



**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

November 23, 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. 20 (June 1, 2009 through August 31, 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 June 1, 2009 through August 31, 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 37.6 gallons per minute (gpm) and extraction well EW-2 operated at an average pumping rate of 4.9 gpm. Approximately 0.81 pounds of tetrachloroethene (PCE) were removed from the extracted groundwater by the low profile air stripper during this reporting period and approximately 37.7 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 6,489,531 gallons of treated groundwater have been 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 5,329,722 gallons of groundwater entering the

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treatment system. This inconsistency is possibly due to fouling of the influent flow meter paddle wheels. However, as noted in the last quarterly report, cleaning of the influent flow meter paddle wheels was not effective at reducing this inconsistency. As detailed in the recommendations of this and the previous quarterly report, further diagnosis of these inconsistencies by a NYSDEC-issued call-out contractor is warranted.

During this reporting period, the groundwater extraction and treatment system was inoperative for a total of approximately 125 hours due to system alarm conditions and routine system maintenance. Of the 125 hours, approximately 120 hours of "downtime" was due to a high-high wet well condition in the treatment system building, approximately 2 hours of "downtime" was due to routine pressure blower maintenance, and approximately 3 hours of "downtime" was due to a non-routine maintenance event in which the malfunctioning system autodialer was replaced with a new unit. In response to the downtime associated with high-high wet well conditions and as per our previous recommendations, D&B lowered the level of the high level (wet well pump on) float approximately 4 inches on June 24, 2009. Note that the float was lowered in an attempt to activate the wet well pumps sooner than the previous setting would allow, therefore, possibly alleviating conditions contributing to the frequent high-high wet well alarms. Based on review of the frequency of this alarm condition subsequent to the float repositioning, the frequency of the high-high wet well condition following the float repositioning is less, as compared to previous months. D&B will continue to monitor the occurrence of high-high wet well alarms in the Quarter 21 report.

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.

The analytical results of samples collected from the system influent are compared to the New York State Department of Environmental Conservation (NYSDEC) Class GA Groundwater Standards and Guidance Values, and the analytical results of samples collected from the air stripper discharge are compared to the site-specific NYSDEC State Pollutant Discharge Elimination System (SPDES) permit equivalency effluent limitations. Analytical results are presented in Attachment D. Based on the analytical results, extraction well EW-1 exhibited concentrations of PCE above its NYSDEC Class GA Standard of 5.0 micrograms per liter (ug/l) in groundwater ranging from 8.0 ug/l detected on July 1, 2009, to a maximum of 15.0 ug/l detected on June 3, 2009. Extraction well EW-2 exhibited concentrations of PCE above its NYSDEC Class GA Standard of 5.0 ug/l ranging from

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47.0 ug/l detected on July 15, 2009, to a maximum of 61.0 ug/l detected on July 28, 2008. The discharge sample results for the period exhibited VOCs, metals and pH concentrations below the effluent limitations, with the exception of the pH results collected on June 18 (6.4), July 1 (6.1) and July 15, 2009 (6.3), which were slightly less than the effluent limit range of 6.5 to 8.5.

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

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, hand-held 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 August 13, 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. PCE, at a concentration of 10.0 ug/l, was detected at a concentration exceeding its Class GA Standard of 5.0 ug/l in groundwater monitoring well ASMW-1. The concentration of PCE detected in groundwater monitoring well ASMW-1 (10.0 ug/l) and ASMW-2 (4.2 ug/l) decreased from 11.0 ug/l and 10.0 ug/l, respectively, as compared to the previous quarter (May 18, 2009). PCE concentrations have continued to maintain a decreasing trend since 2003. In addition, 1,1,1-Trichloroethane, at a concentration of 2.3 ug/l, was also detected in groundwater monitoring well ASMW-1. Note that 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 21 is scheduled for November 2009.

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### **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.
- 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 the performance monitoring conducted during this reporting period, D&B offers 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 42.5 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 decreased from 11.0 ug/l (May 18, 2009) to 10.0 ug/l (August 13, 2009). In addition, ASMW-1 continues to exhibit an overall decreasing trend from a high of 30.0 ug/l (May 16, 2005) for the past 4-year period.
- Concentrations of PCE detected in groundwater monitoring well ASMW-2 decreased from 10.0 ug/l (May 18, 2009) to 4.2 ug/l (August 13, 2009). In addition, ASMW-2 continues to exhibit an overall decreasing trend from a high of 100 ug/l (February 24, 2005) for the past 4-year period.

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- PCE concentrations remain non-detect in upgradient monitoring well ASMW-3 and downgradient groundwater monitoring wells ASMW-4, ASMW-5, ASMW-6 and ASMW-7.
- Inconsistencies were again noted between the influent flow meters for EW-1 and EW-2, and the treatment system discharge flow meter. Cleaning of the influent flow meter was ineffective at reducing this inconsistency during this reporting period. Further diagnosis is warranted and recommended in the following section.
- The recurring high-high wet well condition continues to be the most frequent alarm condition, causing a majority of the total system downtime since start-up. In an attempt to limit the conditions contributing to this alarm condition, D&B lowered the high wet well float approximately 4 inches. Subsequent to the float repositioning conducted this quarter, the frequency of the high-high wet well conditions has been reduced, but not eliminated.
- As the downgradient early warning groundwater monitoring wells continue to exhibit non-detect VOC concentrations, D&B concludes that the selected remedy is functioning as intended by the Record of Decisions (ROD). In addition, please note that the Village of Rockville Centre Public Supply Well located to the south of Molloy College and downgradient of the groundwater treatment system, continues to exhibit non-detect concentrations of chlorinated VOCs.
- According to information received from the Director of Facilities at Molloy College, no new groundwater irrigation 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, D&B offers the following recommendations:

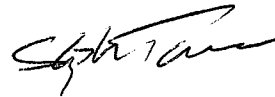
- Continue operation of the groundwater extraction and treatment system to minimize downgradient migration of PCE, currently being captured by the system.
- Continue groundwater monitoring through the existing monitoring well network to determine contaminant concentration trends over time and to evaluate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

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- Lower the level of the high level float an additional 4 inches in an effort to further reduce the frequency of high-high wet well alarm conditions.
- D&B again recommends that the NYSDEC issue a call-out to further diagnose the inconsistencies noted between the influent and effluent flow meters and potentially replace these items, as necessary, based on the result of the diagnosis.

Please do not hesitate to contact me at (516) 364-9890, Ext. 3094, if you have any questions.

Very truly yours,



Stephen Tauss  
Project Manager

SET/PM/jmy  
Attachments

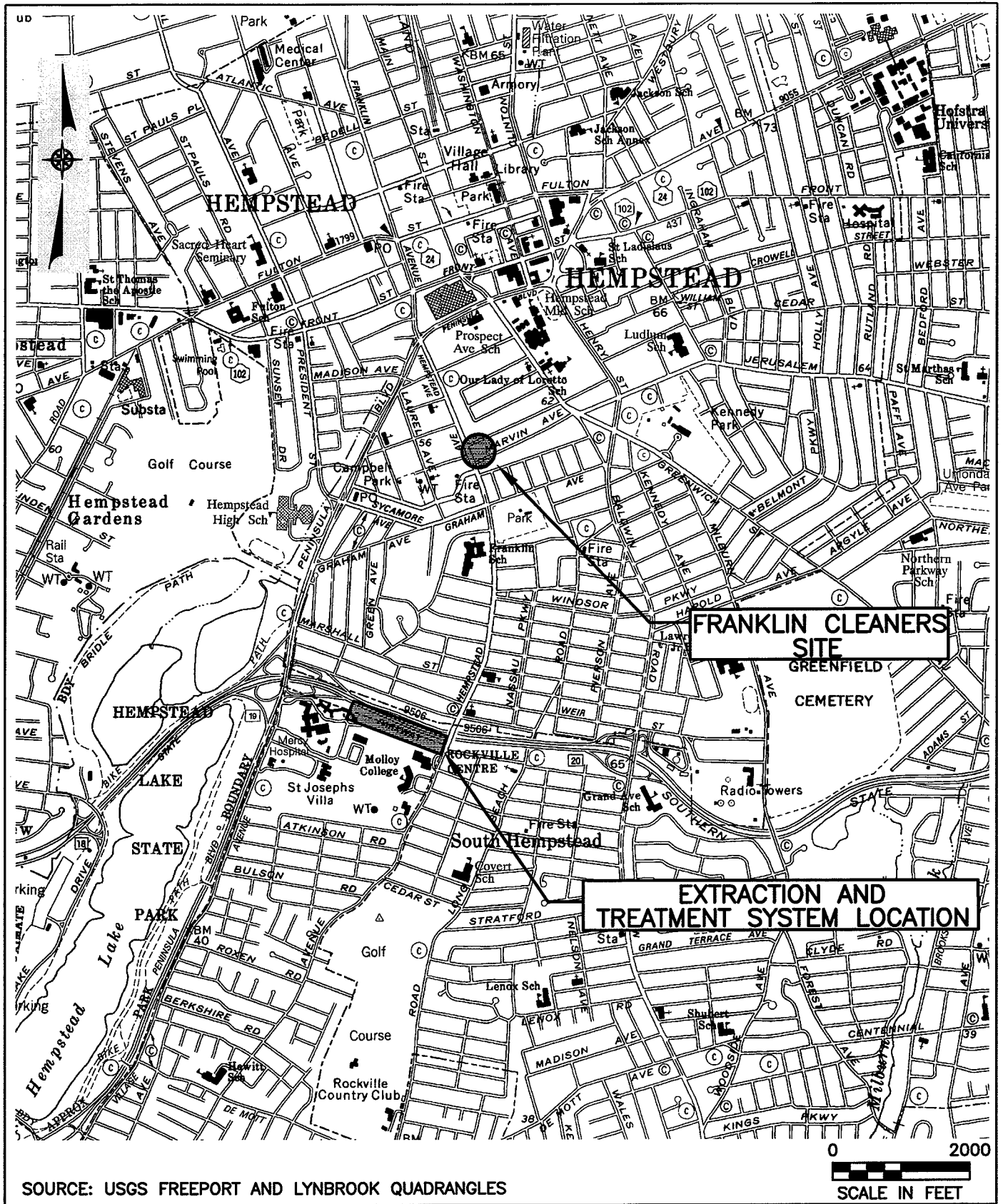
cc: J. Trad (NYSDEC)  
J. Multari (Molloy College)  
J. Neri (H2M)  
R. Walka (D&B)  
F. DeVita (D&B)  
P. Martorano (D&B)

◆2531\SET10199PL-20.DOC(R06)

**ATTACHMENT A**

**FIGURES**

F:\2531DWG\Quarterly Reports\FIGURE 1.dwg. Layout1, 10/20/2009 8:44:51 AM, pmartrano



SOURCE: USGS FREEPORT AND LYNBROOK QUADRANGLES

0 2000  
SCALE IN FEET

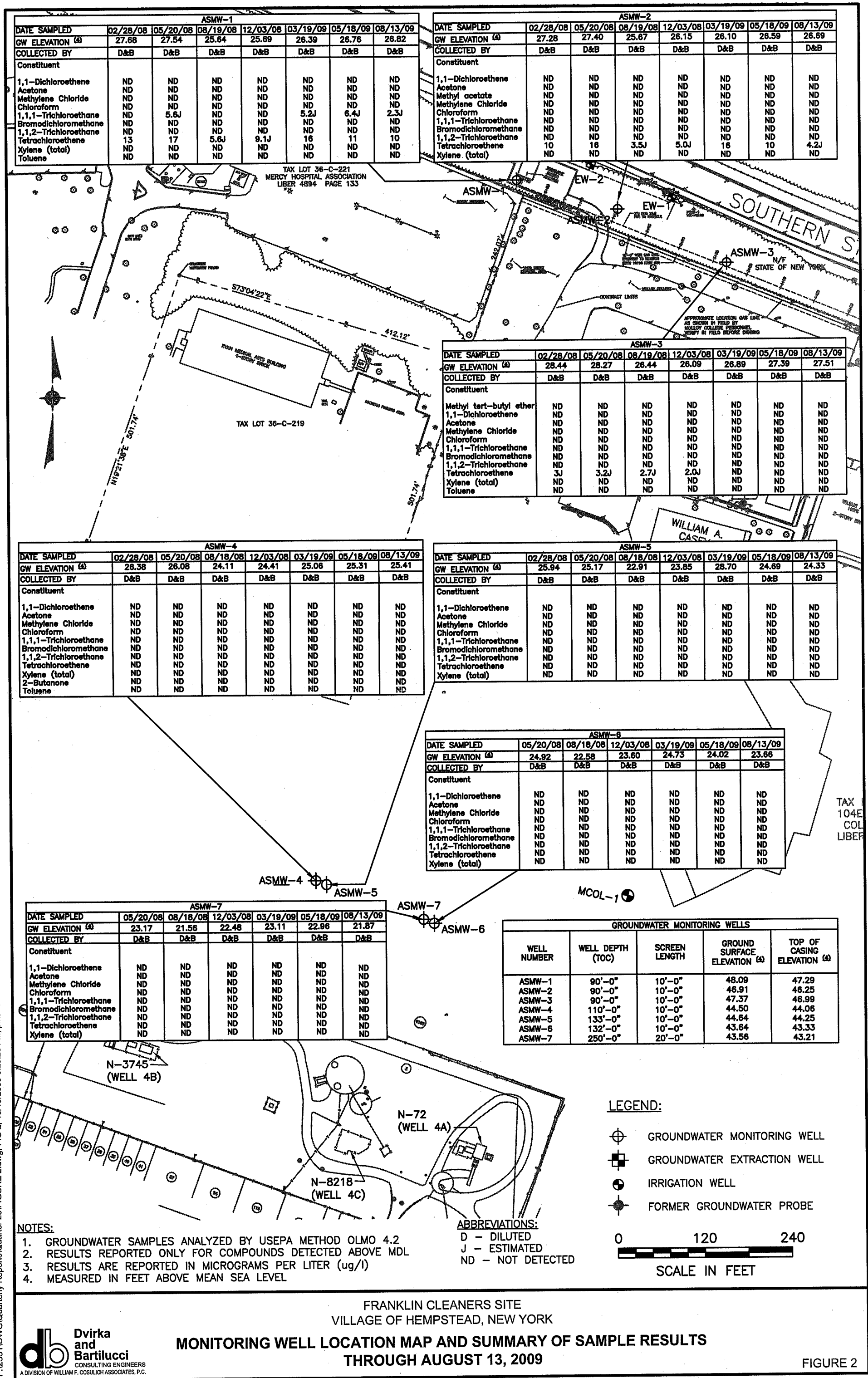
FRANKLIN CLEANERS SITE  
VILLAGE OF HEMPSTEAD, NEW YORK

### SITE LOCATION MAP



FIGURE 1





ASMW-1							
DATE SAMPLED	02/28/08	05/20/08	08/19/08	12/03/08	03/19/09	05/18/09	08/13/09
GW ELEVATION (A)	27.68	27.54	25.64	25.89	26.39	26.76	26.82
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	5.6J	ND	ND	5.2J	6.4J	2.3J
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	13	17	5.6J	9.1J	16	11	10
Xylene (total)	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND

ASMW-2							
DATE SAMPLED	02/28/08	05/20/08	08/19/08	12/03/08	03/19/09	05/18/09	08/13/09
GW ELEVATION (A)	27.28	27.40	25.67	26.15	26.10	26.59	26.89
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	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	10	16	3.5J	5.0J	16	10	4.2J
Xylene (total)	ND	ND	ND	ND	ND	ND	ND

ASMW-3							
DATE SAMPLED	02/28/08	05/20/08	08/19/08	12/03/08	03/19/09	05/18/09	08/13/09
GW ELEVATION (A)	28.44	28.27	26.44	26.09	26.89	27.39	27.51
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	3J	3.2J	2.7J	2.0J	ND	ND	ND
Xylene (total)	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND

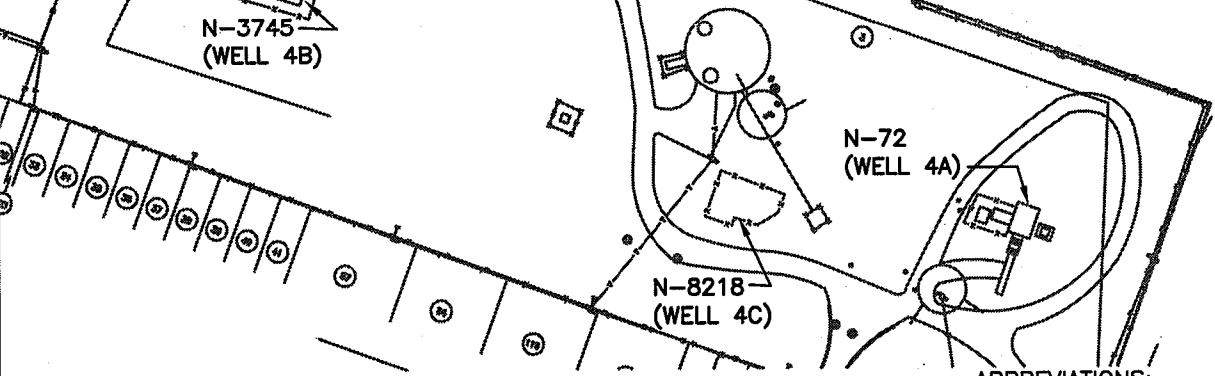
ASMW-4							
DATE SAMPLED	02/28/08	05/20/08	08/18/08	12/03/08	03/19/09	05/18/09	08/13/09
GW ELEVATION (A)	26.38	26.08	24.11	24.41	25.06	25.31	25.41
COLLECTED BY	D&B	D&B	D&B	D&B	D&B	D&B	D&B
Constituent							
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	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
2-Butanone	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND

ASMW-5							
DATE SAMPLED	02/28/08	05/20/08	08/18/08	12/03/08	03/19/09	05/18/09	08/13/09
GW ELEVATION (A)	25.94	25.17	22.91	23.85	28.70	24.69	24.33
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	05/20/08	08/18/08	12/03/08	03/19/09	05/18/09	08/13/09
GW ELEVATION (A)	24.92	22.58	23.60	24.73	24.02	23.66
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	05/20/08	08/18/08	12/03/08	03/19/09	05/18/09	08/13/09
GW ELEVATION (A)	23.17	21.56	22.48	23.11	22.96	21.87
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

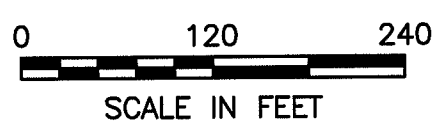
GROUNDWATER MONITORING WELLS				
WELL NUMBER	WELL DEPTH (TOC)	SCREEN LENGTH	GROUND SURFACE ELEVATION (A)	TOP OF CASING ELEVATION (A)
ASMW-1	90'-0"	10'-0"	48.09	47.29
ASMW-2	90'-0"	10'-0"	46.91	46.25
ASMW-3	90'-0"	10'-0"	47.37	46.99
ASMW-4	110'-0"	10'-0"	44.50	44.06
ASMW-5	133'-0"	10'-0"	44.64	44.25
ASMW-6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



- NOTES:
- GROUNDWATER SAMPLES ANALYZED BY USEPA METHOD OLMO 4.2
  - RESULTS REPORTED ONLY FOR COMPOUNDS DETECTED ABOVE MDL
  - RESULTS ARE REPORTED IN MICROGRAMS PER LITER (ug/l)
  - MEASURED IN FEET ABOVE MEAN SEA LEVEL

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

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



FRANKLIN CLEANERS SITE  
 VILLAGE OF HEMPSTEAD, NEW YORK  
**MONITORING WELL LOCATION MAP AND SUMMARY OF SAMPLE RESULTS  
 THROUGH AUGUST 13, 2009**

F:\25311DWG\Quarterly Reports\Quarter 20\FIGURE 2.dwg, FIG 2, 10/19/2009 6:25:26 PM, pmariorano

**ATTACHMENT B**

**DESCRIPTION OF SYSTEM ALARM CONDITIONS**

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

SHUT-OFF DATE/TIME	RESTART DATE/TIME	CAUSE FOR SHUTDOWN
6/9/09 3:36 AM	6/9/09 4:55 PM	Alarm Condition #3 - High Wet Well: Trip breaker on wet well pumps. Pump wet well down past shutoff float. Restart system.
6/12/09 3:20 AM	6/12/09 6:00 PM	Alarm Condition #3 - High Wet Well: Trip breaker on wet well pumps. Pump wet well down past shutoff float. Restart system.
6/24/09 2:23 PM	6/24/09 3:30 PM	Routine Pressure Blower Maintenance <sup>(1)</sup> . Restarted system.
6/29/09 8:45 AM	6/29/09 12:45 PM	Non-routine maintenance: Installed new sensaphone autodialer to replace faulty unit.
7/2/09 8:15 PM	7/5/09 8:30 AM	Alarm Condition #3 - High Wet Well: Trip breaker on wet well pumps. Pump wet well down past shutoff float. Restart system.
7/8/09 12:07 AM	7/8/09 5:50 PM	Alarm Condition #3 - High Wet Well: Trip breaker on wet well pumps. Pump wet well down past shutoff float. Restart system.
7/15/09 4:16 PM	7/15/09 4:30 PM	Non-routine maintenance: Training for new employee.
7/26/09 7:05 AM	7/27/09 7:16 AM	Alarm Condition #3 - High Wet Well: Trip breaker on wet well pumps. Pump wet well down past shutoff float. Restart system.
8/13/09 7:20 AM	8/13/09 8:04 AM	Routine Pressure Blower Maintenance <sup>(1)</sup> . Restarted system.

**NOTES:**

1. Maintenance event performed by Systematic Technologies, Inc.

**ATTACHMENT C**

**SYSTEM MAINTENANCE REPORTS**

## MAINTENANCE AND INSPECTION REPORT

### FRANKLIN CLEANERS SITE, ROCKVILLE CENTRE, NY

Date: 6/24/09

Name of Personnel Onsite	Title	Time Arrived	Time Departed	Total Hours
J. Sorensen	Technician	1350	1630	2.66 on site
O. Rodriguez	Technician	1350	1630	2.66 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;
2. Inspected fan wheel for buildup of materials;
3. Inspected V-belt drive for proper alignment and tension
4. Lubricated motor bearings and fan bearings;
5. Inspected all setscrews and bolts for tightness.

*item 6:*

~~Item 8: Non-Routine Maintenance~~

Vegetation clearing

Name of Part / Supply / Material	Manufacturer	Model Number	Quantity Used
Bearing Grease	Mobil	Mobilith SHC 100	Not Measurable
Fuel	BP	87 Octane Gasoline	3.5 Gallons
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 7/13/09  
 Signature / Print / Date

## MAINTENANCE AND INSPECTION REPORT

### FRANKLIN CLEANERS SITE, ROCKVILLE CENTRE, NY

Date: 8/13/09

Name of Personnel Onsite	Title	Time Arrived	Time Departed	Total Hours
P. Hahn	Technician	1030	1130	1 on site
J. Sorensen	Technician	1030	1130	1 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

Name of Part / Supply / Material	Manufacturer	Model Number	Quantity Used
Bearing Grease	Mobil	Mobilith 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 Dvirka and Bartilucci.


 Luke Sorensen      8/31/09  
 Signature / Print / Date

**ATTACHMENT D**

**ANALYTICAL RESULTS**

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

SAMPLE ID	SYSTEM INFLUENT (EW-1)	SYSTEM INFLUENT (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	6/3/2009	6/18/2009	7/1/2009	7/15/2009	7/28/2009	8/13/2009	8/24/2009	
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	15	13	8 J	11	13	13	11	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
1,1,1,2-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:**

**ABBREVIATIONS:**

**QUALIFIERS:**

Concentration exceeds NYSDEC Class GA Groundwater Standards or Guidance Values

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

ST: Standard Value U: Compound analyzed for but not detected  
 GV: Guidance Value J: Compound found at a concentration below CRDL, value estimated



**FRANKLIN CLEANERS SITE**  
**NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050**  
**RESULTS OF ANALYSIS OF EW-2 INFLUENT**

SAMPLE ID	SYSTEM INFLUENT (EW-2)	SYSTEM INFLUENT (EW-2)	SYSTEM INFLUENT (EW-2)	SYSTEM INFLUENT (EW-2)	SYSTEM INFLUENT (EW-2)	SYSTEM INFLUENT (EW-2)	SYSTEM INFLUENT (EW-2)	NYSDEC CLASS GA
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	WATER	WATER	GROUNDWATER
DATE OF COLLECTION	6/3/2009	6/18/2009	7/1/2009	7/15/2009	7/28/2009	8/13/2009	8/24/2009	STANDARDS AND
COLLECTED BY	D&B	D&B	D&B	D&B	D&B	D&B	D&B	GUIDANCE VALUES
UNITS	(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-Dichloroethane	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	56	55	48	47	61	51	50	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

**QUALIFIERS:**

ST: Standard Value U: Compound analyzed for but not detected  
 GV: Guidance Value J: Compound found at a concentration below CRDL, 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)	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	EFFLUENT LIMITATIONS	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER		
DATE OF COLLECTION	6/3/2009	6/18/2009	7/1/2009	7/15/2009	7/28/2009	8/13/2009	8/24/2009			
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)	(ug/L)	(ug/L)
Dichlorodifluoromethane	U	U	U	U	U	U	U	U	--	5 ST
Chloromethane	U	U	U	U	U	U	U	U	--	--
Vinyl chloride	U	U	U	U	U	U	U	U	--	2 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
Carbon disulfide	U	U	U	U	U	U	U	U	--	60 GV
Methyl acetate	U	U	U	U	U	U	U	U	--	--
Methylene chloride	U	U	U	U	U	U	U	U	--	5 ST
trans 1,2-Dichloroethene	U	U	U	U	U	U	U	U	--	5 ST
Methyl-tert butyl ether	U	U	U	U	U	U	U	U	--	10 GV
1,1-Dichloroethane	U	U	U	U	U	U	U	U	10	5 ST
cis-1,2-Dichloroethene	U	U	U	U	U	U	U	U	10	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	10	5 ST
Cyclohexane	U	U	U	U	U	U	U	U	--	--
Carbon tetrachloride	U	U	U	U	U	U	U	U	--	5 ST
Benzene	U	U	U	U	U	U	U	U	--	1 ST
1,2-Dichloroethane	U	U	U	U	U	U	U	U	--	0.6 ST
Trichloroethene	U	U	U	U	U	U	U	U	10	5 ST
Methylcyclohexane	U	U	U	U	U	U	U	U	--	--
1,2-Dichloropropane	U	U	U	U	U	U	U	U	--	1 ST
Bromodichloromethane	U	U	U	U	U	U	U	U	--	50 GV
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	U	--	0.4 ST
4-Methyl-2-pentanone	U	U	U	U	U	U	U	U	--	--
Toluene	U	U	U	U	U	U	U	U	--	5 ST
trans-1,3-Dichloropropene	U	U	U	U	U	U	U	U	--	0.4 ST
1,1,2-Trichloroethane	U	U	U	U	U	U	U	U	--	1 ST
Tetrachloroethene	U	U	U	U	U	U	U	U	5	5 ST
2-Hexanone	U	U	U	U	U	U	U	U	--	50 GV
Dibromochloromethane	U	U	U	U	U	U	U	U	--	50 GV
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	--	5 ST
Bromoform	U	U	U	U	U	U	U	U	--	50 GV
Isopropylbenzene	U	U	U	U	U	U	U	U	--	5 ST
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	U	--	5 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	--	3 ST
1,2-Dibromo-3-chloropropane	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

**NOTES:**

Concentration exceeds Site Specific Effluent Limitation

**ABBREVIATIONS**

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

**QUALIFIERS:**

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

**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)	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	EFFLUENT LIMITATIONS
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	WATER	WATER	
DATE OF COLLECTION	6/3/2009	6/18/2009	7/1/2009	7/15/2009	7/28/2009	8/13/2009	8/24/2009	
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>METALS</b>								
Iron	U	U	U	U	U	49.1 B	U	1000
Manganese	26.2 B	26.7 B	25.9 B	26.1 B	25.4 B	27.9 B	25.8 B	1000
pH (S.U.)	7.2	6.4	6.1	6.3	7.0	7.1	6.6	6.5 to 8.5

**ABBREVIATIONS:**

ug/L: Micrograms per liter

**QUALIFIERS:**

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	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	8/13/2009	8/13/2009	8/13/2009	8/13/2009	8/13/2009	8/13/2009	8/13/2009	
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-Dichloroethane	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	2.3 J	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	10	4.2 J	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

**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>
June 3, 2009	0.0	0.0	0.0	0.0
June 11, 2009	0.0	0.0	0.0	0.0
June 18, 2009	0.0	0.0	0.0	0.0
June 24, 2009	0.0	0.0	0.0	0.0
June 29, 2009	0.0	0.0	0.0	0.0
July 8, 2009	0.0	0.0	0.0	0.0
July 15, 2009	0.0	0.0	0.0	0.0
July 23, 2009	0.0	0.0	0.0	0.0
July 28, 2009	0.0	0.0	0.0	0.0
August 3, 2009	0.0	0.0	0.0	0.0
August 13, 2009	0.0	0.0	0.0	0.0
August 19, 2009	0.0	0.0	0.0	0.0
August 24, 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.

**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	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 (lbs)
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 <sup>(1)</sup>
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	96.43	2.64E-04	182	29.71
8/23/2007	38.3	17	6.5	130	< 0.5	97.35	3.26E-04 4.23E-04	191 28	29.78 <sup>(1)</sup>
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	99.18	3.73E-04	484	30.13
10/31/2007	39.9	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	64	< 0.5	99.32	4.43E-04	407	30.58 <sup>(1)</sup>
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 <sup>(1)</sup>
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	39.8	17	6.2	100	< 0.5	99.52	6.49E-04	374	32.21
4/18/2008	38.9	16	6.5	86	< 0.5	99.45	5.92E-04	371	32.43
5/1/2008	38.3	19	6.4	89	< 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 <sup>(1)</sup>
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	8.64E-04	247	33.37
7/10/2008	39.8	12	6.0	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	66	< 0.5	99.38	4.77E-04	279	33.84
8/21/2008	40.3	13	6.0	61	< 0.5	99.33	4.46E-04	510	34.06 <sup>(1)</sup>
9/5/2008	39.0	13	6.0	60	< 0.5	99.31	4.34E-04	110	34.11
9/19/2008	39.6	15	6.1	82	< 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	64	< 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 <sup>(1)</sup>
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	53	< 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	289	35.54
2/2/2009	40.3	12	6.1	56	< 0.5	99.26	4.13E-04	323	35.68
2/26/2009	39.1	16	5.6	69	< 0.5	99.45	5.07E-04	581	35.97 <sup>(1)</sup>
3/11/2009	40.1	18	5.7	92	< 0.5	99.54	6.24E-04	253	36.13
3/25/2009	39.0	16	5.3	74	< 0.5	99.48	5.09E-04	335	36.30
4/8/2009	39.2	16	5.3	61	< 0.5	99.44	4.76E-04	334	36.46
4/24/2009	40.4	13	5.2	61	< 0.5	99.38	4.22E-04	277	36.58
5/5/2009	39.5	16	5.2	63	< 0.5	99.46	4.81E-04	186	36.67
5/18/2009	40.5	13	5.5	53	< 0.5	99.33	4.10E-04	554	36.89 <sup>(1)</sup>
6/3/2009	39.5	15	5.3	56	< 0.5	99.40	4.45E-04	65	36.92
6/18/2009	39.1	13	5.2	55	< 0.5	99.35	3.98E-04	326	37.05
7/1/2009	40.3	8	5.5	48	< 0.5	99.09	3.02E-04	308	37.14
7/15/2009	40.3	11	5.3	47	< 0.5	99.23	3.47E-04	144	37.19
7/28/2009	40.6	13	5.4	61	< 0.5	99.37	4.29E-04	458	37.39
8/13/2009	40.4	13	5.3	51	< 0.5	99.33	3.98E-04	382	37.54
8/24/2009	40.2	11	5.3	50	< 0.5	99.25	3.64E-04	449	37.70 <sup>(1)</sup>

**NOTES:**

- Performance results for the reporting period are shaded.
- Estimated through the end of the reporting period.

**ABBREVIATIONS:**

gpm: gallons per minute  
ug/L: micrograms per liter

lb/hr: pounds per hour  
NS: Not sampled

**QUALIFIERS:**

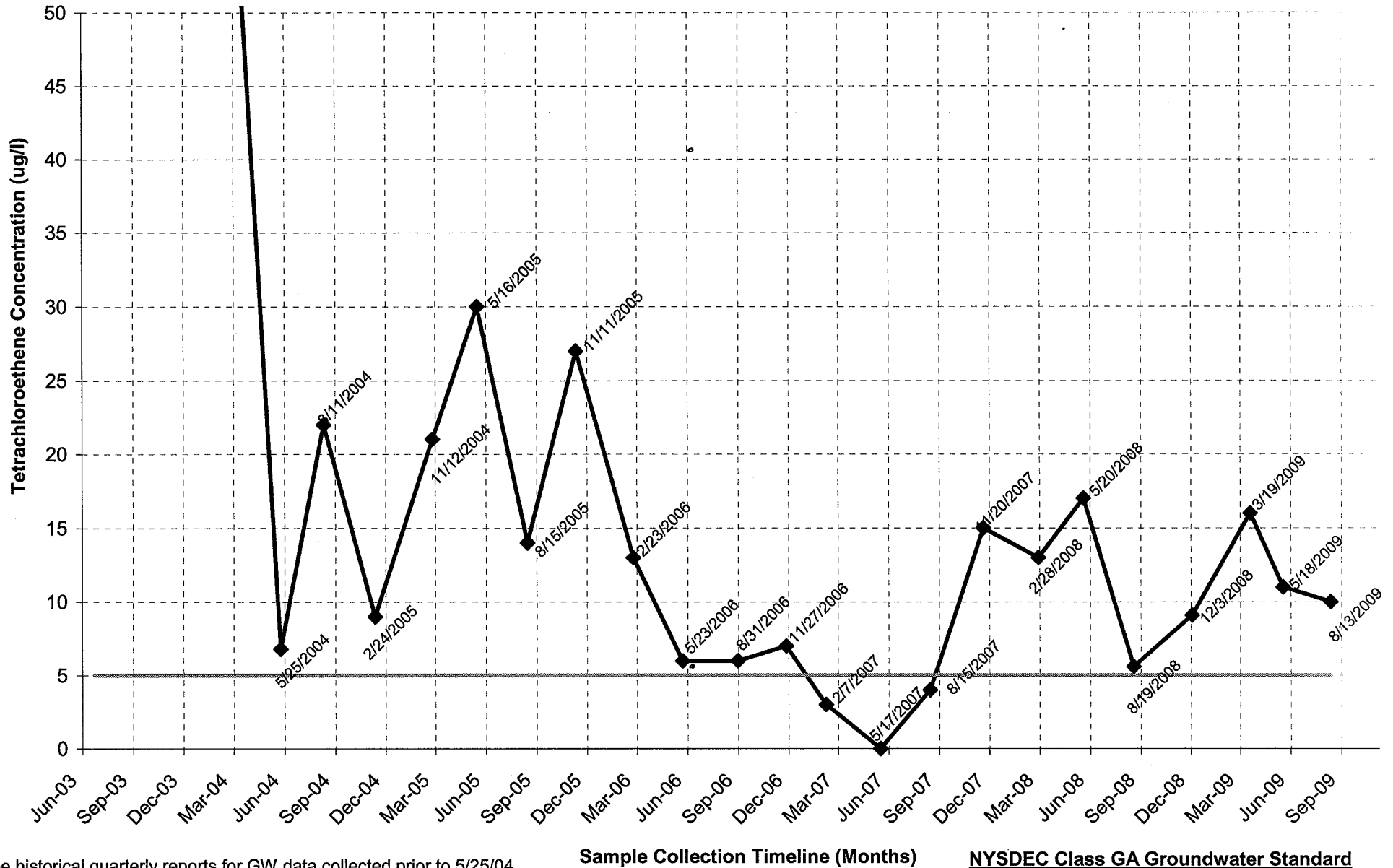
J: Compound found at a concentration below CRDL, value estimated  
B: Compound detected in method blank as well as the sample, value estimated

**ATTACHMENT F**

**MONITORING WELL TREND LINE GRAPHS**



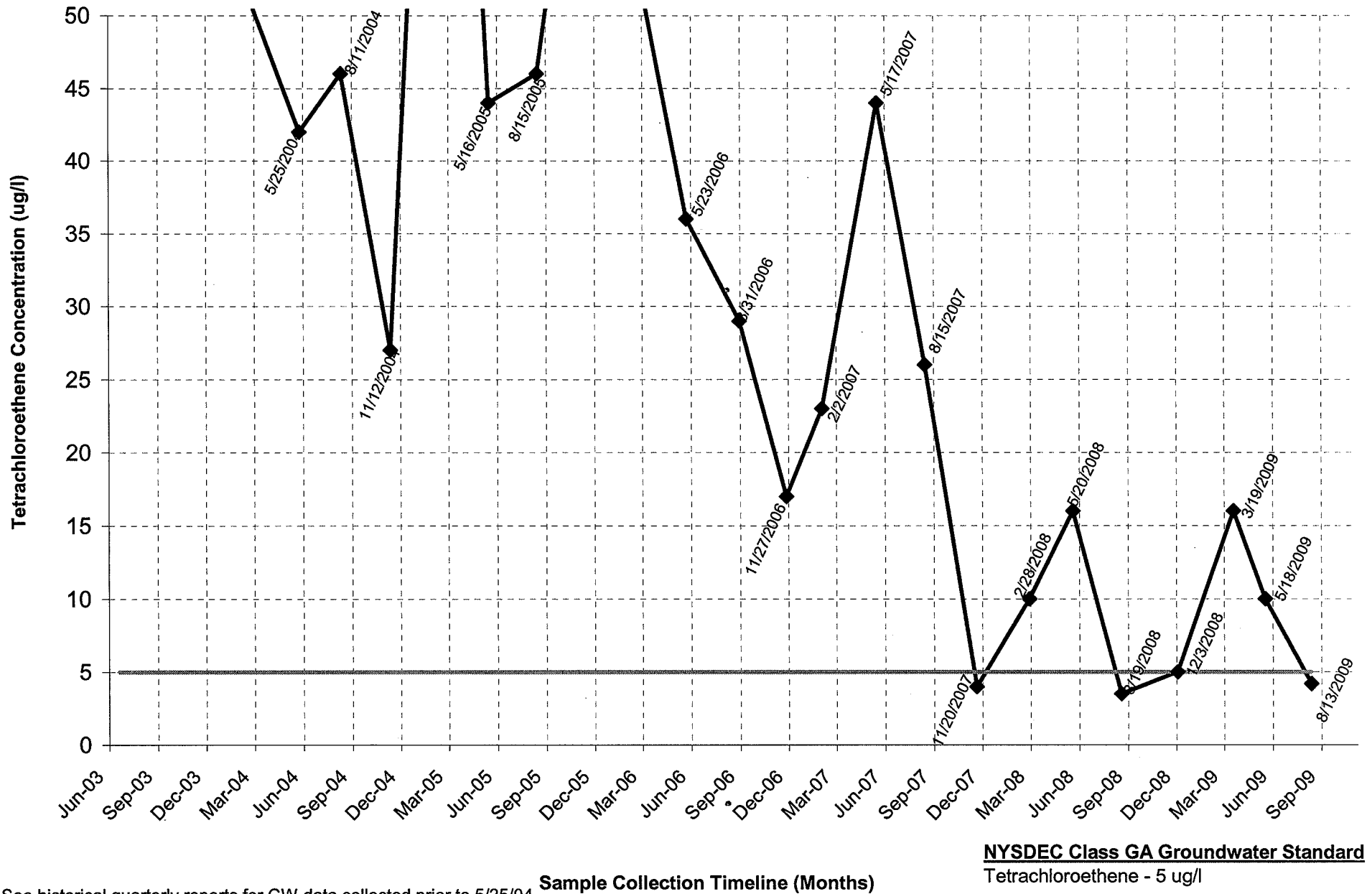
**GRAPH 1**  
**Franklin Cleaners Site**  
**NYSDEC Contract No. D004446 / Site No. 1-30-050**  
**Groundwater Monitoring Well ASMW-1**



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

**NYSDEC Class GA Groundwater Standard**  
Tetrachloroethene - 5 ug/l

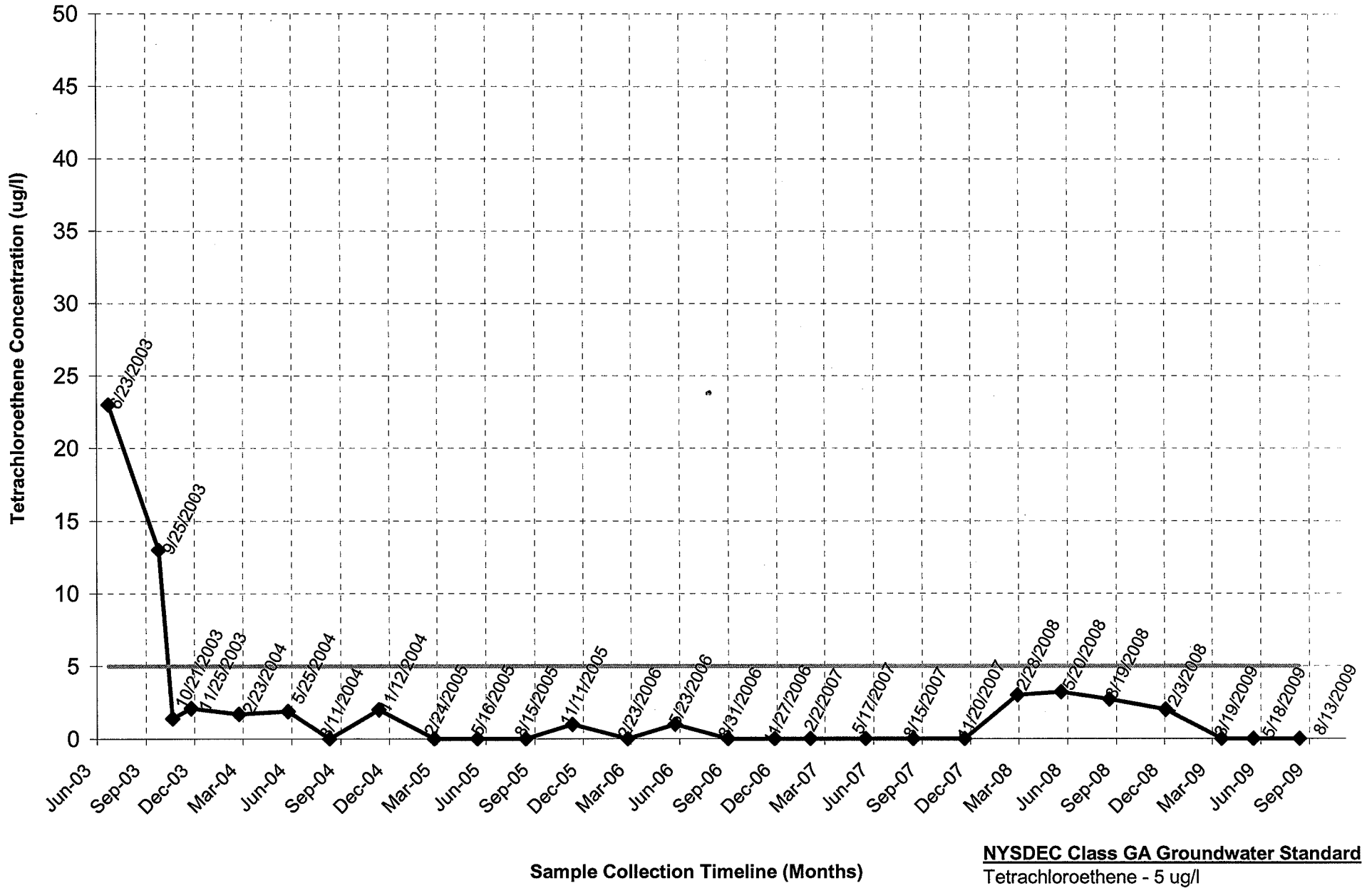
**GRAPH 2**  
**Franklin Cleaners Site**  
**NYSDEC Contract No. D004446 / Site No. 1-30-050**  
**Groundwater Monitoring Well ASMW-2**



(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, 11/11/05 and 2/23/06, respectively.

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



**ATTACHMENT G**

**DATA VALIDATION CHECKLISTS**

## DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners		
Project Number:	2531-03		
Sample Date(s):	June 3, 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:	SH1008	Date:	6/17/2009

## 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  
%R - percent recovery

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

RRF - relative response factor  
RPD - relative percent difference

### Comments:

Performance was acceptable.

**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
12. Field duplicates RPD					X

%R - percent recovery

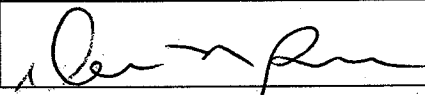
%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable, with the following exception:

- 2A. Manganese was detected in preparation blank and detected in the sample at concentration less than ten times the concentration found in the blank. Therefore, manganese in sample AS was qualified as non-detect (U).

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 09/9/2009
VALIDATION PERFORMED BY SIGNATURE:	

## DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners		
Project Number:	2531-03		
Sample Date(s):	June 18, 2009		
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:	SH1116	Date:	7/29/2009

## 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.

**INORGANIC ANALYSES  
METALS**

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
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 09/9/2009
VALIDATION PERFORMED BY SIGNATURE:	



## DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners	
Project Number:	2531-03	
Sample Date(s):	July 1, 2009	
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:	SH1209	Date: 7/17/2009

## 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

%R - percent recovery

%D - percent difference

%RSD - percent relative standard deviation

RRF - relative response factor

RPD - relative percent difference

### Comments:

Performance was acceptable.

**INORGANIC ANALYSES  
METALS**

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
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
12. Field duplicates RPD					X

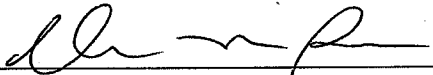
%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 09/9/2009
VALIDATION PERFORMED BY SIGNATURE:	

## DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners	
Project Number:	2531-03	
Sample Date(s):	July 15, 2009	
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:	SH1289	Date: 7/28/2009

## 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:

- The %D was above the QC limit of 25 % for dichlorodifluoromethane, chloromethane, acetone, carbon tetrachloride, 1,2-dichloroethane 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.

**INORGANIC ANALYSES  
METALS**

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
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

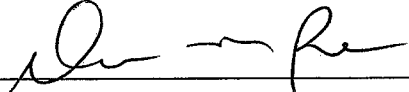
%R - percent recovery

%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 09/9/2009
VALIDATION PERFORMED BY SIGNATURE:	

## DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners	
Project Number:	2531-03	
Sample Date(s):	July 28, 2009	
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:	SH1396	Date:9/21/2009

## 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, chloromethane, vinyl chloride and methylcyclohexane in the continuing calibration associated with all samples. The above compounds were qualified as estimated (J/UJ) 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
9. Post digestive spike sample %R					X
10. Duplicate %RPD					X
11. Serial dilution check %D					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 09/9/2009
VALIDATION PERFORMED BY SIGNATURE:	

## DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners		
Project Number:	2531-03		
Sample Date(s):	August 13, 2009		
Matrix/Number of Samples:	Water/ 10 Trip Blank/1		
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:	SH1564	Date:	8/31/2009

## 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		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

%R - percent recovery

%D - percent difference

%RSD - percent relative standard deviation

RRF - relative response factor

RPD - relative percent difference

### Comments:

Performance was acceptable.

**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
12. Field duplicates RPD					X

%R - percent recovery

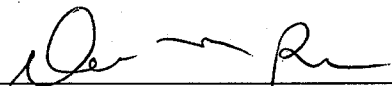
%D - percent difference

RPD - relative percent difference

Comments:

Performance was acceptable, with the following exception:

- 2A. Manganese was detected in preparation blank and detected in the sample at concentration less than ten times the concentration found in the blank. Therefore, manganese in sample AS was qualified as non-detect (U).

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 09/9/2009
VALIDATION PERFORMED BY SIGNATURE:	



## DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners	
Project Number:	2531-03	
Sample Date(s):	August 24, 2009	
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:	SH1634	Date:9/8/2009

## 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.

**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
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 09/24/2009
VALIDATION PERFORMED BY SIGNATURE:	