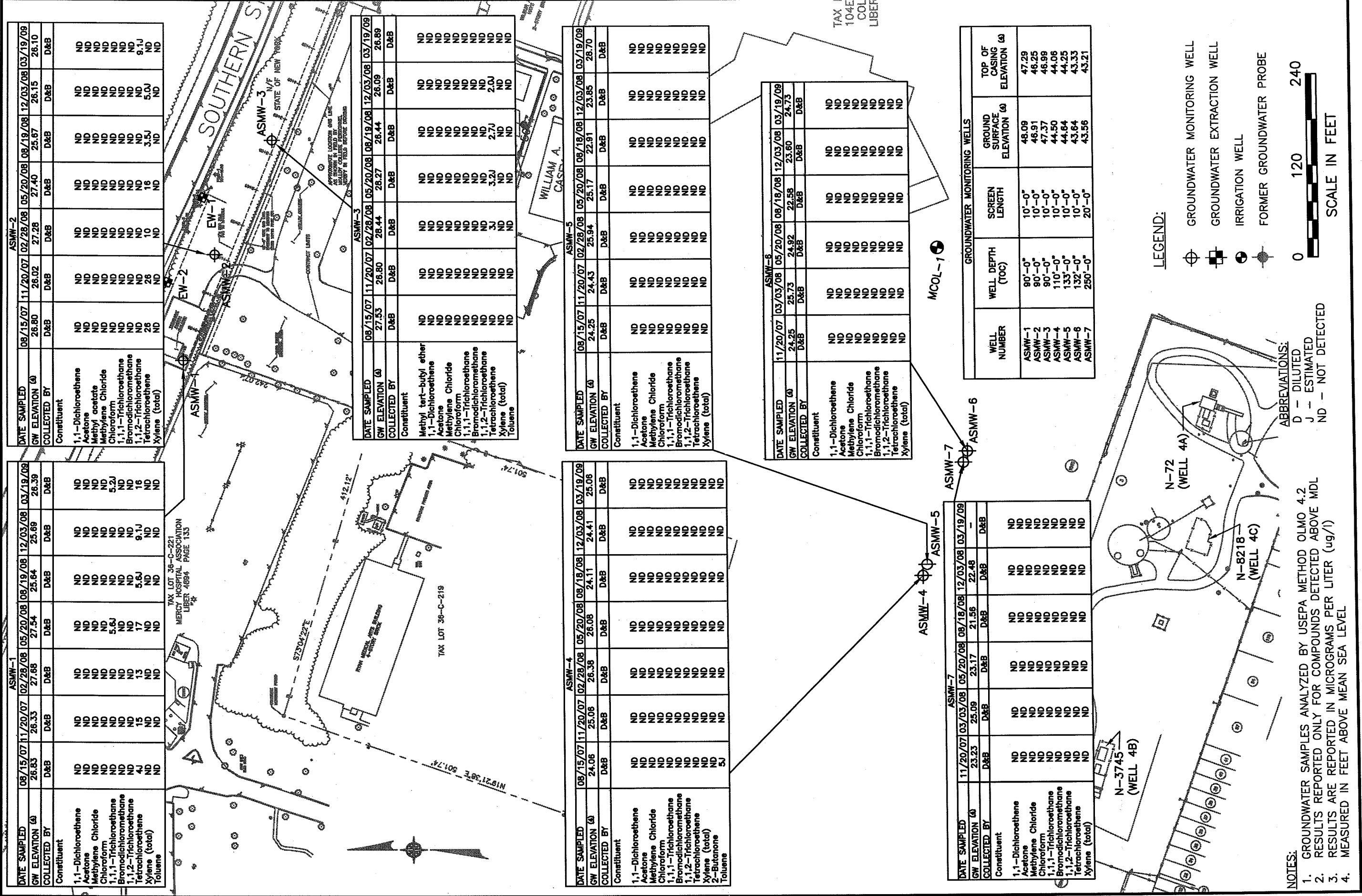
SOURCE: USGS FREEPORT AND LYNBROOK QUADRANGLES

SCALE IN FEET

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

SITE LOCATION MAP

FIGURE 1



**MONITORING WELL LOCATION MAP AND SUMMARY OF SAMPLE RESULT
THROUGH MARCH 19, 2009**

FIGURE 2

The logo for Dvirka and Bartilucci Consulting Engineers. It features a stylized lowercase 'd' and 'b' intertwined, with a circle positioned between them. To the right of the graphic, the company name 'Dvirka and Bartilucci' is written in a bold, sans-serif font. Below the name, the words 'CONSULTING ENGINEERS' are printed in a smaller, all-caps font. At the bottom right, it says 'A DIVISION OF WILLIAM F. COSULICH & ASSOCIATES, P.C.'

ATTACHMENT B

DESCRIPTION OF SYSTEM ALARM CONDITIONS

**FANKLIN 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: 12/17/08

Name of Personnel Onsite	Title	Time Arrived	Time Departed	Total Hours
L. Sorensen	President	1005	1045	.66 on site

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

1. Inspected fan wheel for wear and corrosion – none found;
2. Inspected fan wheel for buildup of materials – none found;
3. Inspected V-belt drive for proper alignment and tension – okay;
4. Lubricated motor bearings and fan bearings;
5. Inspected all setscrews and bolts for tightness – okay.

Name of Part / Supply / Material	Manufacturer	Model Number	Quantity Used
Bearing Grease	Mobil	SHC-100	Not Measurable
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 Dvirk and Bartilucci.

Soren Luke Sorensen 12/17/08
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)	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES					
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	WATER	
DATE OF COLLECTION	12/9/2008	12/24/2008	D&B	1/19/2009	D&B	2/22/2009	2/26/2009
COLLECTED BY							D&B
UNITS	(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-tert-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-Dichloropropane	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	50 GV
Bromoform	U	U	U	U	U	U	5 ST
Isopropylbenzene	U	U	U	U	U	U	5 ST
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	3 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

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

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.

QUALIFIERS:

FRANKLIN CLEANERS SITE
NYSDEC CONTRACT No. D00446 / SITE No. 1-30-050
RESULTS OF ANALYSIS OF EW-2 INFLUENT

SAMPLE ID	SYSTEM INFLUENT (EW-2)	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES					
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	WATER	
DATE OF COLLECTION	12/9/2008	12/24/2008	1/8/2009	1/19/2009	2/1/2009	2/26/2009	
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)	
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	50 GV
Acetone	U	U	U	U	U	U	60 GV
Carbon disulfide	U	U	U	U	U	U	--
Methyl acetate	U	U	U	U	U	U	5 ST
Methylene chloride	U	U	U	U	U	U	5 ST
trans 1,2-Dichloroethene	U	U	U	U	U	U	10 GV
Methyl-tert butyl ether	U	U	U	U	U	U	5 ST
1,1-Dichloroethane	U	U	U	U	U	U	5 ST
cis-1,2-Dichloroethene	U	U	U	U	U	U	50 GV
2-Butanone	U	U	U	U	U	U	7 ST
Chloroform	U	U	U	U	U	U	5 ST
1,1,1-T Trichloroethane	U	U	U	U	U	U	--
Cyclohexane	U	U	U	U	U	U	5 ST
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-Dichloropropane	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
Dibromo-chloromethane	U	U	U	U	U	U	5 ST
1,2-Dibromoethane	U	U	U	U	U	U	5 ST
Chlorobenzene	U	U	U	U	U	U	3 ST
Ethylbenzene	U	U	U	U	U	U	3 ST
Xylene (total)	U	U	U	U	U	U	5 ST
Styrene	U	U	U	U	U	U	3 ST
Bromoform	U	U	U	U	U	U	0.04 ST
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-Dichloro-propane	U	U	U	U	U	U	5 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

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

ug/L = Micrograms per liter
 Not established

QUALIFIERS:

ST: Standard Value
 Guidance Value

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

J: Compound taken from reanalysis at a secondary dilution

D: Result taken from method blank as well as the sample, value estimated

B: Compound detected in method blank, value estimated

E: Compound concentration exceeds instrument calibration range, 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	SYSTEM EFFLUENT (AS-1) WATER	EFFLUENT LIMITATIONS	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES					
SAMPLE TYPE	12/9/2008	12/24/2008	1/8/2009	1/19/2009	2/2/2009	2/26/2009		
DATE OF COLLECTION	D&B	D&B	D&B	D&B	D&B	D&B		
COLLECTED BY	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)		
UNITS								
Dichlorodifluoromethane	U	U	U	U	U	U	--	5 ST
Chloromethane	U	U	U	U	U	U	--	2 ST
Vinyl chloride	U	U	U	U	U	U	--	5 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
Methylene chloride	U	U	U	U	U	U	--	5 ST
trans 1,2-Dichloroethene	U	U	U	U	U	U	--	5 ST
Methyl-tert 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	--	5 ST
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 ST
1,2-Dichloropropane	U	U	U	U	U	U	--	50 GV
Bromodichloromethane	U	U	U	U	U	U	--	0.4 ST
cis-1,3-Dichloropropene	U	U	U	U	U	U	--	5 ST
4-Methyl-2-pentanone	U	U	U	U	U	U	--	0.4 ST
Toluene	U	U	U	U	U	U	--	0.4 ST
trans-1,3-Dichloropropene	U	U	U	U	U	U	--	1 ST
1,1,2-Trichloroethane	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	--	5 ST
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	--	3 ST
Xylene (total)	U	U	U	U	U	U	--	3 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	--	3 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-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

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 Site Specific Effluent Limitation

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	12/9/2008	12/24/2008	1/8/2009	1/19/2009	2/2/2009	2/2/2009	2/26/2009
COLLECTED BY	D&B						
UNITS	(ug/L)						
METALS							
Iron	U	U	170 B	U	105 B	U	1000
Manganese	27.3 B	28.5 B	29.5 B	27.9 B	26.3 B	33.1 B	1000
pH (S.U.)	6.8	6.9	6.8	6.4	6.0	6.8	6.5 to 8.5

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.

ABBREVIATIONS:

ug/L: Micrograms per liter

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>
December 3, 2008	0.0	0.0	0.0	0.0
December 9, 2008	0.0	0.0	0.0	0.0
December 17, 2008	0.0	0.0	0.0	0.0
December 24, 2008	0.0	0.0	0.0	0.0
January 2, 2009	0.0	0.0	0.0	0.0
January 8, 2009	0.0	0.0	0.0	0.0
January 12, 2009	0.0	0.0	0.0	0.0
January 19, 2009	0.0	0.0	0.0	0.0
January 27, 2009	0.0	0.0	0.0	0.0
February 2, 2009	0.0	0.0	0.0	0.0
February 6, 2009	0.0	0.0	0.0	0.0
February 10, 2009	0.0	0.0	0.0	0.0
February 26, 2009	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).
 * Sample not taken due to sporadic and inconsistent readings from PID, possibly due to very cold weather and possible condensation on the bulb.

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

RESULTS OF GROUNDWATER SAMPLING

SAMPLE ID	ASMN-1	ASMN-2	ASMN-3	ASMN-4	ASMN-5	ASMN-6	ASMN-7	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES
SAMPLE TYPE	WATER	(ug/L)						
DATE OF COLLECTION	3/19/2009	3/19/2009	3/19/2009	3/19/2009	3/19/2009	3/19/2009	3/19/2009	D&B
COLLECTED BY	D&B							
UNITS	(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-Dichloro ethene	U	U	U	U	U	U	U	5 ST
1,1,2-Trichloro-1,2,2-trifluoroethane	U	U	U	U	U	U	U	50 GV
Acetone	U	U	U	U	U	U	U	60 GV
Carbon disulfide	U	U	U	U	U	U	U	-
Methyl acetate	U	U	U	U	U	U	U	5 ST
Methylene chloride	U	U	U	U	U	U	U	5 ST
trans 1,2-Dichloroethene	U	U	U	U	U	U	U	10 GV
Methyl-tert butyl ether	U	U	U	U	U	U	U	5 ST
1,1-Dichloroethane	U	U	U	U	U	U	U	5 ST
cis-1,2-Dichloroethene	U	U	U	U	U	U	U	50 GV
2-Butanone	U	U	U	U	U	U	U	7 ST
Chloroform	5.2 J	U	U	U	U	U	U	5 ST
1,1,1-Trichloroethane	U	U	U	U	U	U	U	-
Cyclohexane	U	U	U	U	U	U	U	5 ST
Carbon tetrachloride	U	U	U	U	U	U	U	1 ST
Benzene	U	U	U	U	U	U	U	0.6 ST
1,2-Dichloroethane	U	U	U	U	U	U	U	5 ST
Trichloroethene	U	U	U	U	U	U	U	-
Methylcyclohexane	U	U	U	U	U	U	U	1 ST
1,2-Dichloropropane	U	U	U	U	U	U	U	50 GV
Bromodichloromethane	U	U	U	U	U	U	U	0.4 ST
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	-
4-Methyl-2-pentanone	U	U	U	U	U	U	U	5 ST
Toluene	U	U	U	U	U	U	U	0.4 ST
trans-1,3-Dichloropropene	U	U	U	U	U	U	U	1 ST
1,1,2-Trichloroethane	16	16	U	U	U	U	U	5 ST
Tetrachloroethene	U	U	U	U	U	U	U	50 GV
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
Xylene (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	3 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	0.04 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	5 ST

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

Concentration exceeds NYSDEC Class GA
 Groundwater Standards or Guidance Values

ATTACHMENT E

PERFORMANCE SUMMARY

FRANKLIN CLEANERS SITE
NYSDC CONTRACT No. D004466 SITE No. 1-30-050

EXTRACTION AND TREATMENT SYSTEM PERFORMANCE RESULTS

DATE OF SAMPLE COLLECTION (1)	SYSTEM INFILTRATE (EW-1) AVERAGE EXTRACTION RATE (gpm)	SYSTEM INFILTRATE (EW-1) PCE CONCENTRATION (ug/l)	SYSTEM INFILTRATE (EW-2) AVERAGE EXTRACTION RATE (gpm)	SYSTEM INFILTRATE (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)
6/6/2006	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	99.55	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
1/7/2007	38.3	17	0.0	NS	< 0.5	97.73	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	28.58
2/23/2007	36.9	13	0.0	NS	< 0.5	96.15	2.71E-04	489	28.80 ⁽⁴⁾
3/5/2007	38.0	9 J	0.0	NS	< 0.5	94.44	2.71E-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
5/2/2007	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	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	95.83	2.36E-04	263	29.66
7/27/2007	37.7	14	0.0	NS	< 0.5	95.43	2.64E-04	182	29.71
8/23/2007	38.3	17	0.0	NS	< 0.5	97.35	3.26E-04	191	29.78 ⁽⁴⁾
9/5/2007	40.0	14	6.3	53	< 0.5	93.07	4.48E-04	112	29.83
9/21/2007	39.0	9 J	6.3	51	< 0.5	99.06	3.37E-04	359	29.95
10/21/2007	38.4	10	6.1	59	< 0.5	92.18	3.73E-04	484	30.13
10/31/2007	38.9	14	5.9	73	< 0.5	99.40	4.95E-04	233	30.25
11/12/2007	39.4	15 B	5.7	80 B	< 0.5	99.46	5.24E-04	289	30.40
11/26/2007	38.5	13	6.0	69	< 0.5	99.32	4.43E-04	407	30.58 ⁽⁴⁾
12/10/2007	40.6	16	6.5	100	< 0.5	99.50	6.51E-04	217	30.72
12/27/2008	40.3	13	6.1	73	< 0.5	99.37	4.85E-04	348	30.89
1/7/2008	40.4	12	6.7	75	< 0.5	99.32	4.94E-04	265	31.02
1/21/2008	38.3	14	6.3	86	< 0.5	99.42	5.40E-04	327	31.20
2/7/2008	40.7	15	6.3	81	< 0.5	99.44	5.61E-04	379	31.41
2/19/2008	39.0	16	6.5	90	< 0.5	99.46	6.05E-04	524	31.73 ⁽⁴⁾
3/3/2008	40.1	20	5.9	100	< 0.5	99.58	6.97E-04	60	31.77
3/17/2008	40.5	16	6.2	100	< 0.5	99.51	6.35E-04	317	31.97
4/2/2008	39.9	15	6.7	75	< 0.5	99.52	6.49E-04	374	32.21
4/18/2008	38.9	17	6.2	86	< 0.5	99.45	5.92E-04	371	32.43
5/1/2008	38.3	19	6.4	88	< 0.5	99.51	6.50E-04	280	32.62
5/13/2008	40.9	17	6.4	95	< 0.5	99.51	6.53E-04	716	33.08 ⁽⁴⁾
6/5/2008	38.6	20	6.5	100	< 0.5	99.54	7.12E-04	110	33.16
6/23/2008	39.9	24	5.9	130	< 0.5	99.66	6.94E-04	247	33.37
7/10/2008	39.8	12	6.2	64	< 0.5	99.31	4.30E-04	394	33.54
7/25/2008	39.6	14	6.0	71	< 0.5	99.39	4.91E-04	327	33.70
8/7/2008	40.2	14	5.9	86	< 0.5	99.38	4.77E-04	279	33.84
8/19/2008	40.3	13	6.0	61	< 0.5	99.33	4.46E-04	510	34.06 ⁽⁴⁾
9/5/2008	39.0	13	6.1	80	< 0.5	99.31	4.34E-04	110	34.11
9/19/2008	39.6	15	6.1	92	< 0.5	99.44	5.48E-04	327	34.29
10/3/2008	40.1	12	6.1	51	< 0.5	99.23	3.97E-04	338	34.43
10/16/2008	39.0	11	6.2	64	< 0.5	99.25	4.14E-04	311	34.55
10/30/2008	39.5	12	5.8	45	< 0.5	99.21	3.68E-04	248	34.65
11/12/2008	39.8	12	6.0	84	< 0.5	99.30	4.31E-04	312	34.78
11/25/2008	39.9	16	6.1	80	< 0.5	99.46	5.64E-04	430	35.02 ⁽⁴⁾
12/9/2008	39.7	16	6.2	78	< 0.5	99.45	5.60E-04	207	35.14
12/24/2008	40.4	13	6.4	57	< 0.5	99.28	4.46E-04	300	35.27
1/8/2009	39.9	12	6.1	83	< 0.5	99.24	4.02E-04	361	35.42
1/19/2009	40.3	14	6.1	61	< 0.5	99.35	4.69E-04	269	35.64
2/2/2009	40.3	12	6.1	56	< 0.5	99.26	4.13E-04	323	35.88
2/26/2009	39.1	16	5.6	89	< 0.5	99.45	5.07E-04	581	35.97 ⁽⁴⁾

NOTES:

ABBREVIATIONS:

QUALIFIERS:

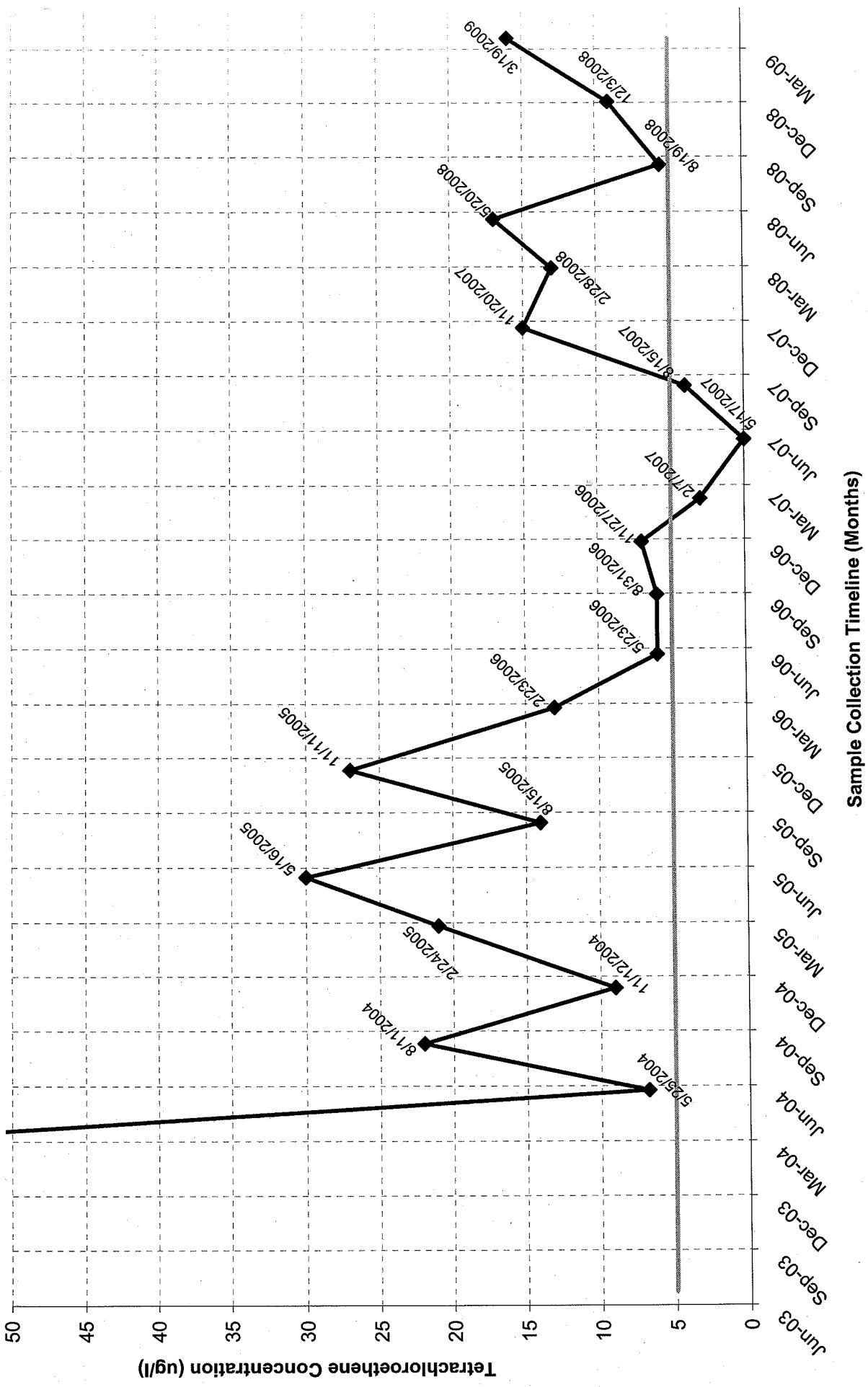
1. Data from 9/23/03 through 8/25/04 reported by URS Corporation.
 2. PCE removal calculations as of September 9, 2003 system start-up date.
 3. Performance results for the reporting period are shaded.
 4. Estimated through the end of the reporting period.
- D: Result taken from reanalysis at a secondary 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
 NS: Not sampled

ATTACHMENT F

MONITORING WELL TREND LINE

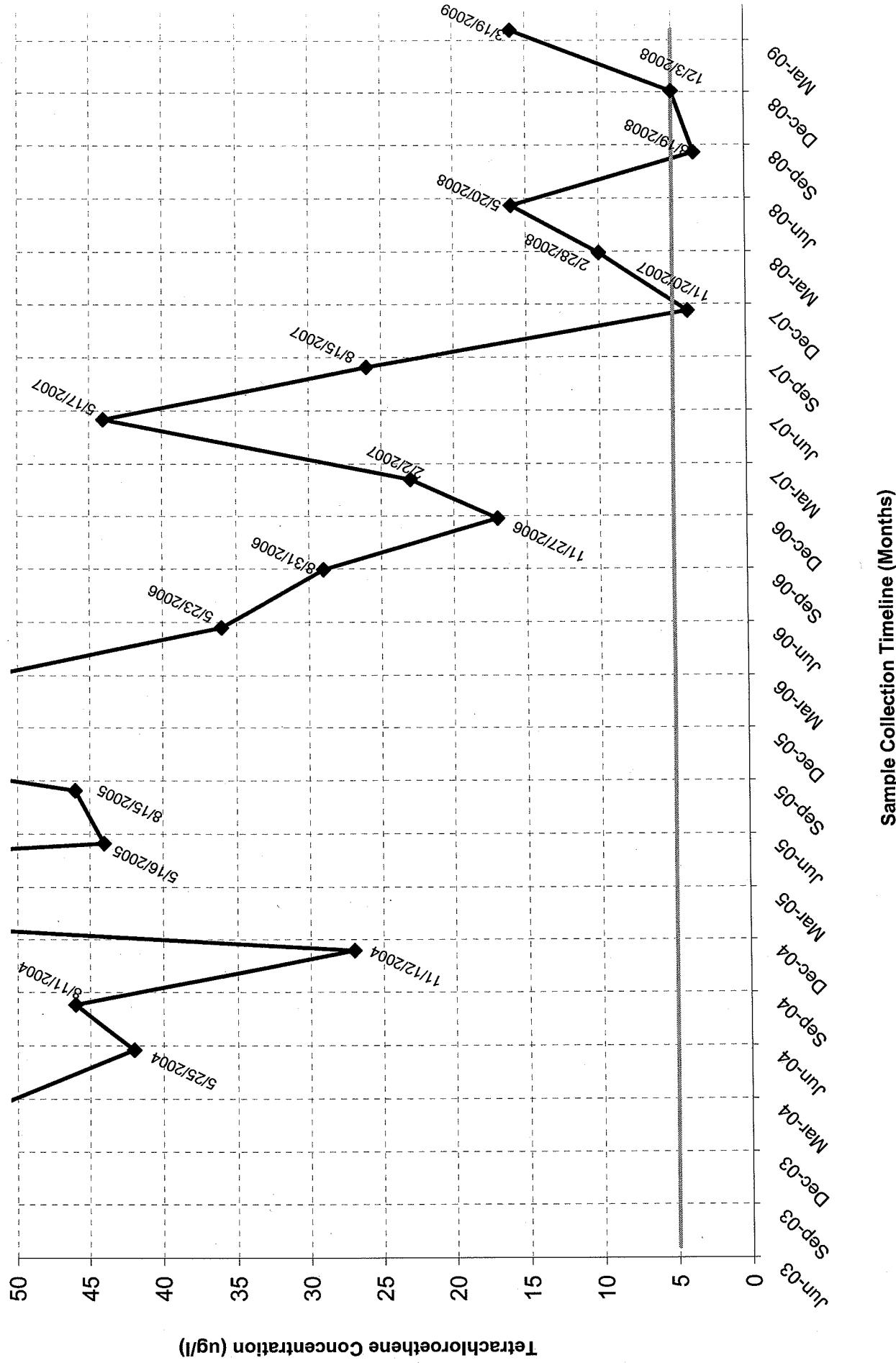
GRAPH 1

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



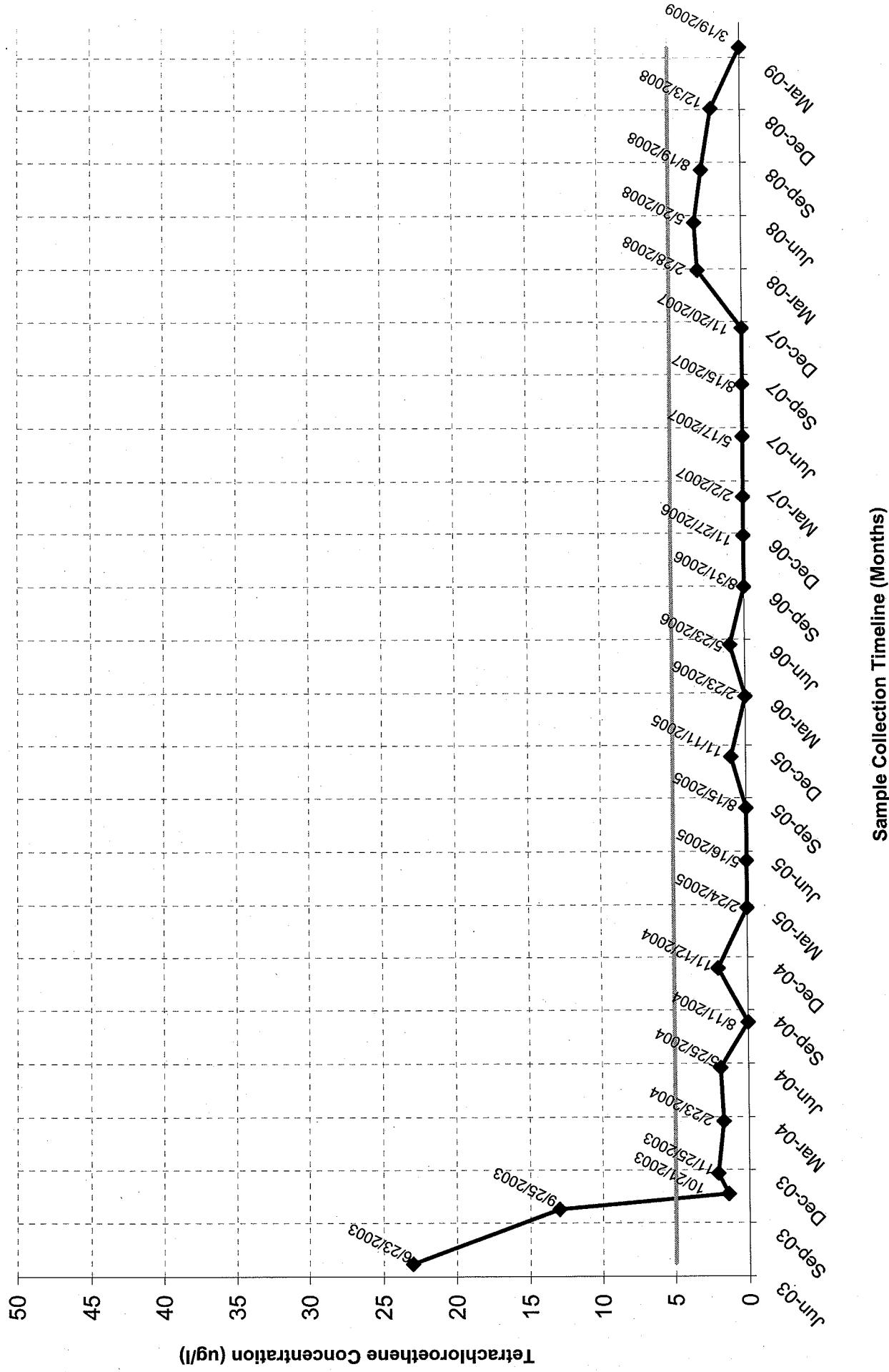
GRAPH 2

**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**



ATTACHMENT G

DATA VALIDATION CHECKLISTS

DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners
Project Number:	2531-03
Sample Date(s):	December 9, 2008
Matrix/Number of Samples:	Water/ 3 Trip Blank/0
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI
Analyses:	Volatile Organic Compounds (VOCs): OLM4.2 Metals: Iron and manganese by USEPA SW846 Method 6010
Laboratory Report No:	MG2307
	Date: 1/08/2009

ORGANIC ANALYSES

VOCS

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks					X
C. Field blanks					X
3. Matrix spike (MS) %R					X
4. Matrix spike duplicate (MSD) %R					X
5. MS/MSD precision (RPD)					X
6. Laboratory Control Sample (LCS) %R		X		X	
7. LCS duplicate (LCSD) %R					X
8. LCS/LCSD precision (RPD)					X
9. Surrogate spike recoveries		X		X	
10. Instrument performance check		X		X	
11. Internal standard retention times and areas		X		X	
12. Initial calibration RRF's and %RSD's		X		X	
13. Continuing calibration RRF's and %D's		X	X		
14. Field duplicates RPD					X

VOCs - volatile organic compounds
%R - percent recovery

%D - percent difference
%RSD - percent relative standard deviation

RRF - relative response factor
RPD - relative percent difference

Comments:

Performance was acceptable with the following exception:

13. The %D was above the QC limit of 25 % for acetone, methyl acetate, 2-butanone, 2-hexanone, and 1,2-dibromo-3-chloropropane in the continuing calibration associated with all samples. The above compounds were qualified as estimated (J/UJ) in all samples.

Pages

**INORGANIC ANALYSES
METALS**

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X		X	
B. Field blanks					X
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X		X	
9. Post digestive spike sample %R					X
10. Duplicate %RPD		X		X	
11. Serial dilution check %D		X		X	
12. Field duplicates RPD					X

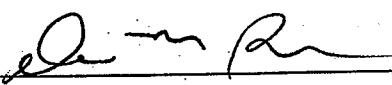
%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 05/13/2009
VALIDATION PERFORMED BY SIGNATURE:	
PEER REVIEW BY & DATE:	Robbin Petrella 05/19/2009

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DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners
Project Number:	2531-03
Sample Date(s):	December 24, 2008
Matrix/Number of Samples:	Water/ 3 Trip Blank/0
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI
Analyses:	Volatile Organic Compounds (VOCs): OLM4.2 Metals: Iron and manganese by USEPA SW846 Method 6010
Laboratory Report No:	MG2418
	Date: 1/13/2009

ORGANIC ANALYSES

VOCS

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks					X
C. Field blanks					X
3. Matrix spike (MS) %R					X
4. Matrix spike duplicate (MSD) %R					X
5. MS/MSD precision (RPD)					X
6. Laboratory Control Sample (LCS) %R		X		X	
7. LCS duplicate (LCSD) %R					X
8. LCS/LCSD precision (RPD)					X
9. Surrogate spike recoveries		X		X	
10. Instrument performance check		X		X	
11. Internal standard retention times and areas		X		X	
12. Initial calibration RRF's and %RSD's		X		X	
13. Continuing calibration RRF's and %D's		X		X	
14. Field duplicates RPD					X

VOCs - volatile organic compounds

%R - percent recovery

%D - percent difference

%RSD - percent relative standard deviation

RRF - relative response factor

RPD - relative percent difference

Comments:

Performance was acceptable with the following exception:

13. The %D was above the QC limit of 25 % for dichlorodifluoromethane in the continuing calibration associated with all samples. The above compounds were qualified as estimated (J/UJ) in all samples.

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**INORGANIC ANALYSES
METALS**

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X		X	
B. Field blanks					X
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R					X
9. Post digestive spike sample %R					X
10. Duplicate %RPD					X
11. Serial dilution check %D		X		X	
12. Field duplicates RPD					X

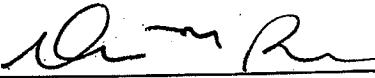
%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 05/13/2009
VALIDATION PERFORMED BY SIGNATURE:	
PEER REVIEW BY & DATE:	Robbin Petrella 05/19/2009

Pages

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DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners			
Project Number:	2531-03			
Sample Date(s):	January 8, 2009			
Matrix/Number of Samples:	<u>Water/3</u> <u>Trip Blank/0</u>			
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI			
Analyses:	<u>Volatile Organic Compounds (VOCs): OLM4.2</u> <u>Metals: Iron and manganese by USEPA SW846 Method 6010</u>			
Laboratory Report No:	SH0030	Date: 1/30/2009		

ORGANIC ANALYSES VOCS

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks					X
C. Field blanks					X
3. Matrix spike (MS) %R					X
4. Matrix spike duplicate (MSD) %R					X
5. MS/MSD precision (RPD)					X
6. Laboratory Control Sample (LCS) %R	X			X	
7. LCS duplicate (LCSD) %R					X
8. LCS/LCSD precision (RPD)					X
9. Surrogate spike recoveries		X		X	
10. Instrument performance check		X		X	
11. Internal standard retention times and areas		X		X	
12. Initial calibration RRF's and %RSD's		X		X	
13. Continuing calibration RRF's and %D's		X	X		
14. Field duplicates RPD					X

VOCs - volatile organic compounds
%R - percent recovery

%D - percent difference
%RSD - percent relative standard deviation

RRF - relative response factor
RPD - relative percent difference

Comments:

Performance was acceptable with the following exception:

13. The %D was above the QC limit of 25 % for dichlorodifluoromethane, bromomethane, chloroethane, trichlorofluoromethane, acetone, and 1,2-dichloroethane in the continuing calibration associated with all samples. The above compounds were qualified as estimated (J/U) in all samples.

**INORGANIC ANALYSES
METALS**

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X		X	
B. Field blanks					X
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X		X	
9. Post digestive spike sample %R					X
10. Duplicate %RPD		X		X	
11. Serial dilution check %D		X		X	
12. Field duplicates RPD					X

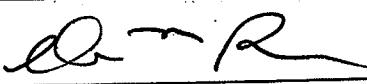
%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 05/13/2009
VALIDATION PERFORMED BY SIGNATURE:	
PEER REVIEW BY & DATE:	Robbin Petrella 05/19/2009

Pages

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DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners		
Project Number:	2531-03		
Sample Date(s):	January 19, 2009		
Matrix/Number of Samples:	Water/ 3		
	Trip Blank/0		
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI		
Analyses:	<u>Volatile Organic Compounds (VOCs): OLM4.2</u> <u>Metals: Iron and manganese by USEPA SW846 Method 6010</u>		
Laboratory Report No:	SH0088	Date: 2/3/2009	

ORGANIC ANALYSES VOCS

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks					X
C. Field blanks					X
3. Matrix spike (MS) %R					X
4. Matrix spike duplicate (MSD) %R					X
5. MS/MSD precision (RPD)					X
6. Laboratory Control Sample (LCS) %R		X		X	
7. LCS duplicate (LCSD) %R					X
8. LCS/LCSD precision (RPD)					X
9. Surrogate spike recoveries		X		X	
10. Instrument performance check		X		X	
11. Internal standard retention times and areas		X		X	
12. Initial calibration RRF's and %RSD's		X		X	
13. Continuing calibration RRF's and %D's		X	X		
14. Field duplicates RPD					X

VOCs - volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exception:

13. The %D was above the QC limit of 25 % for dichlorodifluoromethane, chloroethane, and methyl acetate in the continuing calibration associated with all samples. The above compounds were qualified as estimated (J/UJ) in all samples.

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**INORGANIC ANALYSES
METALS**

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X		X	
B. Field blanks					X
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X		X	
9. Post digestive spike sample %R					X
10. Duplicate %RPD		X		X	
11. Serial dilution check %D		X		X	
12. Field duplicates RPD					X

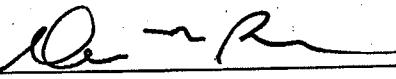
%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 05/14/2009
VALIDATION PERFORMED BY SIGNATURE:	
PEER REVIEW BY & DATE:	Robbin Petrella 05/19/2009

Pages

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DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners		
Project Number:	2531-03		
Sample Date(s):	February 2, 2009		
Matrix/Number of Samples:	Water/ 3		
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI		
Analyses:	<u>Volatile Organic Compounds (VOCs): OLM4.2</u> <u>Metals: Iron and manganese by USEPA SW846 Method 6010</u>		
Laboratory Report No:	SH0150	Date: 2/12/2009	

ORGANIC ANALYSES VOCS

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks					X
C. Field blanks					X
3. Matrix spike (MS) %R					X
4. Matrix spike duplicate (MSD) %R					X
5. MS/MSD precision (RPD)					X
6. Laboratory Control Sample (LCS) %R		X		X	
7. LCS duplicate (LCSD) %R					X
8. LCS/LCSD precision (RPD)					X
9. Surrogate spike recoveries		X		X	
10. Instrument performance check		X		X	
11. Internal standard retention times and areas		X		X	
12. Initial calibration RRF's and %RSD's		X	X		
13. Continuing calibration RRF's and %D's					X
14. Field duplicates RPD					X

VOCs - volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exception:

12. The %RSD was above the QC limit of 30 % for dichlorodifluoromethane, acetone, and methyl acetate in the initial calibration associated with all samples. The above compounds were not detected and therefore do not impact the usability of the sample results.

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**INORGANIC ANALYSES
METALS**

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X		X	
B. Field blanks					X
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X		X	
9. Post digestive spike sample %R					X
10. Duplicate %RPD		X		X	
11. Serial dilution check %D		X		X	
12. Field duplicates RPD					X

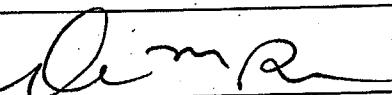
%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 05/14/2009
VALIDATION PERFORMED BY SIGNATURE:	
PEER REVIEW BY & DATE:	Robbin Petrella 05/19/2009

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DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners
Project Number:	2531-03
Sample Date(s):	February 26, 2009
Matrix/Number of Samples:	<u>Water/ 3</u> <u>Trip Blank/0</u>
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI
Analyses:	<u>Volatile Organic Compounds (VOCs): OLM4.2</u> <u>Metals: Iron and manganese by USEPA SW846 Method 6010</u>
Laboratory Report No:	SH0288
	Date: 3/13/2009

ORGANIC ANALYSES

VOCS

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks					X
C. Field blanks					X
3. Matrix spike (MS) %R					X
4. Matrix spike duplicate (MSD) %R					X
5. MS/MSD precision (RPD)					X
6. Laboratory Control Sample (LCS) %R		X		X	
7. LCS duplicate (LCSD) %R					X
8. LCS/LCSD precision (RPD)					X
9. Surrogate spike recoveries	X	X			
10. Instrument performance check	X			X	
11. Internal standard retention times and areas	X			X	
12. Initial calibration RRF's and %RSD's	X			X	
13. Continuing calibration RRF's and %D's					X
14. Field duplicates RPD					X

VOCs - volatile organic compounds

%D - percent difference

RRF - relative response factor

%R - percent recovery

%RSD - percent relative standard deviation

RPD - relative percent difference

Comments:

Performance was acceptable with the following exception:

- The %R was slightly below the QC limit for toluene-d8 in sample AS. Compounds were not detected in the sample and therefore do not impact the usability of the sample results.

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**INORGANIC ANALYSES
METALS**

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks		X		X	
B. Field blanks					X
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R					X
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X		X	
9. Post digestive spike sample %R					X
10. Duplicate %RPD		X		X	
11. Serial dilution check %D		X		X	
12. Field duplicates RPD					X

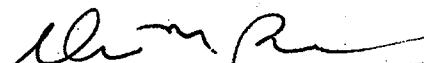
%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 05/14/2009
VALIDATION PERFORMED BY SIGNATURE:	
PEER REVIEW BY & DATE:	Robbin Petrella 05/19/2009