



# Dvirka and Bartilucci

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July 21, 2009

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Division of Environmental Remediation

New York State Department of Environmental Conservation

625 Broadway, 12th Floor

Albany, NY 12233-7013

Re: Active Industrial Uniform Site (Site No. 1-52-125)  
D&B Work Assignment No. D004446-01  
Quarterly Report No. 16  
October 1, 2008 through December 31, 2008  
D&B No. 2578

Dear Mr. Long:

The purpose of this letter is to summarize the performance of the groundwater extraction and treatment system for the Active Industrial Uniform Site, located at 63 West Montauk Highway in the Village of Lindenhurst, Suffolk County, New York (see Attachment A, Figure 1), for the period of October 1, 2008 through December 31, 2008. Presented below is a summary of system operations during the quarter, as well as the results of sampling performed in accordance with the work plan for the referenced work assignment.

## Groundwater Extraction and Treatment System Operations

During this period, on-site extraction well RW-1 operated at an average rate of approximately 22.8 gallons per minute (gpm). Based on a review of the operation and maintenance logs, RW-1's pumping rate has steadily declined from a high of 84.6 gpm, recorded when D&B restarted the groundwater extraction system on February 23, 2005.

Well rehabilitation activities consisting of pumping and surging with a rubber block were conducted on extraction well RW-1 in December 2007. During the well rehabilitation, it was observed that the pump bearing assembly had been compromised and parts of the pump exhibited corrosion. Samples of sludge attached to the pump were collected, which subsequently tested positive for *Gallionella ferruginea*, an iron-oxidizing chemolithotrophic bacterium. Based on these conditions, and flow rate and water level measurements collected during and subsequent to the well rehabilitation activities, it was recommended that the pump be replaced and the well be treated with the proprietary Aqua Freed process. The work and associated costs were approved via e-mail correspondence by the NYSDEC, and D&B is currently working with Subsurface Technologies, Inc. to sign a subcontractor agreement and will schedule the work soon thereafter.

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During this period, off-site extraction well RW-2 operated at an average rate of approximately 80.30 gallons per minute (gpm). Note that, based on a review of the operation and maintenance logs, RW-2's pumping rate has increased from the average of 70.0 gpm reported during the previous quarter.

During this period, approximately 14,638,890 gallons of treated groundwater was discharged to Little Neck Creek. Note that the groundwater extraction system was inoperative for approximately 31 hours, due to one system alarm condition (high level air stripper #1) and one routine system maintenance event (routine blower maintenance). A summary of system downtime is provided in Attachment B. Copies of system maintenance reports, as prepared by Systematic Technologies, Inc., are provided in Attachment C.

#### **Groundwater Extraction and Treatment System Sampling (Aqueous)**

Monthly groundwater samples were collected from the combined influent sample tap (COMB-INF) and from the treatment system discharge sample tap (COMB-EFF) on October 23, November 21 and December 16, 2008. Each sample was analyzed for volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260. The samples collected from the combined influent sample tap were also analyzed for Target Analyte List (TAL) metals by NYSDEC 6/00 Analytical Services Protocol (ASP) Method ILMO4.0 and for pH by USEPA Method 9040.

Quarterly groundwater samples were collected from both extraction well influents (RW-1 and RW-2), the sample tap located between the two air strippers (AS-MID) and from the treatment system discharge sample tap on December 16, 2008. Each sample was analyzed for VOCs by USEPA Method 8260. The treatment system discharge sample was also analyzed for TAL metals by NYSDEC 6/00 ASP Method ILMO4.0.

Semiannual groundwater samples were collected from the treatment system discharge sample tap on December 16, 2008. The samples were analyzed for pH by USEPA Method 9040, chemical oxygen demand (COD) by USEPA Method 410.4/401.2, alkalinity by USEPA Method 310.1, total suspended solids (TSS) by USEPA Method 160.2 and total dissolved solids (TDS) by USEPA Method 1601.1. In accordance with discharge requirements, a grab sample was also collected from the treatment system discharge sample tap and field analyzed for pH, temperature, turbidity, conductivity, dissolved oxygen and total chlorine.

All sample results are summarized in Attachment D.

Based on the influent groundwater sample results, COMB-INF total VOCs ranged from 80.6 micrograms per liter (ug/l) detected on December 16, 2008 to a maximum concentration of 97.6 ug/l detected on November 11, 2008, with cis-1,2-dichloroethene (cis-1,2-DCE), trichloroethene (TCE) and tetrachloroethene (PCE) exhibiting concentrations in exceedance of their respective NYSDEC Class GA groundwater standards or guidance values during all sampling events. COMB-INF iron, manganese, sodium and pH were also detected above their respective NYSDEC Class GA groundwater standard in the COMB-INF sample.

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Based on the influent groundwater sample results collected from RW-1 and RW-2, RW-1 exhibited concentrations of vinyl chloride (VC), cis-1,2-DCE, TCE and PCE above their respective Class GA standards, while RW-2 only exhibited concentrations of cis-1,2-DCE above its applicable Class GA standard. Compared to the Quarter 15 sampling results from September 12, 2008, the RW-1 influent total VOCs increased slightly from 277 ug/l to 283 ug/l, while the RW-2 influent total VOCs decreased from 39.2 ug/l to 18.0 ug/l. Iron, manganese, sodium and pH were also detected above their respective NYSDEC Class GA groundwater standard in both extraction wells.

The sample results from the air stripper midfluent did not exhibit any site specific VOCs, however methyl-tert butyl ether (MTBE) was detected at a concentration of 1.0 ug/l. Based on the results, the first air stripper is effectively removing all site specific VOCs from the influent groundwater and effectively removing MTBE at a rate of approximately 56.5%.

The sample results from the air stripper discharge are compared to the NYSDEC site-specific effluent limits. Based on the effluent sample results, COMB-EFF VOCs, metals and pH were detected below NYSDEC site-specific effluent limits. It should be noted that while all VOCs were detected below NYSDEC site-specific effluent limits, PCE was detected at a concentration of 1.8 ug/l from the sample collected on October 23, 2008 and 1,2,4-trimethylbenzene was detected at a concentration of 1.6 ug/l from the sample collected on December 16, 2008.

Approximately 9.98 pounds of total VOCs were removed from the extracted groundwater during the reporting period and approximately 1,190 pounds of total VOCs have been removed since start-up of the system. The average total VOC removal efficiency for this quarter was approximately 97 percent. A summary of the extraction and treatment system performance results for this period is provided in Attachment E.

#### **Groundwater Extraction and Treatment System Sampling (Air)**

Air samples were collected from the vapor phase carbon adsorption system influent sample tap (VPCV-INF), the sample tap located between the carbon vessels (VPCV-MID) and the effluent sample tap (VPCV-EFF) on October 23, November 21 and December 16, 2008.

The results of the vapor phase carbon adsorption system discharge samples (VPCV-EFF) are compared to the NYSDEC site-specific effluent limits. Sample results are provided in Attachment D. All air discharge results were below NYSDEC site-specific effluent limits for the period.

#### **Groundwater Quality Data**

The network of groundwater monitoring wells was sampled to determine groundwater quality at, and in the vicinity of, the site. Samples were collected from eight on-site monitoring wells (MW-101 through MW-108) and three off-site monitoring wells (MW-109, MW-111 and MW-2S) on December 15, 2008. Note that monitoring well MW-110 could not be located and has reportedly been paved over and, as a result, was not sampled. Monitoring well MW-2S is located on the corner of Thompson Avenue and

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Lane Street, downgradient of the site. Note that monitoring well MW-2S was not originally sampled as part of D&B's work assignment but was initially sampled in November 2007 as part of a Vapor Intrusion Investigation completed by the NYSDEC and will continue to be sampled as part of this work assignment as per the request of the NYSDEC. The locations of the on-site monitoring wells are shown in Figure 2, provided in Attachment A. The locations of the off-site monitoring wells are shown in Figure 3, provided in Attachment A. Each groundwater sample was analyzed for VOCs by USEPA Method 8260 and for pH by USEPA Method 9040. Groundwater sample results are summarized in Attachment D and are compared to the NYSDEC Class GA groundwater standards and guidance values. A copy of the groundwater sampling results for MW-2S from the November 2007 Vapor Intrusion Investigation is included in Attachment F.

Concentrations of total VOCs detected in the on-site monitoring wells ranged from 2.6 ug/l detected in groundwater monitoring well MW-101 to a maximum concentration of 3,395 ug/l detected in groundwater monitoring well MW-103. Five on-site monitoring wells (MW-103, MW-104, MW-105, MW-106 and MW-107) exhibited one or more of the following VOCs at concentrations above their respective Class GA standards or guidance values; vinyl chloride (VC), cis-1,2-DCE, trans-1,2-dichloroethene, TCE and PCE. The maximum concentrations of VC (260 ug/l), cis-1,2-DCE (3,100 ug/l) and trans-1,2-dichloroethene (35 ug/l), were detected in groundwater monitoring well MW-103, located in the center of the site. The maximum concentration of TCE (110 ug/l) was detected in groundwater monitoring well MW-106, located in the southeast corner of the site. The maximum concentration of PCE (430 ug/l) was detected in groundwater monitoring well MW-104, located in the western portion of the site. Note that VOCs were not detected at concentrations exceeding their respective Class GA standards and guidance values in on-site monitoring wells MW-101, MW-102 or MW-108.

VOCs were detected in off-site monitoring wells MW-109, MW-111 and MW-2S; however, the VOCs were not detected at concentrations exceeding their respective Class GA standards and guidance values in any off-site groundwater monitoring well.

Attachment G includes graphs which summarize historical concentrations of total VOCs, cis-1,2-DCE, PCE, TCE and VC detected in the on-site and off-site monitoring wells from December 2006 through December 2008. Note that VOCs have primarily been detected above their respective standards in on-site monitoring wells MW-104 and MW-106. On-site, historical PCE concentrations have been detected somewhat erratically in MW-104, with concentrations ranging from 8 ug/l to 1,660 ug/l, while in MW-106, PCE concentrations are relatively stable at an average of approximately 120 ug/l. On-site historical cis-1,2-DCE concentrations have also been detected somewhat erratically in MW-106. Historical concentrations of TCE exhibit an increasing trend in both MW-104 and MW-106, with concentrations ranging from non-detect to 60.9 ug/l and 21 ug/l to 610 ug/l, respectively. Historical concentrations of VC exhibit an increasing trend in MW-106, with concentrations ranging from 15 ug/l to 500 ug/l, while in MW-104, VC concentrations have typically been non-detect; however, concentrations detected since January 3, 2008, exhibit a generally increasing trend.

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Off-site, concentrations of these compounds have historically been detected below their respective groundwater standards in MW-109 and MW-11. A comparison of the concentrations of VOCs detected in MW-2S in November 2007 and this quarter's monitoring data shows a decrease in VOC concentrations.

### **Data Validation**

The data packages submitted by Mitkem Corporation (Mitkem) have been reviewed for completeness and compliance with NYSDEC ASP Quality Assurance/Quality Control (QA/QC) requirements. Mitkem is a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory. The analysis of air samples was subcontracted by Mitkem to Centek Laboratories, LLC, a NYSDOH ELAP-certified air laboratory. All sample results have been deemed valid and usable for environmental assessment purposes, except as noted below:

- Trichloroethene was detected in the method and trip blanks for the groundwater monitoring well samples collected at October 23, 2008. Samples MW-101, MW-102, MW-103, MW-105, MW-107, MW-108, MW-109 and MW-2S, were less than five times the blank concentration and are, therefore, qualified as non-detect (U).
- Numerous metals were less than ten times the concentration found in the blanks and are, therefore, qualified as non-detect (U).

Data Validation Checklists, including a discussion of data qualified as estimated based on the validation process, are presented in Attachment H.

### **Conclusions**

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

- The results of system influent samples show that extraction wells RW-1 and RW-2 continue to capture VOC-contaminated groundwater.
- Due to the presence of iron-oxidizing bacteria, the yield potential of extraction well RW-1 is currently limited. RW-1 is currently pumping at an average rate of 22.8 gpm, which is significantly below the required flow rate range of 80 gpm to 100 gpm, as specified in the Active Industrial Uniform Site Contract Documents. It should be noted that rehabilitation of extraction well RW-1 has been scheduled to occur in April 2009. Extraction well RW-2 is currently pumping at an average rate of 80.3, which is within the required flow rate range of 80 gpm to 100 gpm, as specified in the Active Industrial Uniform Site Contract Documents.
- Extraction well pump RW-1 showed signs of corrosion and wear when it was inspected in December 2007. The results of the sludge samples collected at that time indicated that iron-oxidizing bacteria was present within the extraction well, limiting the yield potential of the well.

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- The results of system effluent (COMB-EFF) samples show that the air stripping towers are effectively removing the captured VOCs to concentrations below the NYSDEC site-specific effluent limits.
- The results of vapor discharge samples show that the vapor phase carbon vessels are effectively removing VOCs to concentrations below their respective NYSDEC site-specific discharge limits.
- Five of the eight on-site monitoring wells exhibit at least one VOC at concentrations in exceedance of the NYSDEC Class GA groundwater standards and guidance values.
- Off-site monitoring wells MW-109, MW-111 and MW-2S did not exhibit VOCs at concentrations in exceedance of the NYSDEC Class GA standards and guidance values. During the reporting period, VOC concentrations were not detected in off-site groundwater monitoring wells above their respective Class GA groundwater standards and guidance values. As such, it may be warranted to consider a trial shutdown of extraction well RW-2 in an effort to minimize future operational costs. In the interim, VOC concentrations would be closely monitored in the upcoming months and, in the event that this trend continues, recommendations for the shutdown will be subsequently provided to the NYSDEC.
- Based on the fact that the downgradient groundwater monitoring wells continue to exhibit VOC concentrations below the Class GA Standards and Guidance Values, the groundwater extraction and treatment system is functioning as intended by the March 1997 Record of Decision (ROD). However, note that several residences are located between the site and the downgradient monitoring wells.
- Note that no new supply wells have been installed on the Active Industrial property and, based on visual inspection of the immediate area, no new schools or parks have been constructed in the vicinity or downgradient of the Active Industrial property.
- The Class GA Groundwater Standards and Guidance Values and the NYSDEC site-specific effluent limits have not changed since system start-up in December 2001. 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 1997 Record of Decision, remain unchanged.

### **Recommendations**

Based on the results of performance monitoring completed during the period, we provide the following recommendations:

- Continue operation of the groundwater extraction and treatment system to minimize downgradient migration of site-related contaminants currently being captured by the system.

**Dvirka and Bartilucci**  
CONSULTING ENGINEERS

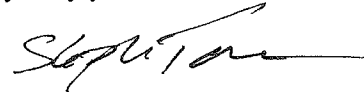
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- In order to reduce the presence of the bacteria and increase the yield potential of extraction well RW-1, it is recommended to rehabilitate the well utilizing the Aqua Freed process. This work is currently scheduled to occur in April 2009.
- Due to the conditions of the extraction pump in extraction well RW-1 observed in December 2007 during well rehabilitation efforts, it has been recommended to remove and replace the extraction well pump, motor and wiring.
- It is recommended to install three new off-site monitoring wells to better assess off-site groundwater contamination. Note that additional details and a figure depicting the proposed well locations have been provided in the draft Active Industrial Periodic Review Report.

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

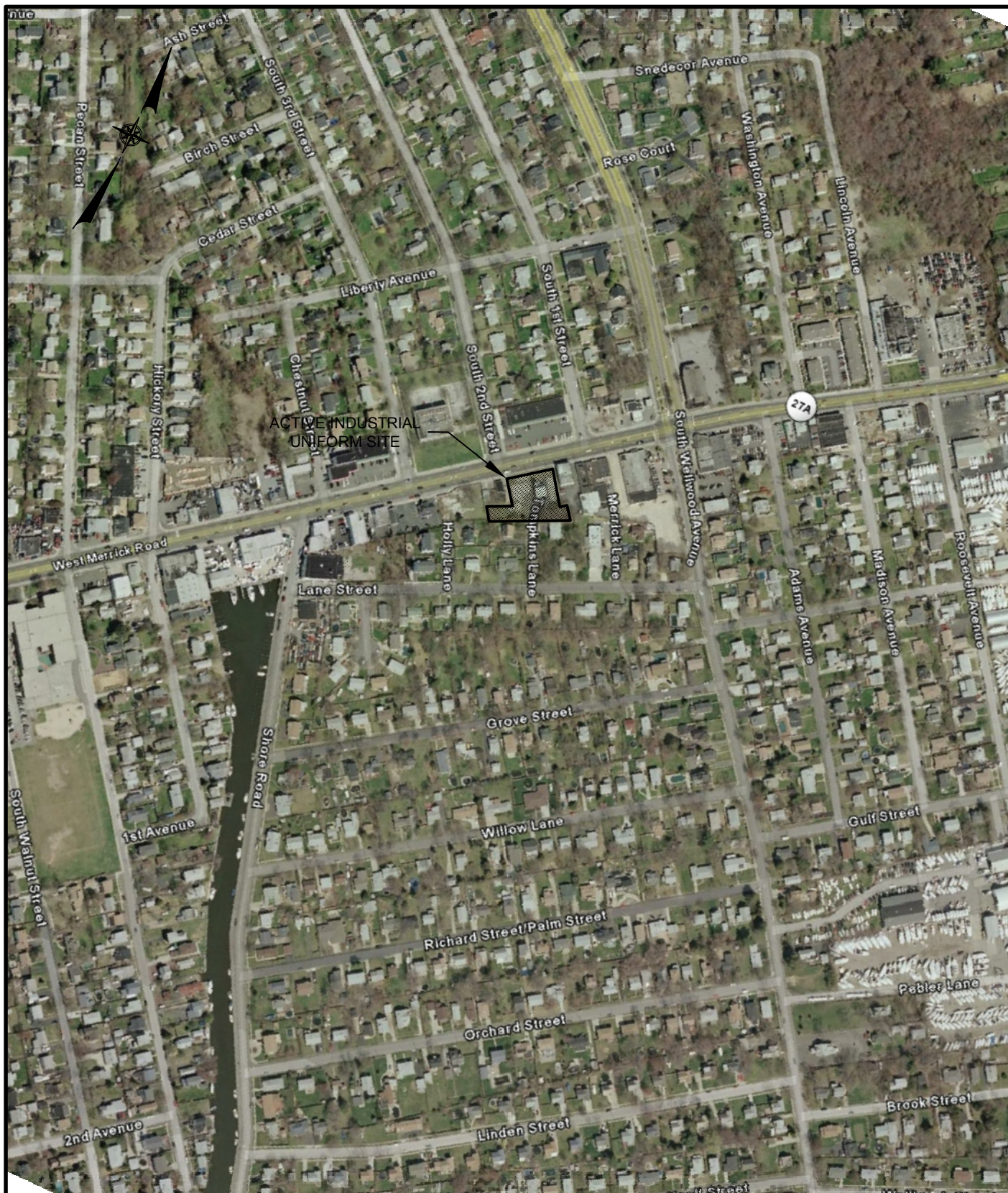
SET/KM/jmy  
Attachments

cc: R. Walka (D&B)  
P. Martorano (D&B)  
F. DeVita (D&B)  
♦2578\SET01219PL\_QR16.doc(R09)

## **ATTACHMENT A**

### **FIGURES**





SOURCE: GOOGLE EARTH 2005

0 400  
SCALE IN FEET

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

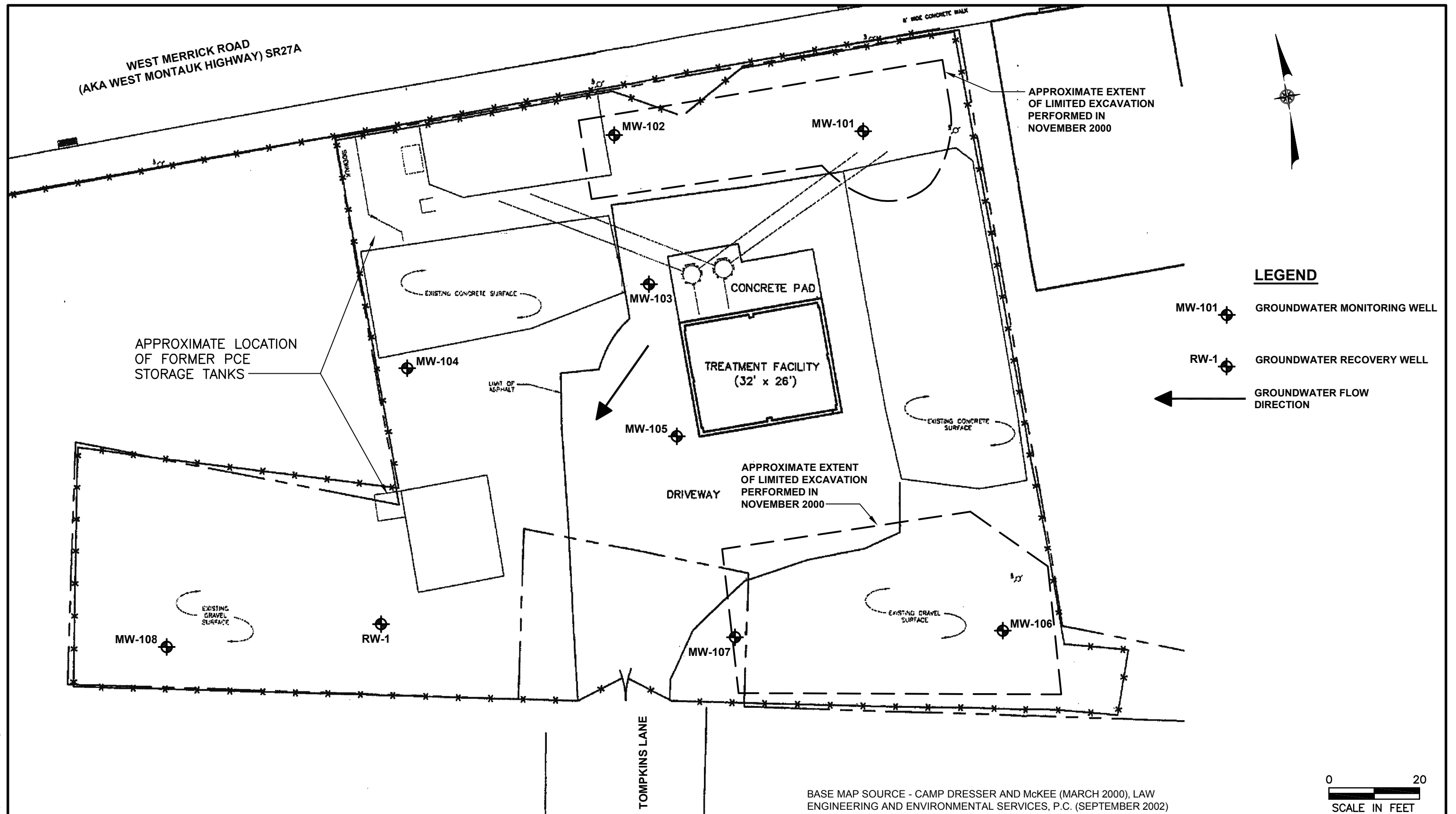
ACTIVE INDUSTRIAL UNIFORM SITE  
VILLAGE OF LINDENHURST, NEW YORK

**SITE LOCATION MAP**

**FIGURE 1-1**

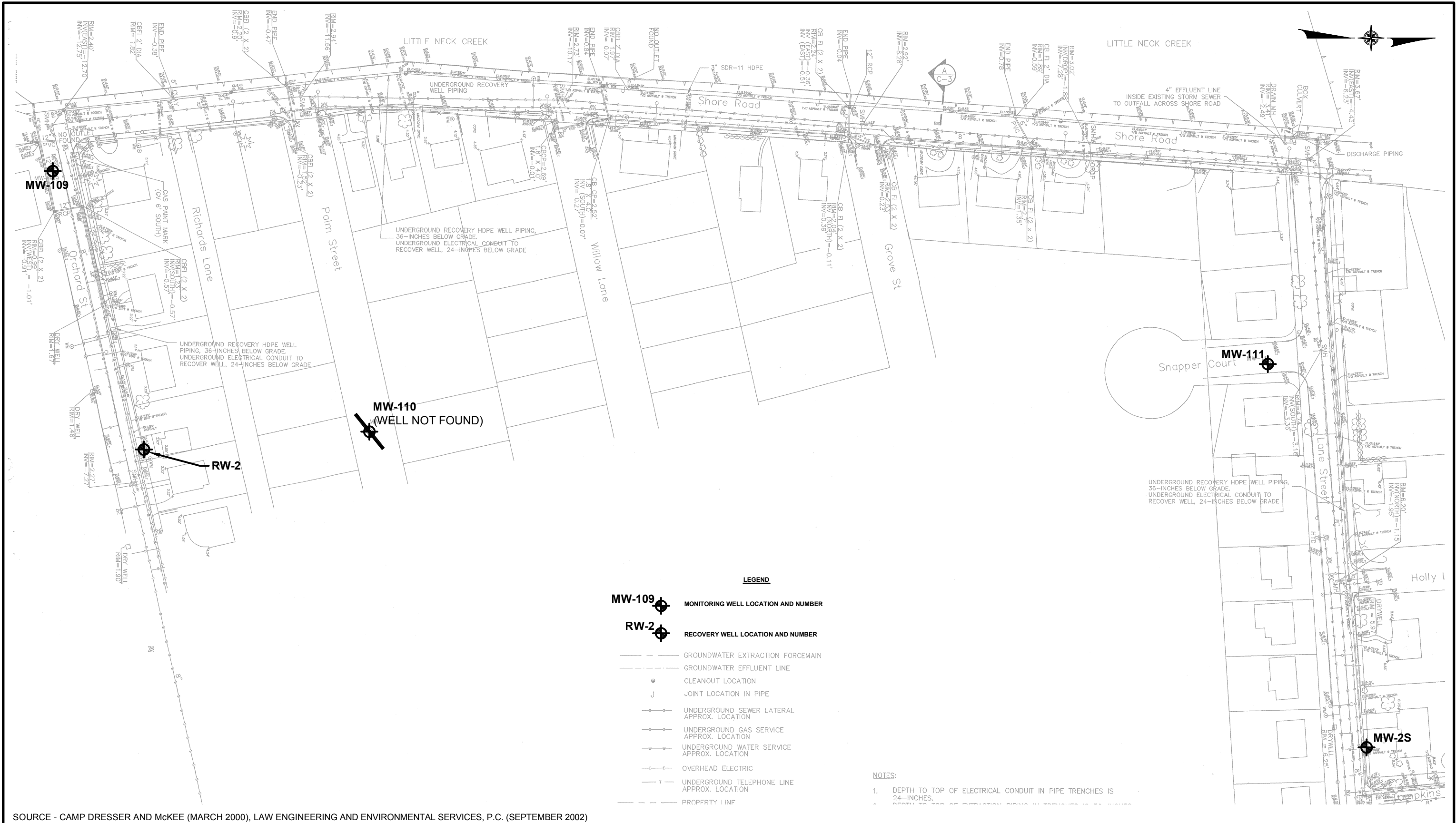


F:\2578\Quarterly Report\FIGURE 2.dwg, FIG 2, 1/9/2009 2:54:44 PM, PMartorano



ACTIVE INDUSTRIAL UNIFORM SITE  
VILLAGE OF LINDENHURST, NEW YORK

ON-SITE MONITORING WELLS AND RECOVERY WELL  
AND GROUNDWATER FLOW DIRECTION



## **ATTACHMENT B**

### **DESCRIPTION OF SYSTEM ALARM CONDITIONS**

**ACTIVE INDUSTRIAL UNIFORM SITE**  
**NYSDEC SITE No. 1-52-125**  
**SUMMARY OF SYSTEM DOWNTIME**

[illegible]

**NOTES:**

1. Maintenance event performed by Systematic Technologies, Inc.

**ATTACHMENT C**

**SYSTEM MAINTENANCE REPORT**

## MAINTENANCE AND INSPECTION REPORT

### ACTIVE INDUSTRIAL UNIFORM SITE, LINDENHURST, NY

Date: 11/21/08

Name of Personnel Onsite	Title	Time Arrived	Time Departed	Total Hours
L. Sorensen	President	0840	0920	0.66 on site
E. Sorensen	Technician	0840	0920	0.66 on site

Check off Items that were completed:

- |  |   |
|--|---|
| <input type="checkbox"/> Item 1: Snow Removal<br><input checked="" type="checkbox"/> Item 2: Pressure Blower Maintenance<br><input type="checkbox"/> Item 2A: Pressure Blower Fan Wheel Replacement<br><input type="checkbox"/> Item 3: Transfer Pump Maintenance<br><input type="checkbox"/> Item 4: Air Stripper Maintenance<br><input type="checkbox"/> Item 5: Granular Activated Carbon Removal and Replacement | <input type="checkbox"/> Item 6: Removal and Replacement of Air Stripper Packing Material<br><input type="checkbox"/> Item 7: Solids Filtration Change-out<br><input type="checkbox"/> Item 8: Non-Routine Maintenance Services |
|--|---|

Description of Work:

Item 2: Pressure Blower Maintenance

1. Inspected fan wheel for wear and corrosion – none found.
2. Inspected fan wheel for buildup of materials – none found.
3. Inspected motor winding for dust and dirt – none found.
4. Lubricated motor bearings.

Name of Part / Supply / Material	Manufacturer	Model Number	Quantity Used
Bearing Grease	Mobil	Mobilith SHC100	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 11/30/08  
 Signature / Print / Date

## **ATTACHMENT D**

### **ANALYTICAL RESULTS**



**ACTIVE INDUSTRIAL UNIFORM SITE**  
**NYSDEC SITE No. 1-52-125**  
**RESULTS OF SYSTEM COMBINED INFLUENT ANALYSIS - VOLATILE ORGANIC COMPOUNDS (VOCs)**

SAMPLE ID	COMB INF	COMB INF	COMB INF	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES (ug/L)
SAMPLE TYPE	WATER	WATER	WATER	
DATE OF COLLECTION	10/23/2008	11/21/2008	12/16/2008	
COLLECTED BY	D&B	D&B	D&B	
UNITS	(ug/L)	(ug/L)	(ug/L)	
<b>VOCs</b>				
Dichlorodifluoromethane	U	U	U	5 GV
Chloromethane	U	U	U	--
Vinyl chloride	U	U	U	2 ST
Bromomethane	U	U	U	5 ST
Chloroethane	U	U	U	5 ST
Trichlorofluoromethane	U	U	U	5 ST
1,1-Dichloroethene	U	U	U	5 ST
Acetone	U	U	U	50 GV
Iodomethane	U	U	U	--
Carbon disulfide	U	U	U	60 GV
Methylene chloride	U	U	U	5 ST
trans 1,2-Dichloroethene	U	U	U	5 ST
Methyl-tert butyl ether	2.7 J	3.4 J	2.3 J	10 GV
1,1-Dichloroethane	1.2 J	1.2 J	U	5 ST
Vinyl acetate	U	U	U	--
2-Butanone	U	U	U	50 GV
cis-1,2-Dichloroethene	28	30	22	5 ST
2,2-Dichloropropane	U	U	U	5 ST
Bromochloromethane	U	U	U	5 ST
Chloroform	U	U	U	7 ST
1,1,1-Trichloroethane	U	U	U	5 ST
1,1-Dichloropropene	U	U	U	5 ST
Carbon tetrachloride	U	U	U	5 ST
1,2-Dichloroethane	U	U	U	0.6 ST
Benzene	U	U	U	1 ST
Trichloroethene	16	14	12	5 ST
1,2-Dichloropropane	U	U	U	1 ST
Bromodichloromethane	U	U	U	5 ST
cis-1,3-Dichloropropene	U	U	U	0.4 ST
4-Methyl-2-pentanone	U	U	U	--
Toluene	U	U	U	5 ST
trans-1,3-Dichloropropene	U	U	U	0.4 ST
1,1,2-Trichloroethane	U	U	U	1 ST
1,3-Dichloropropane	U	U	U	5 ST
Tetrachloroethene	44	49	41	5 ST
2-Hexanone	U	U	U	50 GV
Dibromochloromethane	U	U	U	50 GV
1,2-Dibromoethane	U	U	U	5 ST
Chlorobenzene	U	U	U	5 ST
1,1,1,2-Tetrachloroethane	U	U	U	5 ST
Ethylbenzene	U	U	U	5 ST
Xylene (total)	U	U	U	5 ST
Styrene	U	U	U	5 ST
Bromoform	U	U	U	50 GV
Isopropylbenzene	U	U	U	5 ST
1,1,2,2-Tetrachloroethane	U	U	U	5 ST
Bromobenzene	U	U	U	5 ST
1,2,3-Trichloropropane	U	U	U	0.04 ST
n-Propylbenzene	U	U	U	5 ST
2-Chlorotoluene	U	U	U	5 ST
1,3,5-Trimethylbenzene	U	U	U	5 ST
4-Chlorotoluene	U	U	U	5 ST
tert-Butylbenzene	U	U	U	5 ST
1,2,4-Trimethylbenzene	U	U	U	5 ST
sec-Butylbenzene	U	U	U	5 ST
4-Isopropyltoluene	U	U	U	5 ST
1,3-Dichlorobenzene	U	U	U	3 ST
1,4-Dichlorobenzene	U	U	U	3 ST
n-Butylbenzene	U	U	U	5 ST
1,2-Dichlorobenzene	U	U	U	3 ST
1,2-Dibromo-3-chloropropane	U	U	U	0.04 ST
1,2,4-Trichlorobenzene	U	U	U	5 ST
Hexachlorobutadiene	U	U	U	0.5 ST
Naphthalene	U	U	3.3 J	10 GV
1,2,3-Trichlorobenzene	U	U	U	5 ST
<b>Total VOCs</b>	<b>91.9</b>	<b>97.6</b>	<b>80.6</b>	

**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 found in a blank as well as the sample

**ACTIVE INDUSTRIAL UNIFORM SITE**  
**NYSDEC SITE No. 1-52-125**  
**RESULTS OF SYSTEM COMBINED INFLUENT ANALYSIS - INORGANIC COMPOUNDS AND GENERAL CHEMISTRY**

SAMPLE ID	COMB INF	COMB INF	COMB INF	NYSDEC CLASS GA GROUNDWATER STANDARDS (ug/L)
SAMPLE TYPE	WATER	WATER	WATER	
DATE OF COLLECTION	10/23/2008	11/21/2008	12/16/2008	
COLLECTED BY	D&B	D&B	D&B	
UNITS	(ug/L)	(ug/L)	(ug/L)	
<b>INORGANIC COMPOUNDS</b>				
Aluminum	U	19.8 B	U	--
Antimony	U	U	1.6 B	3
Arsenic	U	2.9 B	U	25
Barium	45.8 B	35.3 B	34.7 B	1,000
Beryllium	0.093 B	U	0.10 B	--
Cadmium	0.60 B	0.73 B	0.56 B	5
Calcium	135,000	128,000	124,000	--
Chromium	U	U	U	--
Cobalt	0.74 B	1.5 B	1.4 B	--
Copper	25.6	40.6	35.8	200
Iron	860	1,080	712	300
Lead	U	2.5 B	2.4 B	25
Magnesium	145,000	135,000	143,000 B	--
Manganese	2,530	2,340	2,360	300
Mercury	U	U	0.032 B	0.7
Nickel	2.1 B	4.9 B	1.4 B	100
Potassium	34,400	36,800	36,200	--
Selenium	4.2 B	U	8.5	10
Silver	0.81 B	U	0.84 B	50
Sodium	1,170,000	1,180,000	1,210,000	20,000
Thallium	U	U	U	--
Vanadium	U	0.46 B	U	--
Zinc	217 E	163	100	--
Iron and Manganese	3,390	3,420	3,072	500
<b>GENERAL CHEMISTRY</b>				
pH (S.U.)	6.1	6.2	6.1	6.5 - 8.5

**NOTES:**

Concentration exceeds NYSDEC  
Class GA Groundwater Standards

**ABBREVIATIONS:**

ug/L: Micrograms per liter

--: Not established

**QUALIFIERS:**

B: Analyte detected greater than IDL, but less than CRDL.

U: Compound analyzed for but not detected.

E: Compound concentration exceeds instrument calibration range, value estimated.

**ACTIVE INDUSTRIAL UNIFORM SITE**  
**NYSDEC SITE No. 1-52-125**  
**RESULTS OF SYSTEM EXTRACTION WELLS - VOLATILE ORGANIC COMPOUNDS (VOCs)**

SAMPLE ID	RW-1 INF	RW-2 INF	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES (ug/L)
SAMPLE TYPE	WATER	WATER	
DATE OF COLLECTION	12/16/2008	12/16/2008	
COLLECTED BY	D&B	D&B	
UNITS	(ug/L)	(ug/L)	
<b>VOCs</b>			
Dichlorodifluoromethane	U	U	5 GV
Chloromethane	U	U	-
Vinyl chloride	2.2 J	U	2 ST
Bromomethane	U	U	5 ST
Chloroethane	U	U	5 ST
Trichlorofluoromethane	U	U	5 ST
1,1-Dichloroethene	U	U	5 ST
Acetone	U	U	50 GV
Iodomethane	U	U	-
Carbon disulfide	U	U	60 GV
Methylene chloride	U	U	5 ST
trans 1,2-Dichloroethene	U	U	5 ST
Methyl-tert butyl ether	1.5 J	2.5 J	10 GV
1,1-Dichloroethane	U	1.2 J	5 ST
Vinyl acetate	U	U	-
2-Butanone	U	U	50 GV
cis-1,2-Dichloroethene	68	8.1	5 ST
2,2-Dichloropropane	U	U	5 ST
Bromochloromethane	U	U	5 ST
Chloroform	U	U	7 ST
1,1,1-Trichloroethane	U	U	5 ST
1,1-Dichloropropene	U	U	5 ST
Carbon tetrachloride	U	U	5 ST
1,2-Dichloroethane	U	U	0.6 ST
Benzene	U	U	1 ST
Trichloroethene	42	4.0 J	5 ST
1,2-Dichloropropane	U	U	1 ST
Bromodichloromethane	U	U	5 ST
cis-1,3-Dichloropropene	U	U	0.4 ST
4-Methyl-2-pentanone	U	U	-
Toluene	U	U	5 ST
trans-1,3-Dichloropropene	U	U	0.4 ST
1,1,2-Trichloroethane	U	U	1 ST
1,3-Dichloropropane	U	U	5 ST
Tetrachloroethene	170	2.2 J	5 ST
2-Hexanone	U	U	50 GV
Dibromochloromethane	U	U	50 GV
1,2-Dibromoethane	U	U	5 ST
Chlorobenzene	U	U	5 ST
1,1,1,2-Tetrachloroethane	U	U	5 ST
Ethylbenzene	U	U	5 ST
Xylene (total)	U	U	5 ST
Styrene	U	U	5 ST
Bromoform	U	U	50 GV
Isopropylbenzene	U	U	5 ST
1,1,2,2-Tetrachloroethane	U	U	5 ST
Bromobenzene	U	U	5 ST
1,2,3-Trichloropropane	U	U	0.04 ST
n-Propylbenzene	U	U	5 ST
2-Chlorotoluene	U	U	5 ST
1,3,5-Trimethylbenzene	U	U	5 ST
4-Chlorotoluene	U	U	5 ST
tert-Butylbenzene	U	U	5 ST
1,2,4-Trimethylbenzene	U	U	5 ST
sec-Butylbenzene	U	U	5 ST
4-Isopropyltoluene	U	U	5 ST
1,3-Dichlorobenzene	U	U	3 ST
1,4-Dichlorobenzene	U	U	3 ST
n-Butylbenzene	U	U	5 ST
1,2-Dichlorobenzene	U	U	3 ST
1,2-Dibromo-3-chloropropane	U	U	0.04 ST
1,2,4-Trichlorobenzene	U	U	5 ST
Hexachlorobutadiene	U	U	0.5 ST
Naphthalene	U	U	10 GV
1,2,3-Trichlorobenzene	U	U	5 ST
<b>Total VOCs</b>	<b>283.7</b>	<b>18.0</b>	

**NOTES:**

Concentration  
exceeds NYSDEC Class GA  
Groundwater Standard or Guidance  
Value

**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 found in a blank as well as the sample

**ACTIVE INDUSTRIAL UNIFORM SITE**  
**NYSDEC SITE No. 1-52-125**  
**RESULTS OF SYSTEM EXTRACTION WELLS - INORGANIC COMPOUNDS AND GENERAL CHEMISTRY**

SAMPLE ID	RW-1 INF	RW-2 INF	NYSDEC CLASS GA GROUNDWATER STANDARDS (ug/L)
SAMPLE TYPE	WATER	WATER	
DATE OF COLLECTION	12/16/2008	12/16/2008	
COLLECTED BY	D&B	D&B	
UNITS	(ug/L)	(ug/L)	
<b>INORGANIC COMPOUNDS</b>			
Aluminum	U	U	--
Antimony	U	U	3
Arsenic	U	U	25
Barium	20.7 B	36.6 B	1,000
Beryllium	0.039 B	U	--
Cadmium	0.13 B	0.56 B	5
Calcium	21,600	150,000	--
Chromium	U	U	--
Cobalt	0.87 B	1.0 B	--
Copper	3.6 B	32.0	200
Iron	118	943	300
Lead	U	15.3	25
Magnesium	3,770 B	180,000	--
Manganese	1,150	2,680	300
Mercury	0.047 B	0.038 B	0.7
Nickel	0.43 B	0.86 B	100
Potassium	2,660 B	44,400	--
Selenium	U	7.3	10
Silver	U	U	50
Sodium	26,400	1,500,000	20,000
Thallium	U	U	--
Vanadium	U	U	--
Zinc	15.2 B	44.4	--
Iron and Manganese	1,268	3,623	500
<b>GENERAL CHEMISTRY</b>			
pH (S.U.)	6.1	6.1	6.5 - 8.5

**NOTES:**

Concentration exceeds NYSDEC  
Groundwater Standards

**ABBREVIATIONS:**

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

**QUALIFIERS:**

B: Analyte detected greater than IDL, but less than CRDL.  
 U: Compound analyzed for but not detected.  
 E: Compound concentration exceeds instrument calibration range, value  
 estimated

**ACTIVE INDUSTRIAL UNIFORM SITE**  
**NYSDEC SITE No. 1-52-125**  
**RESULTS OF SYSTEM MIDFLUENT ANALYSIS - VOLATILE ORGANIC COMPOUNDS (VOCs)**

SAMPLE ID	AS-MID	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES (ug/L)
SAMPLE TYPE	WATER	
DATE OF COLLECTION	12/16/2008	
COLLECTED BY	D&B	
UNITS	(ug/L)	
<b>VOCs</b>		
Dichlorodifluoromethane	U	5 GV
Chloromethane	U	--
Vinyl chloride	U	2 ST
Bromomethane	U	5 ST
Chloroethane	U	5 ST
Trichlorofluoromethane	U	5 ST
1,1-Dichloroethene	U	5 ST
Acetone	U	50 GV
Iodomethane	U	--
Carbon disulfide	U	60 GV
Methylene chloride	U	5 ST
trans 1,2-Dichloroethene	U	5 ST
Methyl-tert butyl ether	1.0 J	10 GV
1,1-Dichloroethane	U	5 ST
Vinyl acetate	U	--
2-Butanone	U	50 GV
cis-1,2-Dichloroethene	U	5 ST
2,2-Dichloropropane	U	5 ST
Bromochloromethane	U	5 ST
Chloroform	U	7 ST
1,1,1-Trichloroethane	U	5 ST
1,1-Dichloropropene	U	5 ST
Carbon tetrachloride	U	5 ST
1,2-Dichloroethane	U	0.6 ST
Benzene	U	1 ST
Trichloroethene	U	5 ST
1,2-Dichloropropane	U	1 ST
Bromodichloromethane	U	5 ST
cis-1,3-Dichloropropene	U	0.4 ST
4-Methyl-2-pentanone	U	--
Toluene	U	5 ST
trans-1,3-Dichloropropene	U	0.4 ST
1,1,2-Trichloroethane	U	1 ST
1,3-Dichloropropane	U	5 ST
Tetrachloroethene	U	5 ST
2-Hexanone	U	50 GV
Dibromochloromethane	U	50 GV
1,2-Dibromoethane	U	5 ST
Chlorobenzene	U	5 ST
1,1,1,2-Tetrachloroethane	U	5 ST
Ethylbenzene	U	5 ST
Xylene (total)	U	5 ST
Styrene	U	5 ST
Bromoform	U	50 GV
Isopropylbenzene	U	5 ST
1,1,2,2-Tetrachloroethane	U	5 ST
Bromobenzene	U	5 ST
1,2,3-Trichloropropane	U	0.04 ST
n-Propylbenzene	U	5 ST
2-Chlorotoluene	U	5 ST
1,3,5-Trimethylbenzene	U	5 ST
4-Chlorotoluene	U	5 ST
tert-Butylbenzene	U	5 ST
1,2,4-Trimethylbenzene	U	5 ST
sec-Butylbenzene	U	5 ST
4-Isopropyltoluene	U	5 ST
1,3-Dichlorobenzene	U	3 ST
1,4-Dichlorobenzene	U	3 ST
n-Butylbenzene	U	5 ST
1,2-Dichlorobenzene	U	3 ST
1,2-Dibromo-3-chloropropane	U	0.04 ST
1,2,4-Trichlorobenzene	U	5 ST
Hexachlorobutadiene	U	0.5 ST
Naphthalene	U	10 GV
1,2,3-Trichlorobenzene	U	5 ST
<b>Total VOCs</b>	1.0	

**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

**ACTIVE INDUSTRIAL UNIFORM SITE**  
**NYSDEC SITE No. 1-52-125**  
**RESULTS OF SYSTEM EFFLUENT ANALYSIS - VOLATILE ORGANIC COMPOUNDS (VOCs)**

SAMPLE ID	COMB EFF	COMB EFF	COMB EFF	NYSDEC Site Specific Effluent Limitation
SAMPLE TYPE	WATER	WATER	WATER	
DATE OF COLLECTION	10/23/2008	11/21/2008	12/16/2008	
COLLECTED BY	D&B	D&B	D&B	
UNITS	(ug/L)	(ug/L)	(ug/L)	
VOCs				(ug/L)
Dichlorodifluoromethane	U	U	U	NL
Chloromethane	U	U	U	NL
Vinyl chloride	U	U	U	10
Bromomethane	U	U	U	NL
Chloroethane	U	U	U	NL
Trichlorofluoromethane	U	U	U	NL
1,1-Dichloroethene	U	U	U	NL
Acetone	U	U	U	NL
Iodomethane	U	U	U	NL
Carbon disulfide	U	U	U	NL
Methylene chloride	U	U	U	NL
trans 1,2-Dichloroethene	U	U	U	10*
Methyl-tert butyl ether	U	U	U	NL
1,1-Dichloroethane	U	U	U	NL
Vinyl acetate	U	U	U	NL
2-Butanone	U	U	U	NL
cis-1,2-Dichloroethene	U	U	U	10*
2,2-Dichloropropane	U	U	U	NL
Bromochloromethane	U	U	U	NL
Chloroform	U	U	U	NL
1,1,1-Trichloroethane	U	U	U	5
1,1-Dichloropropene	U	U	U	NL
Carbon tetrachloride	U	U	U	NL
1,2-Dichloroethane	U	U	U	NL
Benzene	U	U	U	NL
Trichloroethene	U	U	U	10
1,2-Dichloropropane	U	U	U	NL
Bromodichloromethane	U	U	U	NL
cis-1,3-Dichloropropene	U	U	U	NL
4-Methyl-2-pentanone	U	U	U	NL
Toluene	U	U	U	NL
trans-1,3-Dichloropropene	U	U	U	NL
1,1,2-Trichloroethane	U	U	U	NL
1,3-Dichloropropane	U	U	U	NL
Tetrachloroethene	1.8 J	U	U	4
2-Hexanone	U	U	U	NL
Dibromochloromethane	U	U	U	NL
1,2-Dibromoethane	U	U	U	NL
Chlorobenzene	U	U	U	NL
1,1,1,2-Tetrachloroethane	U	U	U	NL
Ethylbenzene	U	U	U	NL
Xylene (total)	U	U	U	5**
Styrene	U	U	U	NL
Bromoform	U	U	U	NL
Isopropylbenzene	U	U	U	NL
1,1,2,2-Tetrachloroethane	U	U	U	NL
Bromobenzene	U	U	U	NL
1,2,3-Trichloropropane	U	U	U	NL
n-Propylbenzene	U	U	U	NL
2-Chlorotoluene	U	U	U	NL
1,3,5-Trimethylbenzene	U	U	U	NL
4-Chlorotoluene	U	U	U	NL
tert-Butylbenzene	U	U	U	NL
1,2,4-Trimethylbenzene	U	U	1.6 J	NL
sec-Butylbenzene	U	U	U	NL
4-Isopropyltoluene	U	U	U	NL
1,3-Dichlorobenzene	U	U	U	NL
1,4-Dichlorobenzene	U	U	U	NL
n-Butylbenzene	U	U	U	NL
1,2-Dichlorobenzene	U	U	U	NL
1,2-Dibromo-3-chloropropane	U	U	U	NL
1,2,4-Trichlorobenzene	U	U	U	NL
Hexachlorobutadiene	U	U	U	NL
Naphthalene	U	1.6 J	2.3 J	NL
1,2,3-Trichlorobenzene	U	U	U	NL
Total VOCs	1.8	1.6	3.9	

**NOTES:**

  Concentration exceeds NYSDEC Site Specific Effluent Limitation

- \* - Effluent limitation for 1,2 Dichloroethene (Total)  
 \*\* - Effluent limit for xylene-o= 5 ug/l, xylene -m&p = 10 ug/l

**ABBREVIATIONS**

ug/L = Micrograms per liter  
 NL = No limit specified

**QUALIFIERS:**

U: Compound analyzed for but not detected

**ACTIVE INDUSTRIAL UNIFORM SITE**  
**NYSDEC SITE No. 1-52-125**  
**RESULTS OF SYSTEM EFFLUENT ANALYSIS - INORGANIC COMPOUNDS AND GENERAL**  
**CHEMISTRY**

SAMPLE ID	COMB EFF	NYSDEC Site Specific Effluent Limitation
SAMPLE TYPE	WATER	
DATE OF COLLECTION	12/16/2008	
COLLECTED BY	D&B	
UNITS	(ug/L)	
<b>INORGANIC COMPOUNDS</b>		(ug/L)
Aluminum	U	4,000
Antimony	2.1 B	NL
Arsenic	U	140
Barium	31.3 B	NL
Beryllium	0.065 B	NL
Cadmium	0.47 B	30
Calcium	124,000	NL
Chromium	U	NL
Cobalt	0.87 B	NL
Copper	0.92 B	38
Iron	333	4,000
Lead	U	NL
Magnesium	144,000	NL
Manganese	1,550	2,000
Mercury	U	NL
Nickel	0.97 B	65
Potassium	35,400	NL
Selenium	6.5	NL
Silver	U	9
Sodium	1,200,000	NL
Thallium	U	NL
Vanadium	U	NL
Zinc	13.6 B	370
<b>GENERAL CHEMISTRY</b>		
pH (S.U.)	7.4	6 - 9

**QUALIFIERS:**

B: Concentration above IDL but less than CRDL.

U: Compound analyzed for but not detected.

E: Compound concentration exceeds instrument calibration range,

**ABBREVIATIONS:**

ug/L: Micrograms per liter

NL : No limit specified

NS: Not sampled

**ACTIVE INDUSTRIAL UNIFORM SITE**  
**NYSDEC SITE No. 1-52-125**  
**RESULTS OF SYSTEM EFFLUENT ANALYSIS - SEMI-ANNUAL PARAMETERS**

SAMPLE ID	COMB EFF	NYSDEC Site Specific Effluent Limitation
SAMPLE TYPE	WATER	
DATE OF COLLECTION	12/16/2008	
COLLECTED BY	D&B	
<b>WET CHEMISTRY</b>		
Alkalinity, Total (mg/L CaCO <sub>3</sub> )	ND	NL
Total Dissolved Solids (mg/L)	960	Monitor
Total Suspended Solids (mg/L)	18	20
pH (S.U.)	7.4	6 - 9
Chemical Oxygen Demand (mg/L)	ND	NL
<b>FIELD TESTS</b>		
pH (S.U.)	7.40	6 - 9
Temperature (°C)	ND	NL
Turbidity (NTU)	0.0	NL
Conductivity (uS)	5.59	NL
Dissolved Oxygen (mg/L)	6.87	NL
Total Chlorine (mg/L)	0.0	NL

**ABBREVIATIONS:**

ug/L: Micrograms per liter  
mg/L: Milligrams per liter  
uS: Microsemens  
S.U.: Standard Units

NTU: Nephelometric Turbidity Units  
NL - No limit specified  
ND - Not detected



**ACTIVE INDUSTRIAL UNIFORM SITE**  
**NYSDEC SITE No. 1-52-125**  
**RESULTS OF ANALYSIS OF VAPOR PHASE CARBON VESSEL (VPCV) INFLUENT - VOLATILE ORGANIC COMPOUNDS (VOCs)**

SAMPLE ID	VPCV-INF	VPCV-INF	VPCV-INF
SAMPLE TYPE	AIR	AIR	AIR
DATE OF COLLECTION	10/23/2008	11/21/2008	12/16/2008
COLLECTED BY	D&B	D&B	D&B
UNITS	(ug/m <sup>3</sup> )	(ug/m <sup>3</sup> )	(ug/m <sup>3</sup> )
<b>VOCs</b>			
1,1,1-Trichloroethane	12 J	U	9.4 J
1,1,2,2-Tetrachloroethane	U	U	U
1,1,2-Trichloroethane	U	U	U
1,1-Dichloroethane	12 J	6.1 J	10 J
1,1-Dichloroethene	6.3 J	U	U
1,2,4-Trichlorobenzene	U	U	U
1,2,4-Trimethylbenzene	8.8 J	U	U
1,2-Dibromoethane	U	U	U
1,2-Dichlorobenzene	U	U	U
1,2-Dichloroethane	U	U	U
1,2-Dichloropropane	U	U	U
1,3,5-Trimethylbenzene	U	U	U
1,3-Butadiene	U	U	U
1,3-Dichlorobenzene	U	U	U
1,4-Dichlorobenzene	U	U	U
1,4-Dioxane	U	U	U
2,2,4-Trimethylpentane	U	U	U
4-Ethyltoluene	U	U	U
Acetone	12 J	18 J	16 J
Allyl chloride	U	U	U
Benzene	U	U	U
Benzyl chloride	U	U	U
Bromodichloromethane	U	U	U
Bromoform	U	U	U
Bromomethane	U	U	U
Carbon disulfide	U	U	U
Carbon tetrachloride	U	U	U
Chlorobenzene	U	U	U
Chloroethane	U	U	U
Chloroform	U	U	U
Chloromethane	U	U	U
cis-1,2-Dichloroethene	250	140 J	220
cis-1,3-Dichloropropene	U	U	U
Cyclohexane	U	U	U
Dibromochloromethane	U	U	U
Ethyl acetate	U	U	U
Ethylbenzene	U	U	79
Freon 11	U	U	U
Freon 113	U	U	U
Freon 114	U	U	U
Freon 12	U	U	U
Heptane	U	U	U
Hexachloro-1,3-butadiene	U	U	U
Hexane	U	U	U
Isopropyl alcohol	U	U	U
m&p-Xylene	11 J	U	300
Methyl Butyl Ketone	U	U	U
Methyl Ethyl Ketone	U	U	21 J
Methyl Isobutyl Ketone	U	U	U
Methyl tert-butyl ether	21	11 J	26
Methylene chloride	3.9 J	6.2 J	U
o-Xylene	4.7 J	U	140
Propylene	U	U	U
Styrene	U	U	U
Tetrachloroethylene	U	29 J	470
Tetrahydrofuran	U	U	U
Toluene	5.4 J	U	11 J
trans-1,2-Dichloroethene	U	U	U
trans-1,3-Dichloropropene	U	U	U
Trichloroethene	160	33	130
Vinyl acetate	U	U	U
Vinyl bromide	U	U	U
Vinyl chloride	6.8	U	5.3 J
Total VOCs	514	243	1,438

**ABBREVIATIONS:**

ug/m<sup>3</sup> - Micrograms per cubic meter

**QUALIFIERS:**

U: Compound analyzed for but not detected.  
J: Analyte detected at or below quantitation limits

**ACTIVE INDUSTRIAL UNIFORM SITE**  
**NYSDEC SITE No. 1-52-125**  
**RESULTS OF ANALYSIS OF VAPOR PHASE CARBON VESSEL (VPCV) MIDFLUENT - VOLATILE ORGANIC COMPOUNDS (VOCs)**

SAMPLE ID	VPCV-MID	VPCV-MID	VPCV-MID
SAMPLE TYPE	AIR	AIR	AIR
DATE OF COLLECTION	10/23/2008	11/21/2008	12/16/2008
COLLECTED BY	D&B	D&B	D&B
UNITS	(ug/m <sup>3</sup> )	(ug/m <sup>3</sup> )	(ug/m <sup>3</sup> )
<b>VOCs</b>			
1,1,1-Trichloroethane	8.4 J	U	9.7 J
1,1,2,2-Tetrachloroethane	U	U	U
1,1,2-Trichloroethane	U	U	U
1,1-Dichloroethane	17 J	9.9 J	9.0 J
1,1-Dichloroethene	15 J	U	U
1,2,4-Trichlorobenzene	U	U	U
1,2,4-Trimethylbenzene	U	U	U
1,2-Dibromoethane	U	U	U
1,2-Dichlorobenzene	U	U	U
1,2-Dichloroethane	U	U	U
1,2-Dichloropropane	U	U	U
1,3,5-Trimethylbenzene	U	U	U
1,3-Butadiene	U	U	U
1,3-Dichlorobenzene	U	U	U
1,4-Dichlorobenzene	U	U	U
1,4-Dioxane	U	U	U
2,2,4-Trimethylpentane	U	U	U
4-Ethyltoluene	U	U	U
Acetone	11 J	26	5.7 J
Allyl chloride	U	U	U
Benzene	U	U	U
Benzyl chloride	U	U	U
Bromodichloromethane	U	U	U
Bromoform	U	U	U
Bromomethane	U	U	U
Carbon disulfide	U	U	U
Carbon tetrachloride	U	U	U
Chlorobenzene	U	U	U
Chloroethane	U	U	U
Chloroform	U	U	U
Chloromethane	U	U	U
cis-1,2-Dichloroethene	340	290	250
cis-1,3-Dichloropropene	U	U	U
Cyclohexane	U	U	U
Dibromochloromethane	U	U	U
Ethyl acetate	U	U	U
Ethylbenzene	U	U	U
Freon 11	U	U	U
Freon 113	U	U	U
Freon 114	U	U	U
Freon 12	U	U	U
Heptane	U	U	U
Hexachloro-1,3-butadiene	U	U	U
Hexane	U	U	U
Isopropyl alcohol	U	U	U
m&p-Xylene	U	U	14 J
Methyl Butyl Ketone	U	U	U
Methyl Ethyl Ketone	U	U	U
Methyl Isobutyl Ketone	U	U	U
Methyl tert-butyl ether	U	U	17 J
Methylene chloride	3.7 J	U	U
o-Xylene	U	U	4.7 J
Propylene	U	U	U
Styrene	U	U	U
Tetrachloroethylene	12 J	U	56
Tetrahydrofuran	U	U	U
Toluene	U	4.3 J	U
trans-1,2-Dichloroethene	U	U	U
trans-1,3-Dichloropropene	U	U	U
Trichloroethene	49	24 J	79
Vinyl acetate	U	U	U
Vinyl bromide	U	U	U
Vinyl chloride	7.0 J	U	U
Total VOCs	463	354	445

**ABBREVIATIONS:**

ug/m<sup>3</sup> - Micrograms per cubic meter

**QUALIFIERS:**

U: Compound analyzed for but not detected.  
J: Analyte detected at or below quantitation limits

**ACTIVE INDUSTRIAL UNIFORM SITE**  
**NYSDEC SITE No. 1-52-125**  
**RESULTS OF ANALYSIS OF VAPOR PHASE CARBON VESSEL (VPCV) EFFLUENT - VOLATILE ORGANIC COMPOUNDS (VOCs)**

SAMPLE ID	VPCV-EFF	VPCV-EFF	VPCV-EFF
SAMPLE TYPE	AIR	AIR	AIR
DATE OF COLLECTION	10/23/2008	11/21/2008	12/16/2008
COLLECTED BY	D&B	D&B	D&B
UNITS	(ug/m <sup>3</sup> )	(ug/m <sup>3</sup> )	(ug/m <sup>3</sup> )
<b>VOCs</b>			
1,1,1-Trichloroethane	6.3 J	U	U
1,1,2,2-Tetrachloroethane	U	U	U
1,1,2-Trichloroethane	U	U	U
1,1-Dichloroethane	7.2 J	11 J	13 J
1,1-Dichloroethene	14 J	U	U
1,2,4-Trichlorobenzene	U	U	U
1,2,4-Trimethylbenzene	U	U	9.4 J
1,2-Dibromoethane	U	U	U
1,2-Dichlorobenzene	U	U	U
1,2-Dichloroethane	U	U	U
1,2-Dichloropropane	U	U	U
1,3,5-Trimethylbenzene	U	U	U
1,3-Butadiene	U	U	U
1,3-Dichlorobenzene	U	U	U
1,4-Dichlorobenzene	U	U	U
1,4-Dioxane	U	U	U
2,2,4-Trimethylpentane	U	U	U
4-Ethyltoluene	U	U	U
Acetone	15 J	9.8 J	27
Allyl chloride	U	U	U
Benzene	U	U	U
Benzyl chloride	U	U	U
Bromodichloromethane	U	U	U
Bromoform	U	U	U
Bromomethane	U	U	U
Carbon disulfide	5.5 J	U	U
Carbon tetrachloride	U	U	U
Chlorobenzene	U	U	U
Chloroethane	U	U	U
Chloroform	U	U	U
Chloromethane	U	6.2 J	U
cis-1,2-Dichloroethene	180	240	380
cis-1,3-Dichloropropene	U	U	U
Cyclohexane	U	U	U
Dibromochloromethane	U	U	U
Ethyl acetate	U	U	U
Ethylbenzene	U	U	U
Freon 11	U	U	U
Freon 113	U	U	U
Freon 114	U	U	U
Freon 12	U	U	U
Heptane	U	U	U
Hexachloro-1,3-butadiene	U	U	U
Hexane	U	U	U
Isopropyl alcohol	U	U	U
m&p-Xylene	10 J	U	16 J
Methyl Butyl Ketone	U	U	U
Methyl Ethyl Ketone	U	U	U
Methyl Isobutyl Ketone	U	U	U
Methyl tert-butyl ether	U	U	U
Methylene chloride	3.7 J	6.3 J	U
o-Xylene	4.7 J	U	6.7 J
Propylene	U	U	U
Styrene	U	U	U
Tetrachloroethylene	U	U	U
Tetrahydrofuran	U	U	U
Toluene	U	U	U
trans-1,2-Dichloroethene	U	U	U
trans-1,3-Dichloropropene	U	U	U
Trichloroethene	27 J	U	U
Vinyl acetate	U	U	U
Vinyl bromide	U	U	U
Vinyl chloride	6.9 J	U	U
Total VOCs	280	273	452

**ABBREVIATIONS:**

ug/m<sup>3</sup> - Micrograms per cubic meter

**QUALIFIERS:**

U: Compound analyzed for but not detected.  
J: Analyte detected at or below quantitation limits

**ACTIVE INDUSTRIAL UNIFORM SITE**  
**NYSDEC SITE No. 1-52-125**  
**SUMMARY OF VAPOR EMISSION RATES**

**Vapor Phase Carbon Vessel Effluent (VPCV-EFF) Sample Collection Date: 10/23/2008**

Compound Detected <sup>(1)</sup>	Concentration (ug/m <sup>3</sup> )	Flow Rate (ft <sup>3</sup> /min)	Emission Rate (lbs/hr)	NYSDEC Required Effluent Limits (lbs/hr)	Percentage of NYSDEC Permitted Effluent Limits Detected
1,1,1-Trichloroethane	6.3	1,080	2.6E-05	1.0E-03	2.6%
1,1-Dichloroethane	7.2	1,080	2.9E-05	NL	--
1,1-Dichloroethene	14.0	1,080	5.7E-05	NL	--
Acetone	15.0	1,080	6.1E-05	NL	--
Carbon disulfide	5.5	1,080	2.2E-05	NL	--
cis-1,2-Dichloroethene	180.0	1,080	7.3E-04	3.0E-03	24.3%
Methylene chloride	3.7	1,080	1.5E-05	NL	--
Total Xylene	14.7	1,080	6.0E-05	1.0E-03	6.0%
Trichloroethene	27.0	1,080	1.1E-04	6.0E-03	1.8%
Vinyl chloride	6.9	1,080	2.8E-05	1.4E-02	0.2%
Total VOCs	280.3	1,080	1.1E-03	5.0E-01	0.2%

**Vapor Phase Carbon Vessel Effluent (VPCV-EFF) Sample Collection Date: 11/21/2008**

Compound Detected <sup>(1)</sup>	Concentration (ug/m <sup>3</sup> )	Flow Rate (ft <sup>3</sup> /min)	Emission Rate (lbs/hr)	NYSDEC Required Effluent Limits (lbs/hr)	Percentage of NYSDEC Permitted Effluent Limits Detected
1,1-Dichloroethane	11	1,080	4.5E-05	NL	--
Acetone	9.8	1,080	4.0E-05	NL	--
Chloromethane	6.2	1,080	2.5E-05	NL	--
cis-1,2-Dichloroethene	240	1,080	9.7E-04	3.0E-03	32.4%
Methylene chloride	6.3	1,080	2.6E-05	NL	--
Total VOCs	273.3	1,080	1.1E-03	5.0E-01	0.2%

**Vapor Phase Carbon Vessel Effluent (VPCV-EFF) Sample Collection Date: 12/16/2008**

Compound Detected <sup>(1)</sup>	Concentration (ug/m <sup>3</sup> )	Flow Rate (ft <sup>3</sup> /min)	Emission Rate (lbs/hr)	NYSDEC Required Effluent Limits (lbs/hr)	Percentage of NYSDEC Permitted Effluent Limits Detected
1,1-Dichloroethane	13	1,080	5.3E-05	NL	--
1,2,4-Trimethylbenzene	9.4	1,080	3.8E-05	NL	--
Acetone	27	1,080	1.1E-04	NL	--
cis-1,2-Dichloroethene	380	1,080	1.5E-03	3.0E-03	51.3%
Total Xylenes	22.7	1,080	9.2E-05	1.0E-03	9.2%
Total VOCs	452	1,080	1.8E-03	5.0E-01	0.4%

**NOTES:**

1. Only detected compounds are listed. All other VOCs were undetected during this sampling event.  
  Concentration exceeds NYSDEC permitted effluent limits

**ABBREVIATIONS:**

NL - No limit specified in permit application  
ug/m<sup>3</sup> - Micrograms per cubic meter  
ft<sup>3</sup>/min - Cubic feet per minute  
lbs/hr - Pounds per hour

**ACTIVE INDUSTRIAL UNIFORM SITE**  
**NYSDEC SITE No. 1-52-125**  
**RESULTS OF ANALYSIS OF GROUNDWATER SAMPLING - VOLATILE ORGANIC COMPOUNDS (VOCs)**

SAMPLE ID	MW-101	MW-102	MW-103	MW-104	MW-105	MW-106	MW-107	MW-108	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES (ug/L)
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	
DATE OF COLLECTION	12/15/2008	12/15/2008	12/15/2008	12/15/2008	12/15/2008	12/15/2008	12/15/2008	12/15/2008	
COLLECTED BY	D&B	D&B	D&B	D&B	D&B	D&B	D&B	D&B	
UNITS	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
<b>VOCs</b>									
Dichlorodifluoromethane	U	U	U	U	U	U	U	U	5 GV
Chloromethane	U	U	U	U	U	U	U	U	-
Vinyl chloride	U	U	260	U	U	16	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
Acetone	U	U	U	U	U	U	U	U	50 GV
Iodomethane	U	U	U	U	U	U	U	U	-
Carbon disulfide	U	U	U	U	U	U	U	U	60 GV
Methylene chloride	U	U	U	U	U	U	U	U	5 ST
trans 1,2-Dichloroethene	U	U	35 J	U	U	2.6 J	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	5 ST
Vinyl acetate	U	U	U	U	U	U	U	U	-
2-Butanone	U	U	U	U	U	U	U	U	50 GV
cis-1,2-Dichloroethene	2.6 J	3.2 J	3,100	4.8 J	U	360	4.3 J	1.4 J	5 ST
2,2-Dichloropropane	U	U	U	U	U	U	U	U	5 ST
Bromochloromethane	U	U	U	U	U	U	U	U	5 ST
Chloroform	U	U	U	U	U	U	U	U	7 ST
1,1,1-Trichloroethane	U	U	U	U	U	U	U	U	5 ST
1,1-Dichloropropene	U	U	U	U	U	U	U	U	5 ST
Carbon tetrachloride	U	U	U	U	U	U	U	U	5 ST
1,2-Dichloroethane	U	U	U	U	U	U	U	U	0.8 ST
Benzene	U	U	U	U	U	U	U	U	1 ST
Trichloroethene	U	U	U	30	U	110	U	U	5 ST
1,2-Dichloropropane	U	U	U	U	U	U	U	U	1 ST
Bromodichloromethane	U	U	U	U	U	U	U	U	5 ST
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
1,3-Dichloropropane	U	U	U	U	U	U	U	U	5 ST
Tetrachloroethene	U	2.5 J	U	430	5.5	180	9.4	5.0	5 ST
2-Hexanone	U	UJ	UJ	UJ	U	UJ	UJ	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
1,1,1,2-Tetrachloroethane	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
Bromobenzene	U	U	U	U	U	U	U	U	0.04 ST
1,2,3-Trichloropropane	U	U	U	U	U	U	U	U	5 ST
n-Propylbenzene	U	U	U	U	U	U	U	U	5 ST
2-Chlorotoluene	U	U	U	U	U	U	U	U	5 ST
1,3,5-Trimethylbenzene	U	U	U	U	U	U	U	U	5 ST
4-Chlorotoluene	U	U	U	U	U	U	U	U	5 ST
tert-Butylbenzene	U	U	U	U	U	U	U	U	5 ST
1,2,4-Trimethylbenzene	U	U	U	U	U	U	U	U	5 ST
sec-Butylbenzene	U	U	U	U	U	U	U	U	5 ST
4-Isopropyltoluene	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
n-Butylbenzene	U	U	U	U	U	U	U	U	5 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
Hexachlorobutadiene	U	U	U	U	U	U	U	U	0.5 ST
Naphthalene	U	U	U	U	U	U	U	U	10 GV
1,2,3-Trichlorobenzene	U	U	U	U	U	U	U	U	5 ST
<b>Total VOCs</b>	2.6	5.7	3395	464.8	5.5	669	13.7	6.4	
<b>GENERAL CHEMISTRY</b>									
pH (S.U.)	6.8	6.9	6.6	6.6	6.7	6.7	6.7	6.5	6 - 9

**NOTES:**

- Concentration exceeds NYSDEC Class GA Groundwater Standard or Guidance Value
- (1) - Sample analyzed at a dilution of 25:1.  
(2) - Sample analyzed at a dilution of 2.5:1.  
(3) - Sample analyzed at a dilution of 4:1.

**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 found in a blank as well as the sample

**ACTIVE INDUSTRIAL UNIFORM SITE**  
**NYSDEC SITE No. 1-52-125**  
**RESULTS OF ANALYSIS OF GROUNDWATER SAMPLING - VOLATILE ORGANIC COMPOUNDS (VOCs)**

SAMPLE ID	MW-109	MW-110 <sup>(3)</sup>	MW-111	MW-2S				NYSDEC CLASS GA
SAMPLE TYPE	WATER	WATER	WATER	WATER				GROUNDWATER
DATE OF COLLECTION	12/15/2008	—	12/15/2008	12/15/2008				STANDARDS AND GUIDANCE
COLLECTED BY	D&B	D&B	D&B	D&B				VALUES
UNITS	(ug/L)	(ug/L)	(ug/L)	(ug/L)				(ug/L)
<b>VOCs</b>								
Dichlorodifluoromethane	U		U	U				5 GV
Chloromethane	U		U	U				—
Vinyl chloride	U		U	U				2 ST
Bromomethane	U		U	U				5 ST
Chloroethane	U		U	U				5 ST
Trichlorofluoromethane	U		U	U				5 ST
1,1-Dichloroethene	U		U	U				5 ST
Acetone	U		U	U				50 GV
Iodomethane	U		U	U				—
Carbon disulfide	U		U	U				60 GV
Methylene chloride	U		U	U				5 ST
trans 1,2-Dichloroethene	U		U	U				5 ST
Methyl-tert butyl ether	1.9 J		U	U				10 GV
1,1-Dichloroethane	U		U	U				5 ST
Vinyl acetate	U		U	U				—
2-Butanone	U		U	U				50 GV
cis-1,2-Dichloroethene	2.3 J		U	1.2 J				5 ST
2,2-Dichloropropane	U		U	U				5 ST
Bromochloromethane	U		U	U				5 ST
Chloroform	U		U	U				7 ST
1,1,1-Trichloroethane	U		U	U				5 ST
1,1-Dichloropropene	U		U	U				5 ST
Carbon tetrachloride	U		U	U				5 ST
1,2-Dichloroethane	U		U	U				0.6 ST
Benzene	U		U	U				1 ST
Trichloroethene	U		U	U				5 ST
1,2-Dichloropropane	U		U	U				1 ST
Bromodichloromethane	U		U	U				5 ST
cis-1,3-Dichloropropene	U		U	U				0.4 ST
4-Methyl-2-pentanone	U		U	U				—
Toluene	U		U	U				5 ST
trans-1,3-Dichloropropene	U		U	U				0.4 ST
1,1,2-Trichloroethane	U		U	U				1 ST
1,3-Dichloropropane	U		U	U				5 ST
Tetrachloroethene	2.0 J		U	5.0 J				5 ST
2-Hexanone	U		U	U				50 GV
Dibromochloromethane	U		U	U				50 GV
1,2-Dibromoethane	U		U	U				5 ST
Chlorobenzene	U		U	U				5 ST
1,1,1,2-Tetrachloroethane	U		U	U				5 ST
Ethylbenzene	U		U	U				5 ST
Xylene (total)	U		U	U				5 ST
Styrene	U		U	U				50 GV
Bromoform	U		U	U				5 ST
Isopropylbenzene	U		U	U				5 ST
1,1,2,2-Tetrachloroethane	U		U	U				5 ST
Bromobenzene	U		U	U				5 ST
1,2,3-Trichloropropane	U		U	U				0.04 ST
n-Propylbenzene	U		U	U				5 ST
2-Chlorotoluene	U		U	U				5 ST
1,3,5-Trimethylbenzene	U		U	U				5 ST
4-Chlorotoluene	U		U	U				5 ST
tert-Butylbenzene	U		U	U				5 ST
1,2,4-Trimethylbenzene	U		U	U				5 ST
sec-Butylbenzene	U		U	U				5 ST
4-Isopropyltoluene	U		U	U				3 ST
1,3-Dichlorobenzene	U		U	U				5 ST
1,4-Dichlorobenzene	U		U	U				3 ST
n-Butylbenzene	U		U	U				5 ST
1,2-Dichlorobenzene	U		U	U				3 ST
1,2-Dibromo-3-chloropropane	U		U	U				0.04 ST
1,2,4-Trichlorobenzene	U		U	U				5 ST
Hexachlorobutadiene	U		U	U				0.5 ST
Naphthalene	U		U	U				10 GV
1,2,3-Trichlorobenzene	U		U	U				5 ST
<b>Total VOCs</b>	<b>6.2</b>			<b>6.2</b>				
<b>GENERAL CHEMISTRY</b>								
pH (S.U.)	6.1		6.1	6.0				6 - 9

**NOTES:**

Concentration exceeds NYSDEC Class GA Groundwater Standard or Guidance Value  
 (3) - Monitoring well MW-110 was not sampled since it could not be located and has reportedly been paved over by the local municipality.

**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  
 B: Compound found in a blank as well as the sample

**ATTACHMENT E**

**PERFORMANCE SUMMARY**

**ACTIVE INDUSTRIAL UNIFORM SITE  
NYSDEC SITE No. 1-52-125  
EXTRACTION AND TREATMENT SYSTEM PERFORMANCE RESULTS - AQUEOUS**

SAMPLE COLLECTION DATE	SYSTEM INFLUENT AVERAGE EXTRACTION RATE (gpm)	SYSTEM INFLUENT TOTAL VOC CONCENTRATION (ug/L)	SYSTEM EFFLUENT TOTAL VOC CONCENTRATION (ug/L)	TOTAL VOC REMOVAL EFFICIENCY (%)	ESTIMATED AVERAGE TOTAL VOC REMOVAL RATE (lb/hr)	ESTIMATED SYSTEM RUNTIME (hr)	CUMULATIVE TOTAL VOC REMOVAL (lbs)
4/19/2005	79.80 (RW-1) 0.00 (RW-2)	562	3 J	99.47%	2.24E-02	444	808.15
5/16/2005	77.67 (RW-1) 0.00 (RW-2)	636	< 5.0	99.21%	2.47E-02	644	824.08
6/20/2005	75.85 (RW-1) 0.00 (RW-2)	693	< 5.0	99.28%	2.63E-02	1083	852.56 <sup>(2)</sup>
7/25/05 <sup>(3)</sup>	69.61 (RW-1) 82.32 (RW-2)	378	< 5.0	98.68%	2.87E-02	576 (RW-1) 464 (RW-2)	867.36
8/30/05 <sup>(3)</sup>	70.25 (RW-1) 83.00 (RW-2)	277	< 5.0	98.19%	2.12E-02	599 (RW-1) 599 (RW-2)	880.08
9/30/05 <sup>(3)</sup>	68.70 (RW-1) 82.50 (RW-2)	535	< 5.0	99.07%	4.05E-02	755 (RW-1) 460 (RW-2)	904.13 <sup>(2)</sup>
10/24/2005	67.10 (RW-1) 82.70 (RW-2)	397	< 5.0	98.74%	2.97E-02	559 (RW-1) 559 (RW-2)	920.76
11/21/2005	63.83 (RW-1) 81.58 (RW-2)	464	< 5.0	98.92%	3.37E-02	669 (RW-1) 669 (RW-2)	943.35
12/19/2005	63.82 (RW-1) 80.60 (RW-2)	244	< 5.0	97.95%	1.76E-02	969 (RW-1) 969 (RW-2)	960.44 <sup>(2)</sup>
1/24/2006	63.00 (RW-1) 78.85 (RW-2)	258	< 5.0	98.06%	1.83E-02	566 (RW-1) 566 (RW-2)	970.79
2/24/2006	67.00 (RW-1) 79.00 (RW-2)	390	< 5.0	98.72%	2.85E-02	673 (RW-1) 442 (RW-2)	989.97
3/22/2006	66.55 (RW-1) 0.00 (RW-2)	540	< 5.0	99.07%	1.80E-02	848 (RW-1) 0 (RW-2)	1,005.21 <sup>(2)</sup>
4/14/2006	65.46 (RW-1) 0.00 (RW-2)	560	< 5.0	99.11%	1.83E-02	395 (RW-1) 0 (RW-2)	1,012.46
5/23/2006	64.27 (RW-1) 0.00 (RW-2)	223	< 5.0	97.76%	7.17E-03	423 (RW-1) 0 (RW-2)	1,015.49
6/22/2006	64.76 (RW-1) 0.00 (RW-2)	567	< 5.0	99.12%	1.84E-02	918 (RW-1) 0 (RW-2)	1,032.35 <sup>(2)</sup>
7/20/2006	65.32 (RW-1) 0.00 (RW-2)	550	< 5.0	99.09%	1.80E-02	473 (RW-1) 0 (RW-2)	1,040.86
8/17/2006	63.60 (RW-1) 91.30 (RW-2)	258	< 5.0	98.06%	2.00E-02	719 (RW-1) 96 (RW-2)	1,055.23
9/19/2006	60.33 (RW-1) 90.31 (RW-2)	294	< 5.0	98.30%	2.22E-02	1016 (RW-1) 1016 (RW-2)	1,077.73 <sup>(2)</sup>
10/9/2006	59.18 (RW-1) 0.00 (RW-2)	666	< 5.0	99.25%	1.97E-02	209 (RW-1) 0 (RW-2)	1,081.85
11/1/2006	58.40 (RW-1) 0.00 (RW-2)	840	< 5.0	99.40%	2.45E-02	550 (RW-1) 0 (RW-2)	1,095.35
12/8/2006	56.70 (RW-1) 0.00 (RW-2)	474	< 5.0	98.95%	1.34E-02	1418 (RW-1) 0 (RW-2)	1,114.41 <sup>(2)</sup>
1/5/2007	54.22 (RW-1) 0.00 (RW-2)	405	< 5.0	98.77%	1.10E-02	85 (RW-1) 0 (RW-2)	1,115.35
2/26/2007	56.28 (RW-1) 0.00 (RW-2)	244	< 5.0	97.95%	6.87E-03	756 (RW-1) 0 (RW-2)	1,120.54
3/16/2007	52.37 (RW-1) 0.00 (RW-2)	281	< 5.0	98.22%	7.36E-03	505 (RW-1) 0 (RW-2)	1,124.26 <sup>(2)</sup>
6/15/2007	51.33 (RW-1) 0.00 (RW-2)	269 <sup>(5)</sup>	< 5.0	98.14%	6.91E-03	213 (RW-1) 0 (RW-2)	1,125.73 <sup>(2)</sup>
7/12/2007	52.26 (RW-1) 0.00 (RW-2)	257	< 5.0	98.05%	6.72E-03	266 (RW-1) 0 (RW-2)	1,127.52
8/10/2007	52.47 (RW-1) 0.00 (RW-2)	251	< 5.0	98.01%	6.59E-03	692 (RW-1) 0 (RW-2)	1,132.08
9/12/2007	51.57 (RW-1) 0.00 (RW-2)	295	< 5.0	98.31%	7.61E-03	1232 (RW-1) 0 (RW-2)	1,141.46 <sup>(2)</sup>
10/22/2007	50.10 (RW-1) 0.00 (RW-2)	247	< 5.0	97.98%	6.19E-03	504 (RW-1) 0 (RW-2)	1,144.58
11/13/2007	49.28 (RW-1) 0.00 (RW-2)	250	6.0	97.60%	6.16E-03	1019 (RW-1) 0 (RW-2)	1,150.85 <sup>(2)</sup>
1/28/2008	42.64 (RW-1) 0.00 (RW-2)	207	< 5.0	97.58%	4.42E-03	650 (RW-1) 0 (RW-2)	1,153.72
2/22/2008	44.75 (RW-1) 0.00 (RW-2)	241	< 5.0	97.93%	5.39E-03	473 (RW-1) 0 (RW-2)	1,156.28
3/14/2008	43.71 (RW-1) 0.00 (RW-2)	231	< 5.0	97.83%	5.05E-03	923 (RW-1) 0 (RW-2)	1,160.94 <sup>(2)</sup>
4/21/2008	40.16 (RW-1) 0.00 (RW-2)	209	< 5.0	97.60%	4.19E-03	480 (RW-1) 0 (RW-2)	1,162.95
5/14/2008	38.81 (RW-1) 0.00 (RW-2)	153	< 5.0	96.72%	2.96E-03	552 (RW-1) 0 (RW-2)	1,164.58
6/19/2008	40.21 (RW-1) 0.00 (RW-2)	205	< 5.0	97.56%	4.12E-03	1136 (RW-1) 0 (RW-2)	1,169.26 <sup>(2)</sup>
7/14/2008	39.96 (RW-1) 0.00 (RW-2)	308	< 5.0	98.38%	6.16E-03	317 (RW-1) 0 (RW-2)	1,171.21
8/6/2008	36.42 (RW-1) 0.00 (RW-2)	408	< 5.0	98.77%	7.43E-03	215 (RW-1) 0 (RW-2)	1,172.81
9/12/2008	33.56 (RW-1) 70.01 (RW-2)	277 (RW-1) 39.2 (RW-2)	< 5.0	95.36%	4.65E-03 (RW-1) 1.37E-03 (RW-2)	1,228 (RW-1) 838 (RW-2)	1,179.67 <sup>(2)</sup>
10/22/2008	19.22 (RW-1) 82.51 (RW-2)	91.9	< 5.0	94.56%	4.68E-03	483 (RW-1) 483 (RW-2)	1,181.93
11/21/2008	24.64 (RW-1) 79.18 (RW-2)	97.6	< 5.0	94.88%	5.07E-03	718 (RW-1) 718 (RW-2)	1,185.57
12/16/2008	24.55 (RW-1) 79.22 (RW-2)	80.6	< 5.0	93.80%	4.18E-03	976 (RW-1) 976 (RW-2)	1,189.65 <sup>(2)</sup>

**NOTES:**

1. Total mass of VOC recovered through December 31, 2004 based on information contained in the Fourth Quarter 2004 Operation and Maintenance Report prepared by Blue Water Environmental Inc.
2. Estimated through the end of the reporting period.
3. Extraction well RW-2 restarted on 7/5/05 @16:20. Mass removal rates reflect operation of both extraction wells RW-1 and RW-2.
4. Performance results for the reporting period are shaded.
5. COMB-INF result approximated as average of 3/16/07 and 7/12/07 results due to laboratory reporting error.

**ABBREVIATIONS**

gpm: gallons per minute  
ug/L: micrograms per liter  
lb/hr: pounds per hour



**ATTACHMENT F**

**MW-2S SAMPLING RESULTS**

**Table 4.3: Groundwater VOC Results**

Parameter	Location		MW-101		MW-104		MW-104		MW-106		MW-107		MW-108		MW-2S		DP-08	
	Sample Date		11/28/2007		11/28/2007		11/28/2007		11/27/2007		11/27/2007		11/28/2007		11/28/2007		1/23/2008	
	Sample ID		AIMW101		AIMW104		AIMW104DUP		AIMW106		AIMW107		AIMW108		AIMW2S		AIGW08	
	QC Code		FS		FS		FD		FS		FS		FS		FS		FS	
	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Cis-1,2-Dichloroethene	5	U	5	U	5	U	260		5	U	5	U	530	J	5	U	5	U
Tetrachloroethene	5	UJ	77	J	74	J	64	J	5	UJ	5	UJ	120	J	5	U	5	U
trans-1,2-Dichloroethene	5	U	5	U	5	U	2	J	5	U	5	U	5	J	5	U	5	U
Trichloroethene	5	U	3	J	4	J	23		5	U	5	U	110	J	5	U	5	U
Vinyl chloride	5	U	5	U	5	U	4	J	5	U	5	U	25	U	5	U	5	U

**Notes:**

Results in microgram per liter (µg/L)

Only detected compounds shown.

Samples analyzed for VOCs by EPA Method 8260B

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration  
greater than the reporting limit

J = Estimated value

Criteria = Values from Technical and Operational  
Guidance Series (TOGS) 1.1.1, Ambient Water  
Quality Standards and Guidance values and  
Groundwater Effluent Limitations (NYSDEC, 1998).

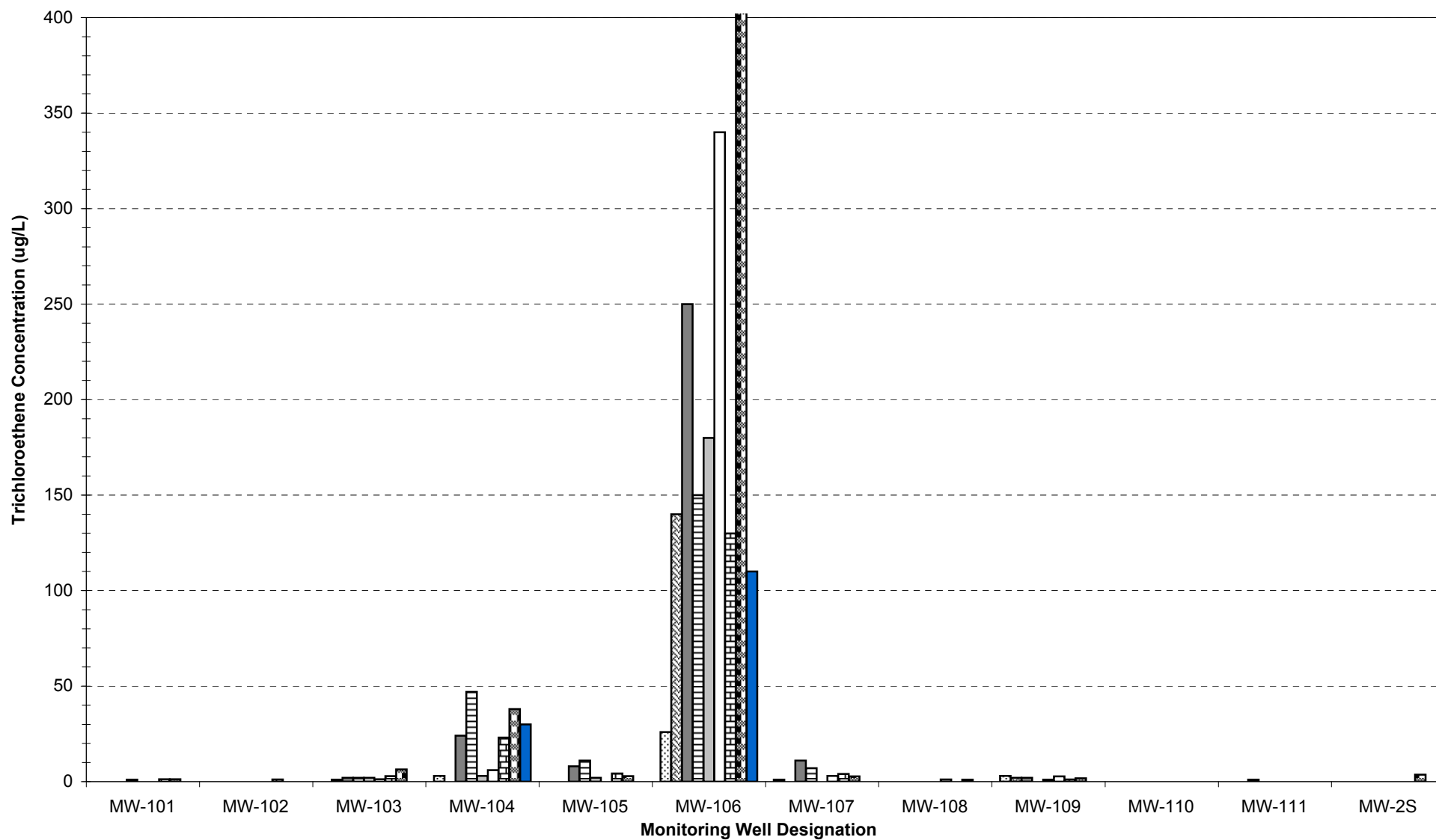
Detections are indicated in **BOLD**

Highlighted results exceed criteria

## **ATTACHMENT G**

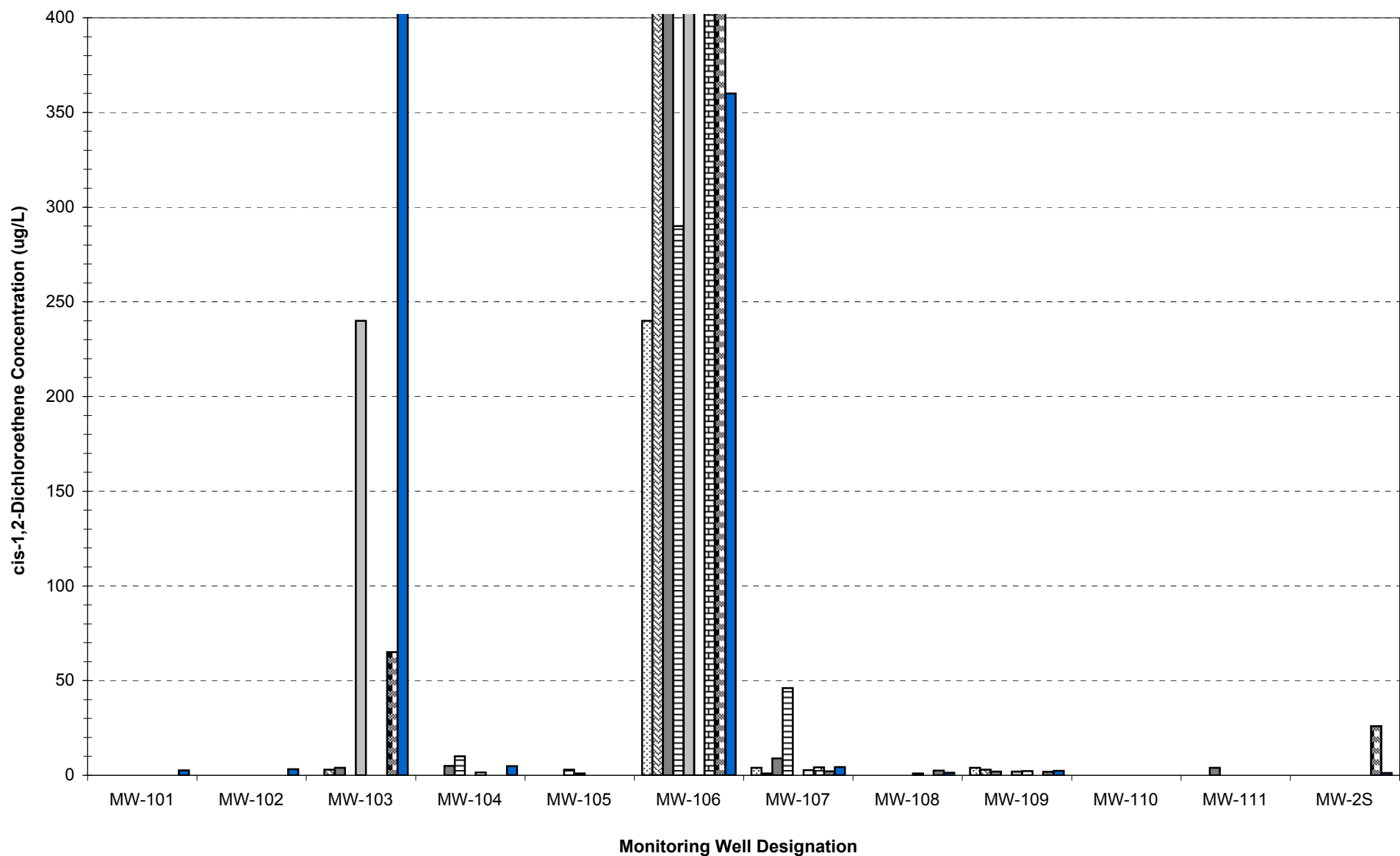
### **MONITORING WELL TREND BAR GRAPHS**

**Active Industrial Uniform Site  
NYSDEC Site No. 1-52-125  
Summary of Groundwater Sampling Results - Trichloroethene**



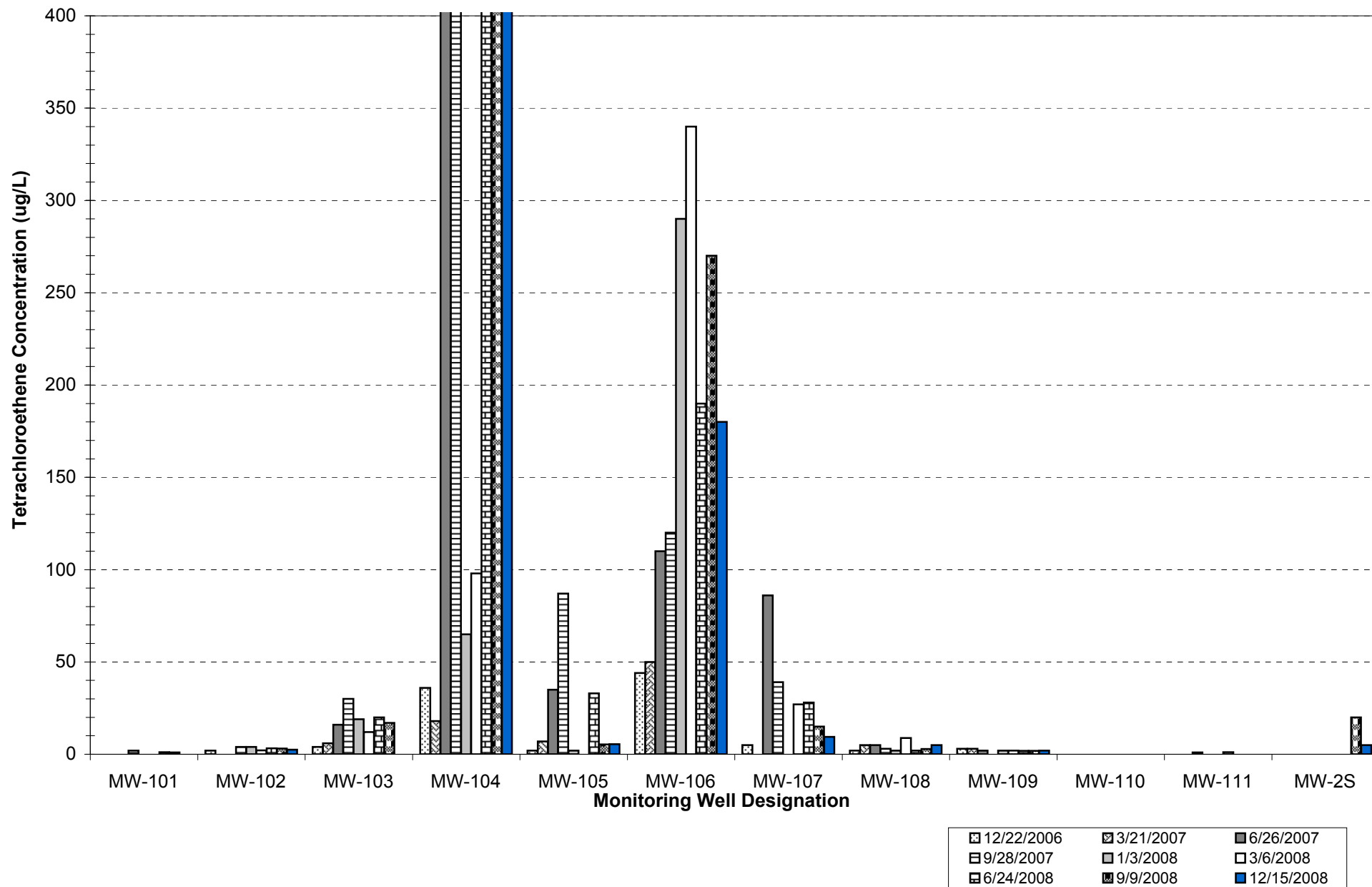
12/22/2006	3/21/2007	6/26/2007
9/28/2007	1/3/2008	3/6/2008
6/24/2008	9/9/2008	12/15/2008

**Active Industrial Uniform Site  
NYSDEC Site No. 1-52-125  
Summary of Groundwater Sampling Results - cis-1,2-Dichloroethene**

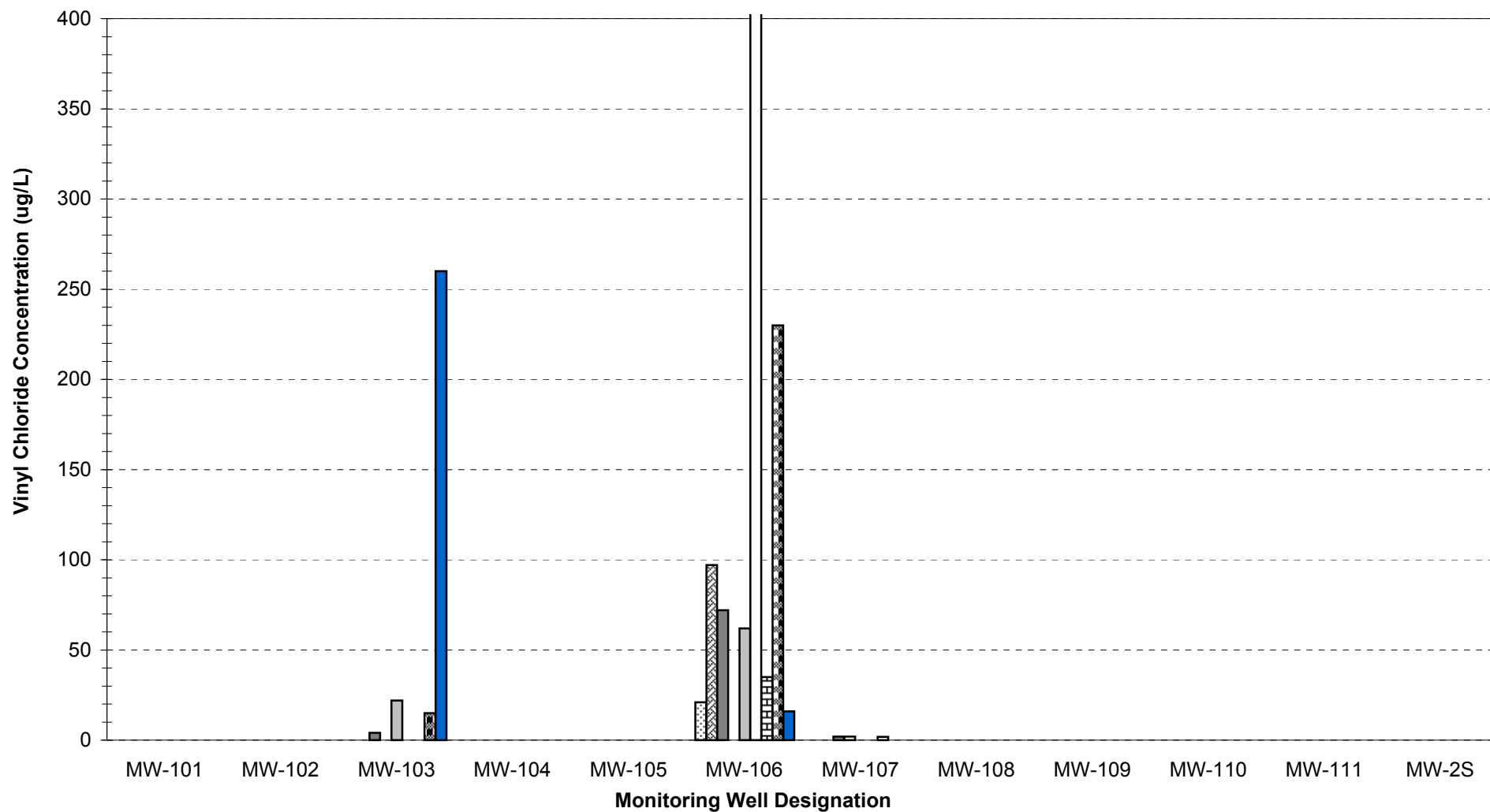


12/22/2006 3/21/2007 6/26/2007  
 9/28/2007 1/3/2008 3/6/2008  
 6/24/2008 9/9/2008 12/15/2008

**Active Industrial Uniform Site  
NYSDEC Site No. 1-52-125  
Summary of Groundwater Sampling Results - Tetrachloroethene**

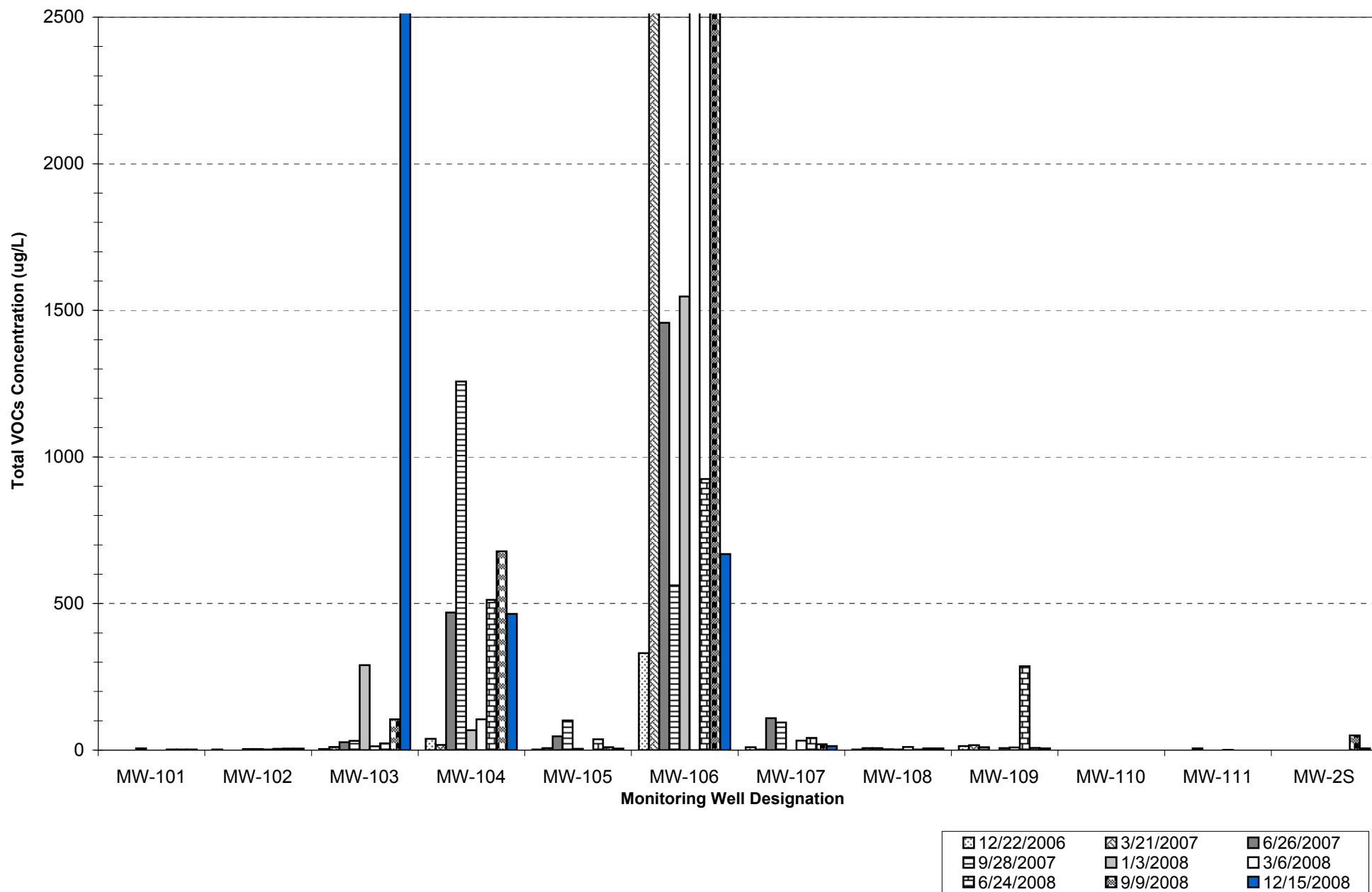


**Active Industrial Uniform Site  
NYSDEC Site No. 1-52-125  
Summary of Groundwater Sampling Results - Vinyl Chloride**



12/22/2006	3/21/2007	6/26/2007
9/28/2007	1/3/2008	3/6/2008
6/24/2008	9/9/2008	12/15/2008

**Active Industrial Uniform Site  
NYSDEC Site No. 1-52-125  
Summary of Groundwater Sampling Results - Total VOCs**





## **ATTACHMENT H**

### **DATA VALIDATION CHECKLISTS**

## DATA VALIDATION CHECK LIST

Project Name:	Active Industrial		
Project Number:	2578-04		
Sample Date(s):	October 24, 2008		
Matrix/Number of Samples:	Water/ 2 Trip Blank/0		
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI		
Analyses:	Volatile Organic Compounds (VOCs): USEPA SW 846 method 8260 Metals: USEPA SW846 Method 6010 and mercury by Method 7470		
Laboratory Report No:	G1904	Date:	11/7/2008

## 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	X		
8. LCS/LCSD precision (RPD)		X		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 exceptions:

- 6&7. The %R was below the QC limit of 70 % for 2,2-dichloropropane in the LCS and LCSD. 2,2-Dichloropropane was qualified as estimated (J/UJ) in all samples.
12. The %RSD was above the QC limit of 20 % for acetone in the initial calibration. Acetone was not detected in the samples and therefore did not impact the usability of the reported sample results.

13. The %R was above the QC limit of 20 % for dichlorodifluoromethane, chloromethane, 2-butanone, 2,2-dichloropropane, and bromochloromethane in the continuing calibration associated with the 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		X	
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R					X
9. Post digestive spike sample %R					X
10. Duplicate %RPD					X
11. Serial dilution check %D		X	X		
12. Field duplicates RPD					X

%R - percent recovery

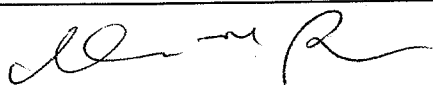
%D - percent difference

RPD - relative percent difference

### Comments:

Performance was acceptable, with the following exceptions:

2. The following metals were detected in preparation, initial and/or continuing blanks and detected in the samples at concentration less than ten times the concentration found in the blanks: barium, beryllium, cobalt, copper, nickel, and silver. Therefore, the above metals were qualified as non-detect (U) in COMB-INF.
11. The %D was above the QC limit of 10 % for the serial dilution sample for zinc associated with all samples. Zinc was qualified as estimated (J/UJ) in all samples.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 04/1/2009
VALIDATION PERFORMED BY SIGNATURE:	

## DATA VALIDATION CHECK LIST

Project Name:	Active Industrial		
Project Number:	2578-04		
Sample Date(s):	November 21, 2008		
Matrix/Number of Samples:	Air/ 3		
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI which sub to Centek Laboratories, LLC, Syracuse, NY		
Analyses:	Volatile Organic Compounds (VOCs): TO15		
Laboratory Report No:	G2189	Date:	1/16/2009

## ORGANIC ANALYSES VOCs

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Method blanks		X		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. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X	X		
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X	X		
12. Field duplicates RPD					X

VOCs - volatile organic compounds  
%R - percent recovery

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

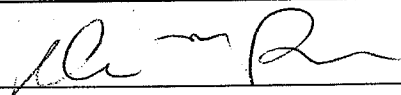
RRF - relative response factor  
RPD - relative percent difference

### Comments:

Performance was acceptable with the following exceptions:

- The %R was below QC limits for trans-1,2-dichloroethene associated with VPCU EFF. The %R was above QC limits for 1,2,4-trichlorobenzene and hexachloro-1,3-butadiene and below QC limits for bromoform associated with VPCU INF and VPCU MID. Trans-1,2-dichloroethene was qualified as estimated (J/UJ) in VPCU EFF. 1,2,4-Trichlorobenzene and hexachloro-1,3-butadiene were qualified as estimated (J) only if detected in VPCU INF and VPCU MID. Bromoform was qualified as estimated (J/UJ) in VPCU INF and VPCU MID.
- The internal standard areas were above QC limits for 1,4-difluorobenzene and chlorobenzene in VPCU INF and chlorobenzene in VPCU MID. These samples were reanalyzed twice and the internal standard areas were within QC limits for the reported sample results. Therefore internal standard areas did not impact the usability of the reported sample results.

11. The %R was above the QC limit of 30 % for bromoform in the continuing calibration associated with VPCU INF and VPCU MID. Bromoform was qualified as estimated (J/UJ) in VPCU INF and VPCU MID.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 04/1/2009
VALIDATION PERFORMED BY SIGNATURE:	

## DATA VALIDATION CHECK LIST

Project Name:	Active Industrial	
Project Number:	2578-04	
Sample Date(s):	November 21, 2008	
Matrix/Number of Samples:	<u>Water/ 2</u> <u>Trip Blank/0</u>	
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI	
Analyses:	<u>Volatile Organic Compounds (VOCs):</u> USEPA SW 846 method 8260 <u>Metals:</u> USEPA SW846 Method 6010 and mercury by Method 7470	
Laboratory Report No:	G2188	Date:12/10/2008

## 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	X		
8. LCS/LCSD precision (RPD)		X	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 exceptions:

- 7&8. The %R was below the QC limit of 70% for 1,1-dichloroethene in the LCSD and the RPD was above the QC limit of 40% for 1,1-dichloroethene and dichlorodifluoromethane associated with all samples. 1,1-Dichloroethene was qualified as estimated (J/UJ) in all samples.
13. The %R was above the QC limit of 20 % for, dichlorodifluoromethane, chloromethane, vinyl chloride, bromomethane, chloroethane, trichlorofluoromethane, iodomethane, carbon disulfide,

1,1-dichloropropene, and 1,2,3-trichlorobenzene 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		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

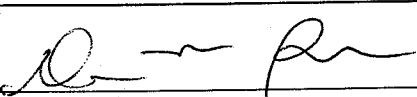
%D - percent difference

RPD - relative percent difference

### Comments:

Performance was acceptable, with the following exceptions:

- The following metals were detected in preparation, initial and/or continuing blanks and detected in the sample at concentration less than ten times the concentration found in the blanks: barium, cobalt, copper, lead, nickel, and vanadium. Therefore, the above metals were qualified as non-detect (U) in COMB INF.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 03/31/2009
VALIDATION PERFORMED BY SIGNATURE:	

## DATA VALIDATION CHECK LIST

Project Name:	Active Industrial	
Project Number:	2578-04	
Sample Date(s):	December 15, 2008	
Matrix/Number of Samples:	Water/ 11 Trip Blank/1	
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI	
Analyses:	Volatile Organic Compounds (VOCs): USEPA SW 846 method 8260	
Laboratory Report No:	G2353	Date:12/26/2008

### 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		X	
8. LCS/LCSD precision (RPD)		X		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

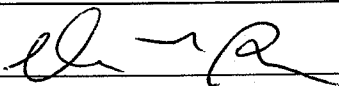
%D - percent difference  
%RSD - percent relative standard deviation

RRF - relative response factor  
RPD - relative percent difference

#### Comments:

Performance was acceptable with the following exceptions:

2. Trichloroethene was detected in the method and trip blanks. Trichloroethene was detected less than 5 times the concentration detected in the blanks and qualified as non-detect (U) at the detection limit in MW 105, MW 103, MW 102, MW 101, MW 107, MW 108, MW 2S, and MW 109.
13. The %R was above the QC limit of 20 % for 2-hexanone the continuing calibration associated with MW 102, MW 107, MW 2S, MW 111, MW 103, MW 106, and MW 104. 2-Hexanone was qualified as estimated (J/UJ) in all samples.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 03/31/2009
VALIDATION PERFORMED BY SIGNATURE:	



## DATA VALIDATION CHECK LIST

Project Name:	Active Industrial		
Project Number:	2578-04		
Sample Date(s):	December 16, 2008		
Matrix/Number of Samples:	Air/ 3		
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI which sub to Centek Laboratories, LLC, Syracuse, NY		
Analyses:	Volatile Organic Compounds (VOCs): TO15		
Laboratory Report No:	G2365	Date:	2/2/2009

## ORGANIC ANALYSES VOCs

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Method blanks		X		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. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X	X		
12. 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:

11. The %R was above the QC limit of 30 % for 1,2,4-trichlorobenzene in the continuing calibration associated with all samples. 1,2,4-Trichlorobenzene was qualified as estimated (J/UJ) in all samples.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 03/31/2009
VALIDATION PERFORMED BY SIGNATURE:	

## DATA VALIDATION CHECK LIST

Project Name:	Active Industrial		
Project Number:	2578-04		
Sample Date(s):	October 23, 2008		
Matrix/Number of Samples:	Air/ 3		
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI which sub to Centek Laboratories, LLC, Syracuse, NY		
Analyses:	Volatile Organic Compounds (VOCs): TO15		
Laboratory Report No:	G1905	Date:	1/13/2009

## ORGANIC ANALYSES VOCS

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Method blanks		X		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. Surrogate spike recoveries		X	X		
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X	X		
12. 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:

- The %R was above QC limits for 1,2,4-trichlorobenzene and hexachloro-1,3-butadiene and below QC limits for methyl butyl ketone associated with all samples. 1,2,4-Trichlorobenzene and hexachloro-1,3-butadiene were qualified as estimated (J) only if detected in all samples. Methyl butyl ketone was qualified as estimated (J/UJ) in all samples.
- The %R was slightly below QC limits for the surrogate associated with INFLUENT. Qualification of the data was not necessary.
- The %R was above the QC limit of 30 % for isopropyl alcohol, methyl isobutyl ketone, and methyl butyl ketone in the continuing calibration associated with all samples. The above compounds were qualified as estimated (J/UJ) in all samples.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 04/1/2009
VALIDATION PERFORMED BY SIGNATURE:	

## DATA VALIDATION CHECK LIST

Project Name:	Active Industrial		
Project Number:	2578-04		
Sample Date(s):	December 16, 2008		
Matrix/Number of Samples:	Water/ 6 Trip Blank/0		
Analyzing Laboratory:	Mitkem Laboratories, Warwick, RI		
Analyses:	<u>Volatile Organic Compounds (VOCs):</u> USEPA SW 846 method 8260 <u>Metals:</u> USEPA SW846 Method 6010 and mercury by Method 7470 <u>General Chemistry:</u> Total Dissolved Solids (2540C), Total Suspended Solids (2540D), and Chemical Oxygen Demand (COD) (5520D)		
Laboratory Report No:	G2364	Date:	12/30/2008

## 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		X	
8. LCS/LCSD precision (RPD)		X		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 exceptions:

- The %R was above the QC limit of 20 % for dichlorodifluoromethane, 2-butanone, 4-methyl-2-pentanone, 2-hexanone, 1,2-dibromo-3-chloropropane, the continuing calibration associated with COMB INF, RW1 INF, and RW2 INF. Dichlorodifluoromethane, 2-butanone, 4-methyl-2-pentanone, 2-hexanone, 1,2-dibromo-3-chloropropane were qualified as estimated (J/UJ) in COMB INF, RW1 INF, and RW2 INF.

# 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		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 exceptions:

- The following metals were detected in preparation, initial and/or continuing blanks and detected in the samples at concentration less than ten times the concentration found in the blanks: antimony, barium, beryllium, cadmium cobalt, copper, iron, mercury, nickel, selenium, silver and zinc.

The following metals were less than ten times the concentration found in the blanks and were qualified as non-detect (U): antimony in COMB INF and EFF; barium in COMB INF, EFF, and RW1 INF; beryllium in COMB INF, EFF, and RW1 INF; cadmium in COMB INF, EFF, RW1 INF, and RW2 INF; cobalt in COMB INF, EFF, RW1 INF, and RW2 INF; copper in EFF, RW1 INF, and RW2 INF; iron in RW1 INF; mercury in COMB INF, RW1 INF, and RW2 INF; nickel in COMB INF, EFF, RW1 INF, and RW2 INF; selenium in COMB INF, EFF, and RW2 INF; silver in COMB INF; and zinc in EFF and RW1 INF.

- The %Ds were above the QC limit of 10 % for the serial dilution sample for barium, iron, manganese, and zinc associated with all samples. The above metals were qualified as estimated (J/UJ) in all samples.

# INORGANIC ANALYSES GENERAL CHEMISTRY

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Method Blanks		X		X	
3. Laboratory control sample %R		X		X	
4. Laboratory duplicate RPD		X		X	
5. Field duplicates RPD					X

%R percent recovery

RPD - relative percent difference

%D - percent difference

RSD - relative standard deviation

## Comments:

Performance was acceptable.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 03/31/2009
VALIDATION PERFORMED BY SIGNATURE:	