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January 7, 2011

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. 21 (September 1, 2009 through November 30, 2009)
D&B No. 2531-03

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 September 1, 2009 through November 30, 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 37.3 gallons per minute (gpm) and extraction well EW-2 operated at an average pumping rate of 5.4 gpm. Normalized graphs of the average flow rate for EW-1 and EW-2 since September 2006 are presented in Attachment B. Based on a review of the data, the flow rate for EW-1 has slightly increased, while the flow rate for EW-2 has slightly decreased throughout this reporting period. Approximately 0.77 pounds of tetracholoethene (PCE) were removed from the extracted groundwater by the low profile air stripper during this reporting period and approximately 38.47 pounds of PCE have been removed since start-up of the system in September 2003. The average PCE removal efficiency for this reporting period was greater than 99 percent.

Based on measurements recorded at the treatment system discharge flow meter, approximately 7,829,460 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 a combined total of approximately 5,562,663 gallons of groundwater entering the treatment system. It was initially thought that this inconsistency was possibly due to either wear or 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 correcting this inconsistency. In addition, no significant wear was observed. It was also noted during several system monitoring events that the EW-1 flow meter was intermittently registering a flow of 0.0 gpm. As detailed in the recommendations of this and the previous quarterly reports, further diagnosis of these inconsistencies by a NYSDEC "call-out" contractor is warranted.

During this reporting period, the groundwater extraction and treatment system was operative for a total of approximately 2,100 hours and inoperative for a total of approximately 73.5 hours due to system alarm conditions and routine system maintenance. The 73.5 hours of inoperative time are explained as follows:

- Approximately 28 hours of "downtime" was due to a high-high wet well condition in the treatment system building;
- Approximately 24 hours of "downtime" was due to extraction well VFD fault conditions;
- Approximately 2 hours of "downtime" was due to a high level in the valve vault sump;
- Approximately 18 hours of "downtime" was due to diagnosis of a no-flow condition with EW-1 and EW-2;
- Approximately 0.5 hours of "downtime" was due to routine pressure blower maintenance; and
- Approximately 1 hour of "downtime" was due to routine wet well pump maintenance.

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, thereby possibly alleviating conditions contributing to the frequent high-high wet well alarms. Based on a review of the history of the frequency of this alarm condition prior to and subsequent to the float repositioning, the frequency of the high-high wet well alarm 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 22 report.

A summary of system downtime is presented in Attachment C. Copies of routine system maintenance reports, as prepared by Systematic Technologies, Inc., are presented in Attachment D. A table summarizing the maintenance events completed this quarter and scheduled for Quarter 22 is presented in Appendix E.

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. In addition, the samples collected from the air stripper discharge sample tap were 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 F.

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 8.3 ug/l detected on November 9, 2009, to a maximum of 13.0 ug/l detected on September 8, 2009. Extraction well EW-2 exhibited concentrations of PCE above its NYSDEC Class GA Standard of 5.0 ug/l ranging from 48.0 ug/l detected on November 9, 2009, to a maximum of 57.0 ug/l detected on September 23, 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 September 8 (5.8), September 23 (5.4), October 5 (5.5), October 26 (6.2) and November 9, 2009 (6.2), which were slightly below the effluent limit range of 6.5 to 8.5. The NYSDEC was notified of the exceedances via e-mail correspondence.

As a result of the analytical laboratory pH exceedances noted above, beginning Octoer 26, 2009, D&B completed pH field monitoring at the influent (EW-1 and EW-2) and effluent (air stripper sump and wet well sump). Initial field readings of the influent pH have exhibited concentrations ranging from 4.7 to 5.8, air stripper effluent pH has exhibited concentrations ranging from 5.7 to 7.3 and the wet well sump pH has exhibited concentrations ranging from 5.9 to 7.3. A comparison of the air stripper effluent field readings to the lab results shows that the field readings are an average of 0.7 pH units greater than the lab results and are generally within the effluent limit range noted above.

It is recommended by USEPA SW-846 to analyze pH immediately. Please note that, due to pH's susceptibility to changes in temperature and carbon dioxide content, pH analyses conducted in the field may be more representative of the true pH than analysis conducted in the laboratory subsequent to shipment to the laboratory in an ice-filled cooler. Both final and laboratory pH analyses are performed using a pH probe meter, which is calibrated using a three-point calibration method prior to each pH analysis. It should be noted that the air stripper effluent laboratory sample results for the sampling event completed on November 24, 2009, exhibited a pH of 6.7.

A summary of the extraction and treatment system performance results since September 2007 is provided in Attachment G.

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, with the exception of the PID readings collected on November 2, 2009, which exhibited concentrations of 0.1 ppm at the influent and effluent of Vessel No. 1 and 0.2 ppm at the influent and effluent of carbon Vessel No. 2. Note that the PID readings collected from carbon vessel outlet 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. Groundwater samples were collected from groundwater monitoring wells ASMW-1 through ASMW-7 on November 20, 2009. The groundwater 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 are 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 11.0 ug/l, was detected at a concentration exceeding its Class GA Standard of 5.0 ug/l in groundwater monitoring well ASMW-1, increasing from a concentration of 10.0 ug/l detected during the previous reporting period (August 13, 2009). Groundwater sample ASMW-2 exhibited a PCE concentration of 3.5 ug/l, which decreased from a concentration of 4.2 ug/l, detected during the previous reporting period. PCE concentrations have continued to maintain a decreasing trend since 2003 in these two upgradient monitoring wells. 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 reporting period. However, 1,1,1-Trichloroethane, at a concentration of 2.4 ug/l, was also detected in groundwater monitoring well ASMW-1. Please refer to the trend line graphs provided in Attachment H, which summarize PCE concentrations detected in samples collected from ASMW-1, ASMW-2 and ASMW-3 since June 2003.

A gross plume model depicting the estimated extent of the PCE plume is provided as Figure 3 in Appendix A. Note that, due to the limited number of sample and data points within the vicinity of the treatment system, the plume extent depicted on Figure 3 is based on a low PCE concentration of 5 ug/l. In addition, note that, due to the limited number of sample and data points within the vicinity of the treatment system, the overall extent of the PCE plume is estimated. In order to better define the PCE plume, it is recommended to install a minimum of five additional groundwater monitoring wells, with two

monitoring wells located to the west and three monitoring wells located to the south of the existing groundwater monitoring well network.

Groundwater sampling for Quarter 22 is scheduled for February 2010.

Data Validation

The biweekly system samples and groundwater samples have been analyzed for VOCs by Mitkem Corporation (Mitkem). In addition, the effluent sample (AS-1) was 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 I.

Findings

Based on the results of the performance monitoring conducted during this reporting period, D&B offers the following findings:

- 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 an average combined total flow rate of 42.7 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.
- A comparison of the air stripper effluent pH field readings to the analytical laboratory pH results show that the field readings are an average of 0.7 pH units greater than the analytical laboratory results. Note that, the pH of a liquid is quite susceptible to changes in temperature and carbon dioxide content. As such, the differences in field and analytical laboratory pH results may be the result of the differences in the time the sample will experience between an instantaneous field analysis and a laboratory analysis following shipment to the analytical laboratory in an ice-filled cooler. As described above, both the field and laboratory pH analyses are performed using a pH probe meter, which is calibrated using a three-point

calibration method prior to use. Therefore, the field pH readings will be more representative of true pH concentrations of system water.

- As compared to the previous reporting period, concentrations of PCE detected in groundwater monitoring well ASMW-1 increased from 10.0 ug/l (August 13, 2009) to 11.0 ug/l (November 20, 2009). However, ASMW-1 continues to exhibit an overall decreasing trend from a high of 27.0 ug/l (November 2005) for the past 4-year period.
- As compared to the previous reporting period, concentrations of PCE detected in groundwater monitoring well ASMW-2 decreased from 4.2 ug/l (August 13, 2009) to 3.5 ug/l (November 20, 2009). In addition, ASMW-2 continues to exhibit an overall decreasing trend from a high of 69.0 ug/l (November 2005) for the past 4-year period.
- 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. Note that cleaning of the influent flow meters was ineffective at reducing this inconsistency. Therefore, the influent flow meters may be worn and due for replacement. 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 level (wet well pump on) float approximately 4 inches. Subsequent to the float repositioning conducted this quarter, the frequency of the high-high wet well alarm 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, based on review of analytical data received from the Village of Rockville Centre, the Village's 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 November 2009, 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 reporting 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 groundwater monitoring well network to determine contaminant concentration trends over time and to evaluate the continued effectiveness of the remediation system.
- 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.
- Due to low analytical laboratory pH results detected at the air stripper effluent, it is recommended to continue the field monitoring of the influent and effluent pH and closely monitor the results. If field monitoring effluent pH values are consistently detected outside of the effluent limit range of 6.5 to 8.5, it may be warranted to perform a post-treatment pH adjustment of the effluent water.
- In order to better define the extent of the PCE plume, as presented on Figure 3 in Appendix A, it is recommended to install a minimum of five additional groundwater monitoring wells, with two monitoring wells located to the west and three monitoring wells located to the south of the existing groundwater monitoring well network. If requested by the NYSDEC, additional details and/or a Monitoring Well Installation Plan can be prepared.

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)
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ATTACHMENT A

FIGURES

SOURCE: USGS FREEPORT AND LYNBROOK QUADRANGLES

FRANKLIN CLEANERS SITE
VILLAGE OF HEMPSTEAD, NEW YORK

SITE LOCATION MAP

FIGURE 1

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ASMW-1							
DATE SAMPLED	05/20/08	08/19/08	12/03/08	03/19/09	05/18/09	08/13/09	11/20/09
GW ELEVATION (4)	27.54	25.64	25.69	26.39	26.76	26.82	26.84
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	5.6J	ND	ND	5.2J	6.4J	2.3J	2.4J
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	17	5.6J	9.1J	16	11	10	11
Xylene (total)	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND

ASMW-2							
DATE SAMPLED	05/20/08	08/19/08	12/03/08	03/19/09	05/18/09	08/13/09	11/20/09
GW ELEVATION (4)	27.40	25.67	26.15	26.10	26.59	26.69	25.85
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	16	3.5J	5.0J	16	10	4.2J	3.5J
Xylene (total)	ND	ND	ND	ND	ND	ND	ND

ASMW-3							
DATE SAMPLED	05/20/08	08/19/08	12/03/08	03/19/09	05/18/09	08/13/09	11/20/09
GW ELEVATION (4)	28.27	26.44	26.09	26.89	27.39	27.51	26.54
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	3.2J	2.7J	2.0J	ND	ND	ND	ND
Xylene (total)	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND

ASMW-4							
DATE SAMPLED	05/20/08	08/18/08	12/03/08	03/19/09	05/18/09	08/13/09	11/20/09
GW ELEVATION (4)	26.08	24.11	24.41	25.08	25.31	25.41	24.86
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	05/20/08	08/18/08	12/03/08	03/19/09	05/18/09	08/13/09	11/20/09
GW ELEVATION (4)	25.17	22.91	23.85	28.70	24.69	24.33	24.20
COLLECTED BY	D&B	D&B	D&B	D&B	D&B	D&B	D&B
Constituent							
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	ND	ND	ND	ND	ND	ND	ND

ASMW-6						
DATE SAMPLED	08/18/08	12/03/08	03/19/09	05/18/09	08/13/09	11/20/09
GW ELEVATION (4)	22.58	23.60	24.73	24.02	23.66	24.13
COLLECTED BY	D&B	D&B	D&B	D&B	D&B	D&B
Constituent						
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND
Xylene (total)	ND	ND	ND	ND	ND	ND

ASMW-7						
DATE SAMPLED	08/18/08	12/03/08	03/19/09	05/18/09	08/13/09	11/18/09
GW ELEVATION (4)	21.56	22.48	23.11	22.96	21.87	23.21
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 (4)	TOP OF CASING ELEVATION (4)
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

TAX LOT 36-C-221
MERCY HOSPITAL ASSOCIATION
LIBER 4894 PAGE 133

TAX LOT 36-C-219

ASMW-1
ASMW-2
ASMW-3
ASMW-4
ASMW-5
ASMW-6
ASMW-7
EW-1
EW-2
MCOL-1

SOUTHERN S

S73°04'22"E
242.07'
N19°21'38"E 501.74'
APPROXIMATE GROUNDWATER FLOW DIRECTION
CONTRACT LIMITS
APPROXIMATE LOCATION GAS LINE AS SHOWN IN FIELD BY MALLOY COLLEGE PERSONNEL VERIFY IN FIELD BEFORE DIGGING
RYAN MEDICAL ARTS BUILDING 4-STORY BRICK
WILLIAM A. CASEY
WILBUR HAYS 2-STORY BR
N-3745 (WELL 4B)
N-72 (WELL 4A)
N-8218 (WELL 4C)
TAX
104E
COL
LIBER

LEGEND:

- GROUNDWATER MONITORING WELL
- GROUNDWATER EXTRACTION WELL
- IRRIGATION WELL
- FORMER GROUNDWATER PROBE

0 120 240
SCALE IN FEET

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

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

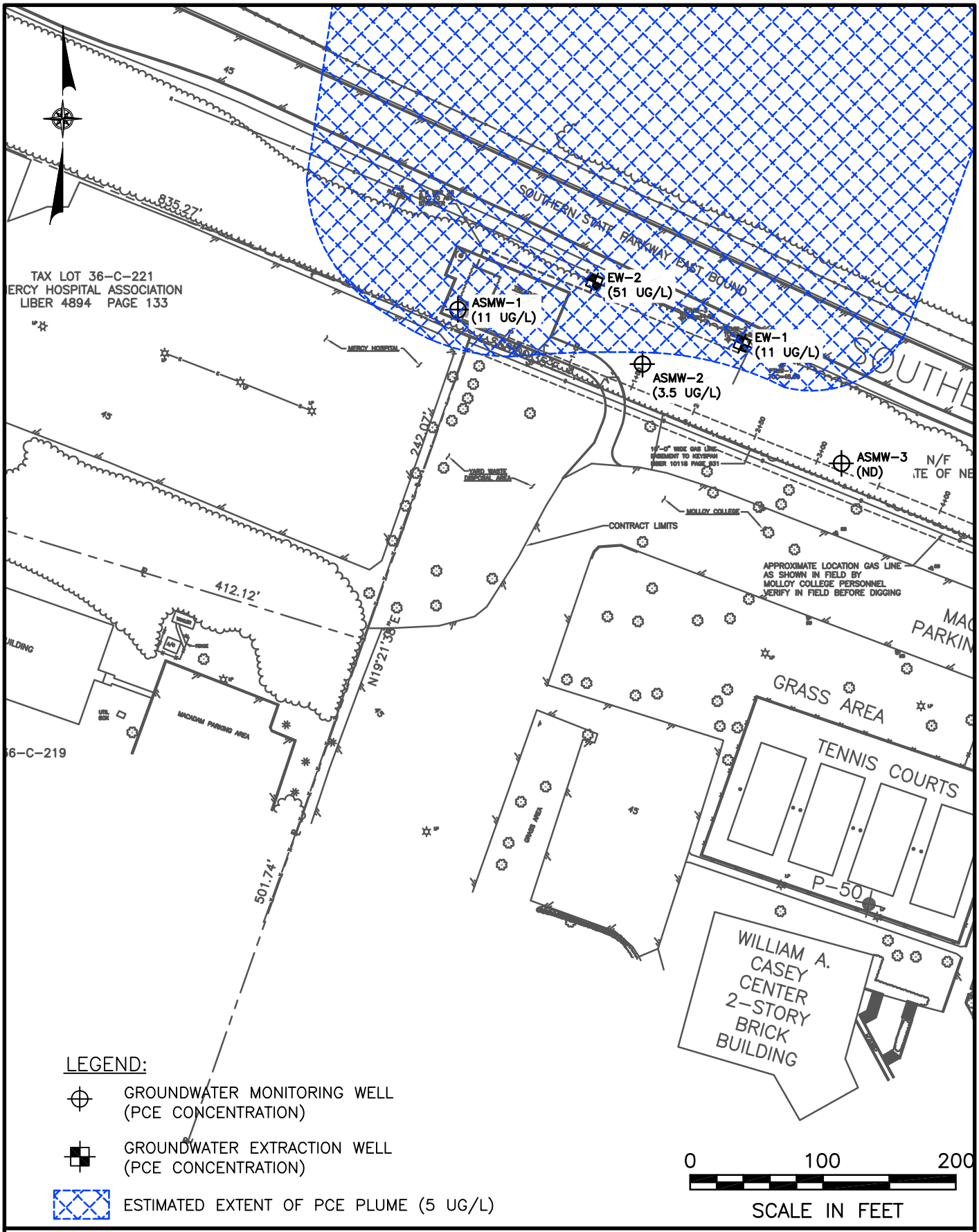
FRANKLIN CLEANERS SITE
VILLAGE OF HEMPSTEAD, NEW YORK

MONITORING WELL LOCATION MAP AND SUMMARY OF SAMPLE RESULTS THROUGH NOVEMBER 20, 2009

FIGURE 2

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

F:\2531\DWG\Quarterly Reports\Quarter 21\FIGURE 2.dwg, FIG 2, 12/30/2009 2:11:30 PM, pmartorano



F:\2531\DWG\Quarterly Reports\Quarter 21\FIGURE 3.dwg, 3/12/2010 3:14:07 PM, dbcadd

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CONSULTING ENGINEERS
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FRANKLIN CLEANERS SITE
VILLAGE OF HEMPSTEAD, NEW YORK

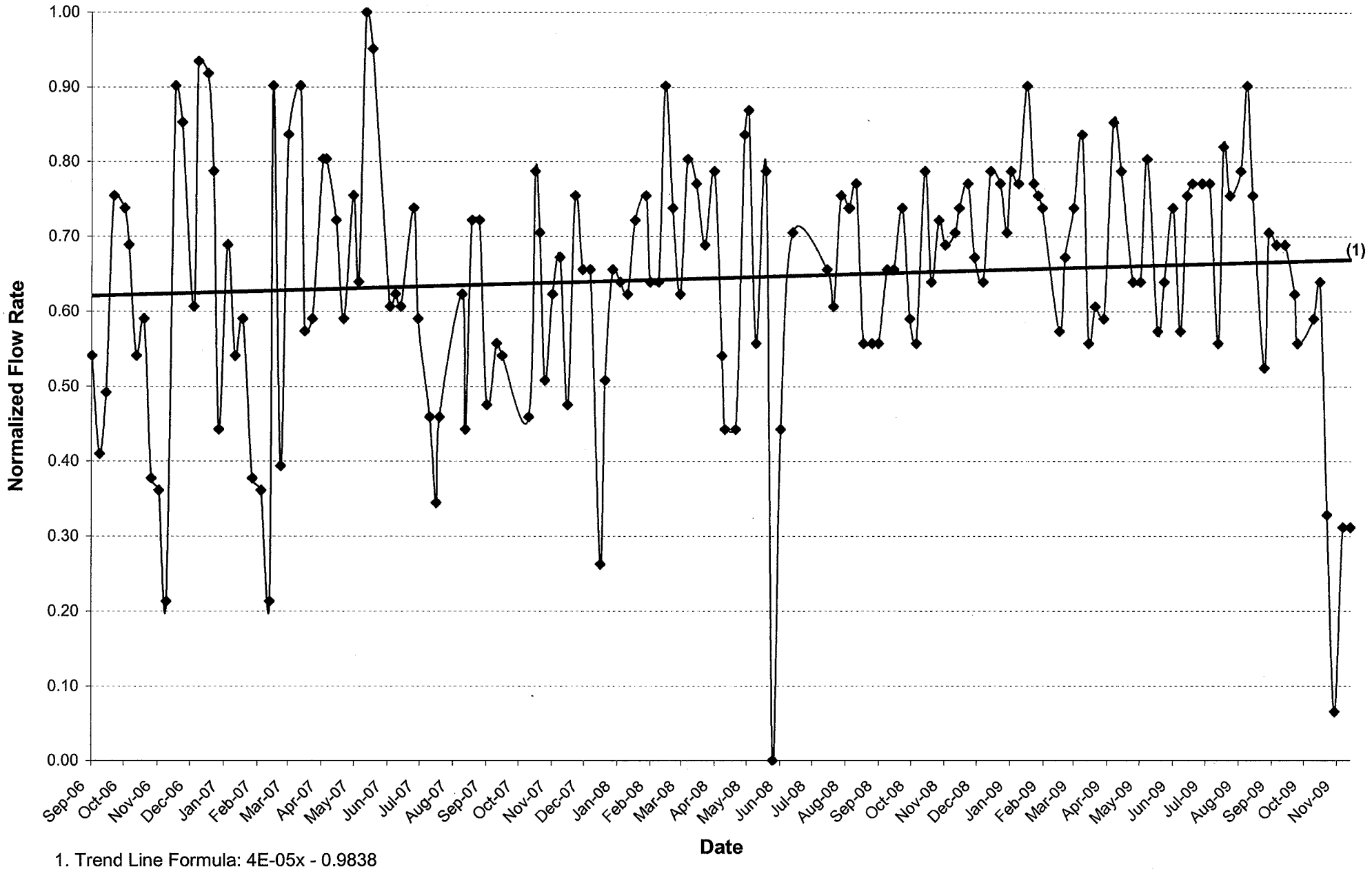
GROSS PLUME MODEL

FIGURE 3

ATTACHMENT B

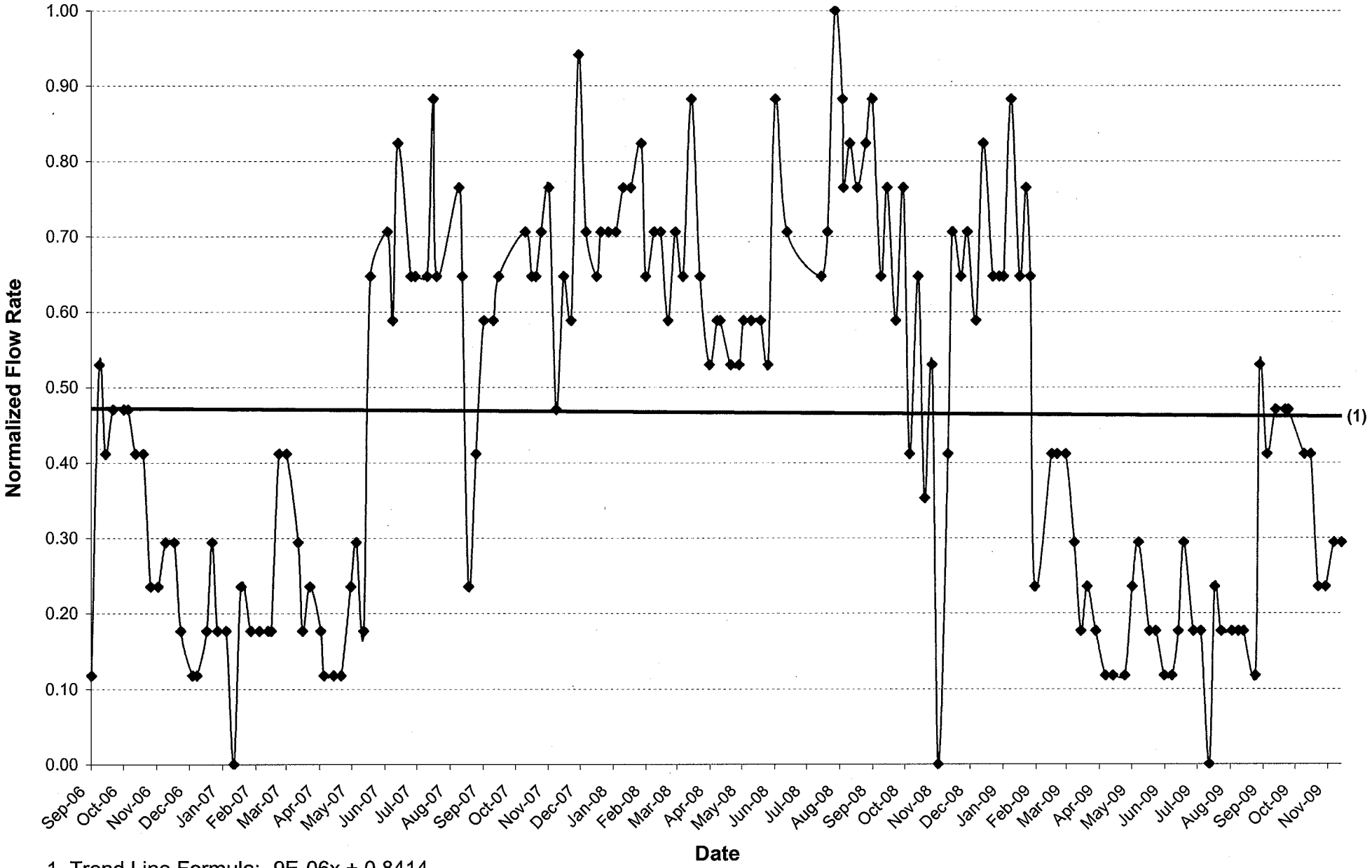
NORMALIZED EXTRACTION WELL FLOW RATE GRAPHS

Franklin Cleaners Site
NYSDEC Contract No. D004446 / Site No. 1-30-050
Extraction Well EW-1



1. Trend Line Formula: 4E-05x - 0.9838

Franklin Cleaners Site
NYSDEC Contract No. D004446 / Site No. 1-30-050
Extraction Well EW-2



1. Trend Line Formula: -9E-06x + 0.8414

ATTACHMENT C

SUMMARY OF SYSTEM DOWNTIME

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
9/1/09 9:10 PM	9/2/09 2:43 PM	Alarm Condition #3 & #5 - Tripped breaker for wet well pumps. Reset EW-1 VFD drive. Restarted system.
9/3/09 8:00 AM	9/3/09 8:09 AM	Alarm Condition #3 & #5 - Tripped breaker for wet well pumps. Reset EW-2 VFD drive (OL-2 condition). Restarted system.
9/3/09 2:50 PM	9/4/09 8:30 AM	EW-1/EW-2 exhibited a flow rate of 0.0. Inspected system and reset main control panel. Restarted system and observed EW-1/EW-2. Both pumping at normal rates.
10/5/09 3:38 PM	10/5/09 4:15 PM	Routine Pressure Blower Maintenance(1). Restarted system.
10/7/09 11:59 AM	10/7/09 6:07 PM	Alarm Condition #3 - High-high wet well alarm. Reset wet well panel. Pumped wet well to low level and restarted system.
10/20/09 10:18 AM	10/20/09 11:23 AM	Routine Submersible Wet Well Pump Maintenance(1). Restarted system.
10/28/09 6:00 AM	10/28/09 12:18 PM	Alarm Condition #2 - Reset VFDs. Restarted system
10/28/09 12:40 PM	10/28/09 2:27 PM	Alarm Condition #3 & #8 - High Level Valve Vault Sump Alarm. Wet well sump overflowed and caused the valve vault sump to fill and trigger an alarm. Pumped valve vault sump to air stripper. Pumped wet well to low lever. Adjusted high level float. Restarted system.
11/19/09 4:59 PM	11/20/09 9:45 AM	Alarm Condition #3 & #5 - High-high wet well alarm. Tripped breaker for wet well pumps. Pumped wet well to low level and restarted system.
11/30/09 11:49 AM	11/30/09 4:35 PM	Alarm Condition #3 & #5 - High-high wet well alarm. Tripped breaker for wet well pumps. Pumped wet well to low level and restarted system.

NOTES:

1. Maintenance event performed by Systematic Technologies, Inc.

ATTACHMENT D

SYSTEM MAINTENANCE REPORTS

MAINTENANCE AND INSPECTION REPORT

FRANKLIN CLEANERS SITE, ROCKVILLE CENTRE, NY

Date: 10/5/09				
Name of Personnel Onsite	Title	Time Arrived	Time Departed	Total Hours
P. Hahn	Technician	1530	1615	.75 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.

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 11/4/09

Signature / Print / Date

MAINTENANCE AND INSPECTION REPORT

FRANKLIN CLEANERS SITE, ROCKVILLE CENTRE, NY

Date: 10/20/09				
Name of Personnel Onsite	Title	Time Arrived	Time Departed	Total Hours
L. Sorensen	President	1000	1200	2 on site
P. Hahn	Technician	1000	1200	2 on site
(Fleet Pump & Service)	Technician	1000	1200	2 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 5: Submersible Wet Well Pump Maintenance and Inspection

1. Checked electrical condition of insulation on power cable and all phases of
2. motor;
3. Checked for any loose or faulty electrical connections within the pump control panel;
4. Checked voltage supply between all phases of the electrical control panel;
5. Checked voltage balance between all phases on the local side of the pump control with pump on;
6. Checked amperage draw on all phases of the pump motor;
7. Checked condition and operation of motor thermal, protectors control system;
8. Checked condition of upper shaft seals (inspect condition of motor housing);
9. Checked condition and operation of leakage detector;
10. Checked lower shaft seals (inspect condition of oil);
11. Changed oil;
12. Checked for worn or loose impeller;
13. Checked all impeller wear rings;
14. Checked for noisy upper and lower bearings;
15. Physically checked for damage to pump and power cable;
16. Cleaned, reset and checked operation of the level sensors;
17. Checked for correct shaft rotation;
18. Tested pump operation cycle.

Name of Part / Supply / Material	Manufacturer	Model Number	Quantity Used
Pump Oil	ITT Flygt	Unknown	2 Quarts

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 11/4/09 Signature / Print / Date			

ATTACHMENT E

MAINTENANCE SCHEDULE

FRANKLIN CLEANERS SITE
NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050
SCHEDULE OF MAINTENANCE EVENTS

Maintenance Activities						
	September-09	October-09	November-09	December-09	January-10	February-10
Activity	21st Qtr	21st Qtr	21st Qtr	22nd Qtr	22nd Qtr	22nd Qtr
Blower Maintenance		10/5/09				
Air Stripper Maintenance						
GAC Removal and Replacement						
Wet Well Pumps Maintenance		10/20/09				

##/##/##	Activity Completed
	Activity to Complete

ATTACHMENT F

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)	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	WATER	
DATE OF COLLECTION	9/8/2009	9/25/2009	10/5/2009	10/26/2009	11/9/2009	11/24/2009	
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)	(ug/L)
VOCs							
Dichlorodifluoromethane	U	U	UJ	UJ	U	U	5 ST
Chloromethane	U	U	U	UJ	U	U	--
Vinyl chloride	U	U	U	UJ	U	U	2 ST
Bromomethane	U	U	U	U	U	U	5 ST
Chloroethane	U	U	U	U	U	U	5 ST
Trichlorofluoromethane	U	UJ	U	UJ	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	UJ	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	UJ	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	13	12	9.9 J	12	8.3 J	11	5 ST
2-Hexanone	U	U	U	U	U	U	50 GV
Dibromochloromethane	U	U	U	U	U	U	50 GV
1,2-Dibromoethane	U	U	U	U	U	U	5 ST
Chlorobenzene	U	U	U	U	U	U	5 ST
Ethylbenzene	U	U	U	U	U	U	5 ST
Xylene (total)	U	U	U	U	U	U	5 ST
Styrene	U	U	U	U	U	U	5 ST
Bromoform	U	U	UJ	U	U	U	50 GV
Isopropylbenzene	U	U	U	U	U	U	5 ST
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	3 ST
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	0.04 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	5 ST

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
B: Compound detected in method blank as well as sample, value estimated.

FRANKLIN CLEANERS SITE
NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050
RESULTS OF ANALYSIS OF 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)	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	WATER	
DATE OF COLLECTION	9/8/2009	9/25/2009	10/5/2009	10/26/2009	11/9/2009	11/24/2009	
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	UJ	UJ	U	U	5 ST
Chloromethane	U	U	U	UJ	U	U	--
Vinyl chloride	U	U	U	UJ	U	U	2 ST
Bromomethane	U	U	U	U	U	U	5 ST
Chloroethane	U	U	U	U	U	U	5 ST
Trichlorofluoromethane	U	UJ	U	UJ	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	UJ	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	UJ	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	53	57	54	56	48	51	5 ST
2-Hexanone	U	U	U	U	U	U	50 GV
Dibromochloromethane	U	U	U	U	U	U	50 GV
1,2-Dibromoethane	U	U	U	U	U	U	5 ST
Chlorobenzene	U	U	U	U	U	U	5 ST
Ethylbenzene	U	U	U	U	U	U	5 ST
Xylene (total)	U	U	U	U	U	U	5 ST
Styrene	U	U	U	U	U	U	5 ST
Bromoform	U	U	UJ	U	U	U	50 GV
Isopropylbenzene	U	U	U	U	U	U	5 ST
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	3 ST
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	0.04 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	5 ST

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
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)	EFFLUENT LIMITATIONS	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	WATER		
DATE OF COLLECTION	9/8/2009	9/25/2009	10/5/2009	10/26/2009	11/9/2009	11/24/2009		
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)	(ug/L)	(ug/L)
Dichlorodifluoromethane	U	U	UJ	UJ	U	U	--	5 ST
Chloromethane	U	U	U	UJ	U	U	--	--
Vinyl chloride	U	U	U	UJ	U	U	--	2 ST
Bromomethane	U	U	U	U	U	U	--	5 ST
Chloroethane	U	U	U	U	U	U	--	5 ST
Trichlorofluoromethane	U	UJ	U	UJ	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	UJ	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	10	5 ST
cis-1,2-Dichloroethene	U	U	U	U	U	U	10	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	10	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	10	5 ST
Methylcyclohexane	U	U	U	UJ	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	5 ST
2-Hexanone	U	U	U	U	U	U	--	50 GV
Dibromochloromethane	U	U	U	U	U	U	--	50 GV
1,2-Dibromoethane	U	U	U	U	U	U	--	5 ST
Chlorobenzene	U	U	U	U	U	U	--	5 ST
Ethylbenzene	U	U	U	U	U	U	--	5 ST
Xylene (total)	U	U	U	U	U	U	--	5 ST
Styrene	U	U	U	U	U	U	--	5 ST
Bromoform	U	U	UJ	U	U	U	--	50 GV
Isopropylbenzene	U	U	U	U	U	U	--	5 ST
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	--	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	--	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	--	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	--	3 ST
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	--	0.04 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	--	5 ST

NOTES:

Concentration exceeds Site Specific Effluent Limitation

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
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)	EFFLUENT LIMITATIONS
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	WATER	
DATE OF COLLECTION	9/8/2009	9/23/2009	10/5/2009	10/26/2009	11/9/2009	11/24/2009	
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)	(ug/L)
METALS							
Iron	U	U	U	60.9 B	67.8 B	50.4 B	1000
Manganese	26.5 B	28.4 B	25.0 B	29.3 B	31.2 B	29.5 B	1000
pH (S.U.)	**5.8**	**5.4**	**5.5**	**6.2**	**6.2**	6.7	6.5 to 8.5

ABBREVIATIONS:

ug/L: Micrograms per liter

QUALIFIERS:

B: Concentration is greater than the instrument detection limit (IDL) but less than the Contract Required Detection Limit (CRDL)

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

SAMPLE ID	CARBON VESSEL NO. 1 INFLUENT	CARBON VESSEL NO. 1 EFFLUENT	CARBON VESSEL NO. 2 INFLUENT	CARBON VESSEL NO. 2 EFFLUENT
SAMPLE TYPE	AIR	AIR	AIR	AIR
COLLECTED BY	D&B	D&B	D&B	D&B
UNITS	(ppm)	(ppm)	(ppm)	(ppm)
DATE OF COLLECTION	***PID Reading***	***PID Reading***	***PID Reading***	***PID Reading***
September 4, 2009	0.0	0.0	0.0	0.0
September 8, 2009	0.0	0.0	0.0	0.0
September 15, 2009	0.0	0.0	0.0	0.0
September 25, 2009	0.0	0.0	0.0	0.0
October 2, 2009	0.0	0.0	0.0	0.0
October 5, 2009	0.0	0.0	0.0	0.0
October 20, 2009	0.0	0.0	0.0	0.0
October 26, 2009	0.0	0.0	0.0	0.0
November 2, 2009	0.1	0.1	0.2	0.2
November 9, 2009	0.0	0.0	0.0	0.0
November 17, 2009	0.0	0.0	0.0	0.0
November 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).

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

SAMPLE ID	ASMW-1	ASMW-2	ASMW-3	ASMW-4	ASMW-5	ASMW-6	ASMW-7	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	WATER	WATER	
DATE OF COLLECTION	11/20/2009	11/20/2009	11/20/2009	11/20/2009	11/20/2009	11/20/2009	11/18/2009	
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-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	2.4 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	11	3.5 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

ATTACHMENT G

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[3] (lb/hr)	ESTIMATED SYSTEM RUNTIME (hr)	ESTIMATED CUMULATIVE PCE REMOVAL (lbs)
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 [1]
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 [1]
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 [1]
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 [1]
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 [1]
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	269	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 [1]
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 [1]
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	3.54E-04	449	37.70 [1]
9/8/2009	39.9	13	5.8	53	< 0.5	99.30	4.14E-04	141	37.76
9/25/2009	39.8	12	5.8	57	< 0.5	99.28	4.05E-04	412	37.93
10/5/2009	39.0	10	5.8	54	< 0.5	99.17	3.50E-04	241	38.01
10/26/2009	39.5	12	5.7	56	< 0.5	99.28	3.97E-04	495	38.21
11/9/2009	36.0	8	5.4	48	< 0.5	99.03	2.79E-04	324	38.30
11/24/2009	37.5	11	5.5	51	< 0.5	99.21	3.47E-04	497	38.47 [1]

NOTES:

1. Estimated through the end of the reporting period.
2. Performance results for the reporting period are shaded.
3. Mass removal rate(lb/hr) = flow(gpm)*concentration(ug/l)*3.79(liters/gallon)*1E-6(g/ug)*2.2E-3(lb/g)*60(min/hr)

ABBREVIATIONS:

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

QUALIFIERS:

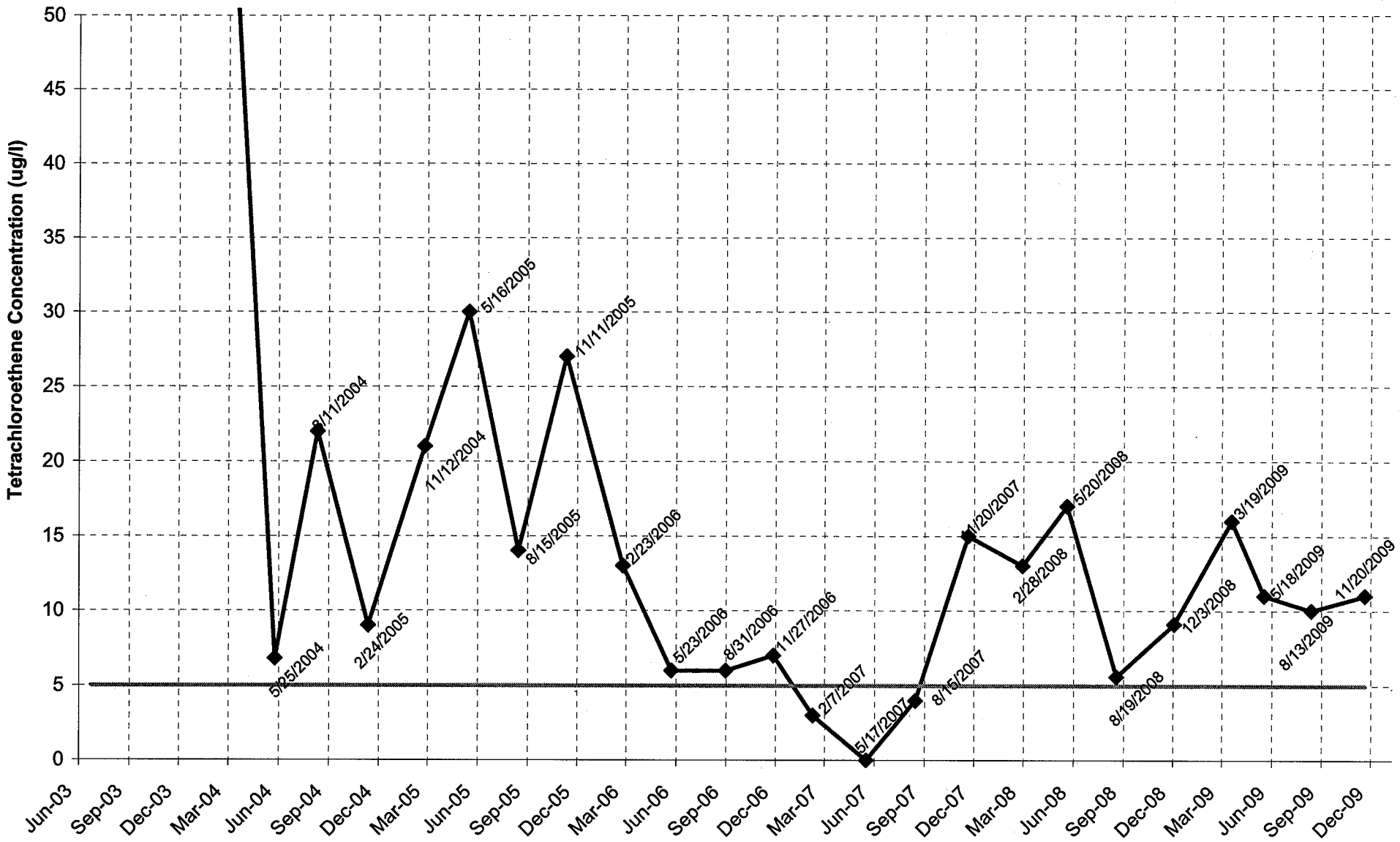
J: Compound found at a concentration below CRDL, value estimated
B: Compound detected in method blank as well as the sample, value estimated

ATTACHMENT H

MONITORING WELL TREND LINE GRAPHS

GRAPH 1

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



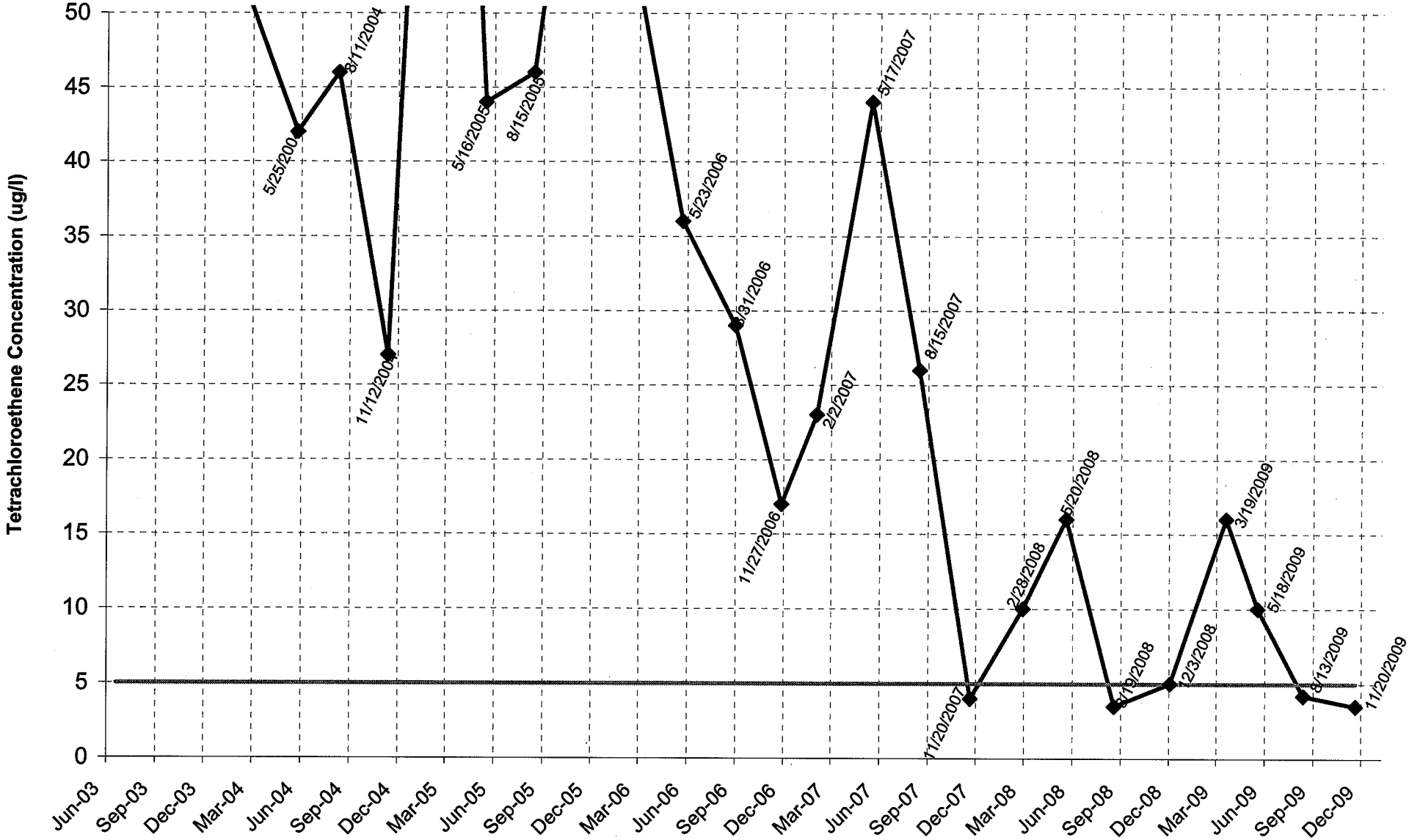
Sample Collection Timeline (Months)

(1) 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



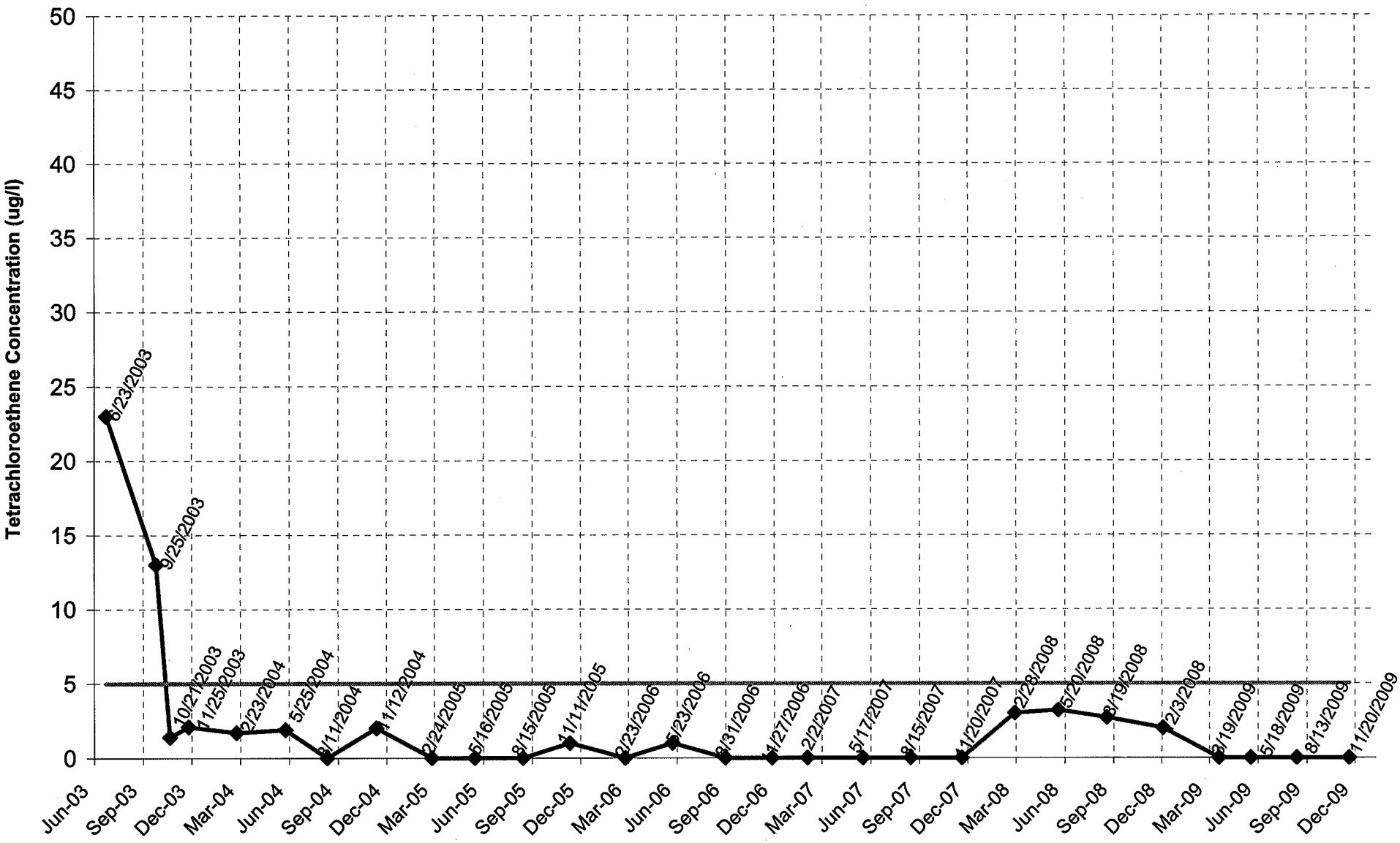
NYSDEC Class GA Groundwater Standard
Tetrachloroethene - 5 ug/l

(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 I

DATA VALIDATION CHECKLISTS

DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners
Project Number:	2531-03
Sample Date(s):	September 8, 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:	SH1733 Date:9/28/2009

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
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

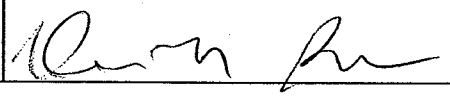
Comments:
Performance was acceptable.

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					
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 10/21/2009
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners
Project Number:	2531-03
Sample Date(s):	September 25, 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:	SH1883 Date:10/22/2009

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
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 trichlorofluoromethane in the continuing calibration associated with all samples. The above compound was 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
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 12/23/2009
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners
Project Number:	2531-03
Sample Date(s):	October 5, 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:	SH1944 Date:10/29/2009

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
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 dichlorofluoromethane, acetone and bromoform 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 12/23/2009
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners
Project Number:	2531-03
Sample Date(s):	October 26, 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:	SH2125 Date:11/18/2009

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
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 dichlorofluoromethane, chloromethane, vinyl chloride, trichlorofluoromethene and methylcyclohexane in the continuing calibration associated with all samples. The above compounds were qualified as estimated (J/UJ) in all samples.

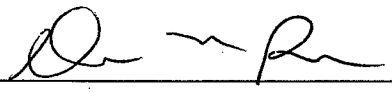
INORGANIC ANALYSES
METALS

	Reported		Performance Acceptable		Not
	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 with the following exception:

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

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 12/23/2009
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners
Project Number:	2531-03
Sample Date(s):	November 9, 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:	SH2221 Date:12/8/2009

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
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 with the following exceptions:

1&11. Sample EW-1 had all areas outside QC limits in the original analysis and was reanalyzed outside holding times however all areas were inside QC limits. The reanalysis was reported for EW-1 with all VOC qualified as estimated (J/UJ).

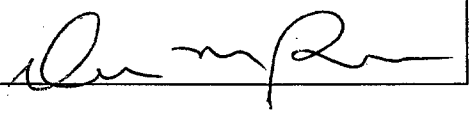
2A. 1,2,4-Trichlorobenzene was detected in the method blank. It was not detected in the associated samples and therefore did not impact the usability of the reported sample result.

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 12/23/2009
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners
Project Number:	2531-03
Sample Date(s):	November 18, 2009
Matrix/Number of Samples:	Water/ 1 Trip Blank/0
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI
Analyses:	Volatile Organic Compounds (VOCs): OLM4.2
Laboratory Report No:	SH2361 Date:12/10/2009

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
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 with the following exception:

2A. 1,2,4-Trichlorobenzene was detected in the method blank. It was not detected in the associated samples and therefore did not impact the usability of the reported sample result.

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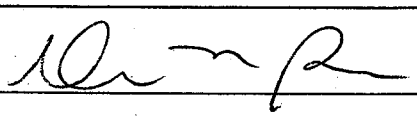
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners
Project Number:	2531-03
Sample Date(s):	November 20, 2009
Matrix/Number of Samples:	Water/ 6 Trip Blank/1
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI
Analyses:	Volatile Organic Compounds (VOCs): OLM4.2
Laboratory Report No:	SH2387 Date:12/10/2009

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
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
%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:

2A. 1,2,4-Trichlorobenzene was detected in the method blank. It was not detected in the associated samples and therefore did not impact the usability of the reported sample result.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 12/23/2009
VALIDATION PERFORMED BY SIGNATURE: