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# Arch Chemicals, Inc.

Rochester, New York (Site #828018a)

Groundwater Monitoring Report 38  
Spring 2007

September 2007



Arch Chemicals, Inc.  
P. O. Box 800  
1200 Lower River Road  
Charleston, TN 37310  
Tel (423) 780-2724



September 10, 2007

Mr. James H. Craft  
New York State  
Department of Environmental Conservation  
6274 East Avon-Lima Road  
Avon, NY 14414



**Re: Arch Rochester Spring 2007 Monitoring Report  
Arch Chemicals (Site #628018a) 100 McKee Rd., Rochester, NY**

Dear Mr. Craft:

The enclosed report presents the Spring 2007 results for the on-going groundwater and surface water monitoring program being conducted by Arch Chemicals, Inc., at its Rochester, New York, manufacturing facility.

If you have any questions regarding this submittal, please call me at (423) 780-2175.

Sincerely,

*Gayle M. Taylor / jlb*

Gayle M. Taylor  
Manager, Environmental Issues  
Arch Chemicals, Inc.

encl.

cc (w/encl): Bart Putzig, NYSDEC  
James Reidy, USEPA Region II  
Karin Klock, Arch Chemicals, Inc.  
Jeffrey Brandow, MACTEC Engineering & Consulting, P.C.

**SURFACE WATER AND GROUNDWATER MONITORING PROGRAM  
SPRING 2007 MONITORING REPORT**

**ARCH CHEMICALS  
ROCHESTER PLANT SITE  
ROCHESTER, NEW YORK**

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**ARCH CHEMICALS, INC.  
CHARLESTON, TENNESSEE**

**SEPTEMBER 2007**



**SURFACE WATER AND GROUNDWATER MONITORING PROGRAM  
SPRING 2007 MONITORING REPORT**

**ARCH CHEMICALS  
ROCHESTER PLANT SITE  
ROCHESTER, NEW YORK**

*Prepared by*

MACTEC Engineering & Consulting, P.C.  
Portland, Maine

*for*

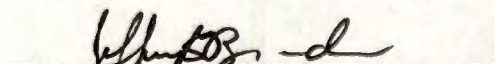
ARCH CHEMICALS, INC.  
Charleston, Tennessee

September 2007

*This document was prepared for the sole use of Arch Chemicals, Inc., the only intended beneficiary(ies) of our work. No other party shall rely on the information contained herein without prior written consent of MACTEC Engineering & Consulting, P.C.*



Nelson M. Breton, C.G.  
Principal Hydrogeologist



Jeffrey E. Brandow, P.E.  
Principal Engineer



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## EXECUTIVE SUMMARY

This monitoring report presents the results of an on-going groundwater and surface water monitoring program being conducted by Arch Chemicals, Inc., at its Rochester, New York, manufacturing facility. Results in this report include surface and groundwater samples collected in June 2007.

During this monitoring event, samples from a total of 47 groundwater monitoring or pumping wells and three locations associated with the Dolomite Products Quarry seep and outfall were collected and analyzed by Severn Trent Laboratories in Amherst, New York.

As in prior reports, monitoring results were compared with previous average concentrations at each sampling location. Thirty-two of the 50 monitoring locations sampled for chloropyridines had contaminant concentrations that were at or below their respective 5-year prior averages. Twenty-eight of the 34 monitoring locations sampled for volatile organic compounds had concentrations at or below their 5-year prior average. Contaminant contour plots are generally consistent with past observations.

Regular sampling locations associated with the quarry included the main quarry seep (QS-4), the quarry ditch as it enters the Erie Barge Canal (QO-2), and the surface water in the canal approximately 100-feet downstream of the quarry ditch (QO-2S1). The sample from quarry seep QS-4 remained below its historical average. Sample QO-2 contained chloropyridines at an estimated 6 µg/L, which is slightly above the 5-year prior average for this location. The sample from the canal had no detectable chloropyridines.

During the period December 2006 through May 2007, the on-site groundwater extraction system pumped approximately 5.6 million gallons of groundwater to the on-site treatment system, containing an estimated 306 pounds of chloropyridines and 6 pounds of target volatile organic compounds.

Pump and/or meter repairs were required on wells BR-5A, BR-7A, BR-9, PW-11, PW-13, and PW-14.

In November 2006, pumping well PW-10 partially collapsed while Arch was attempting to remove the pump for service. This well is no longer operational, and Arch is in the process of replacing it with a new pumping well at a location slightly south of PW-10.

All accessible on-site monitoring wells were checked for the presence of dense non-aqueous phase liquids (DNAPL) and floating (or light) NAPL (LNAPL), using an interface probe. No DNAPL or LNAPL was observed in any of these wells, with the exception of pumping well PW-13. Arch has been tracking the accumulation of LNAPL in PW-13 since the well was installed in 2004. During this monitoring event, the measured thickness of LNAPL in PW-13 increased to 0.91 feet.

The next regular monitoring event will occur in November 2007 and will include groundwater, surface water, and seep sampling.



## 1.0 INTRODUCTION

In accordance with the Order on Consent executed between Arch Chemicals, Inc., and the New York State Department of Environmental Conservation (NYSDEC), effective August 21, 2003, Arch is conducting a Remedial Action program at its facility on McKee Road in Rochester, New York. As part of this program, Arch conducts twice-yearly monitoring events consisting of sampling and chemical analysis of groundwater and surface water in the vicinity of the Rochester facility.

The Spring 2007 sampling event included the collection and analysis of a total of 50 groundwater, surface water, and seep samples from off-site and on-site locations. Samples were collected June 6 - 14, 2007, for analysis of selected chloropyridines and volatile organic compounds (VOCs).

This report presents the results of the Spring 2007 monitoring event.

## 2.0 SAMPLE COLLECTION AND ANALYSIS

### 2.1 GROUNDWATER

Groundwater samples were collected from off-site wells, on-site wells and piezometers for analysis of selected chloropyridines (2-chloropyridine, 2,6-dichloropyridine, 3-chloropyridine, 4-chloropyridine, pyridine, and p-fluoroaniline) and target compound list (TCL) VOCs. Samples were collected by Severn Trent Laboratories and transported to their laboratory in Amherst, New York for analysis. Table 1 lists the wells that were sampled and the requested analyses. The off-site and on-site locations of these sampling points are shown in Figures 1 and 2, respectively. Groundwater sampling data sheets are provided in Appendix A.

Groundwater was collected with the low flow/low stress purging technique from most of the wells using bladder or peristaltic pumps. Samples from active pumping wells (BR-5A, BR-7A, BR-9, PW-11, PW-13, and PW-14) were collected from the discharge lines.

One off-site bedrock monitoring well, BR-126, could not be located during the Spring 2007 event. It is assumed that this well has been damaged beyond repair by the off-site property owner.

Groundwater piezometric elevations were measured on June 5, 2007. Piezometric contour maps were constructed for each water-bearing zone (overburden, bedrock, and deep bedrock) and are presented in Figures 3, 4, and 5.

All accessible on-site monitoring wells were again checked for the presence of non-aqueous phase liquid (NAPL), using an interface probe. No dense NAPL (DNAPL) was observed in any of these wells. 0.91 feet of floating NAPL (LNAPL) was observed in pumping well PW-13, where it has been observed since the well's installation in 2004. The LNAPL has been previously analyzed as No. 2 fuel oil and there is no indication that it originates from the Arch facility. LNAPL was not observed in any of the other on-site wells.



## 2.2 SURFACE WATER

Surface water and quarry seep samples were collected as part of the on-going monitoring program for the Arch Rochester site. The location of the quarry and its outfall in relation to the site is shown on Figure 6. Samples of the quarry seep (QS-4), the surface ditch that receives the quarry discharge (QO-2), and the Barge Canal (QO-2S1) were collected by Severn Trent Laboratories on June 12, 2007. Samples were analyzed for the Arch suite of selected chloropyridines. The quarry locations sampled during this event are shown on Figure 7.

## 2.3 ANALYTICAL PROCEDURES

The analytical procedures, data review findings, and validated data for this groundwater and surface water monitoring event are discussed in the following paragraphs.

Samples were analyzed for the Arch suite of selected chloropyridines and TCL VOCs by USEPA SW-846 Methods 8270C and 8260B, respectively. The reporting limits for the chloropyridines and VOCs are approximately 10 micrograms per liter ( $\mu\text{g/L}$ ) and 5 to 25  $\mu\text{g/L}$ , respectively, for undiluted samples.

## 2.4 QUALITY CONTROL

All laboratory analytical results were reviewed and qualified following U.S. Environmental Protection Agency Contract Laboratory Program (USEPA CLP), "National Functional Guidelines For Organic Data Review", October, 1999, as modified by USEPA Region II, "SOP No. HW-6 Revision XII", March 2001. Analytical results were evaluated for the following parameters:

- \* Collection and Preservation
- \* Holding Times
- Surrogate Recoveries
- Blank Contamination
- \* Duplicates
- \* Laboratory Control Samples
- \* Matrix Spike/Matrix Spike Duplicates
- Miscellaneous

\* - all criteria were met for this parameter

With the qualifications discussed below, results are determined to be usable as reported by the laboratory.

Surrogate Recoveries. Several SVOC samples in SDG 6241 had surrogate recoveries that were less than laboratory control limits due to large dilutions that were required for target analytes. In order to minimize these low surrogate recoveries, serial dilutions are generally carried out based on a dilution schedule that is supplied to the laboratory. However, during this event the schedule was not originally followed which resulted in the low surrogates recoveries. Since these dilutions were necessary no qualifications were added to the samples based on surrogate recoveries alone.



**Blank Contamination.** Methylene chloride (0.59 µg/L) and acetone (2.2 µg/L) were reported in the trip and method blanks. Action levels were calculated at ten times the detections reported in the blanks and compared to raw data results. The results for methylene chloride in samples BR-127, BR-5A, BR-9, E-1, PW-11, PZ-107, S-3, BR-6A, PW-10, PW-13, PW-14, and PZ-106 were less than the action level and were qualified as non-detect (U). The results for acetone in samples BR-8, E-1, PW-11, S-3, S-4, and BR-6A were also less than the action level and were qualified as non-detect (U).

**Miscellaneous.** Several samples required dilutions due to concentrations of the target analytes 2,6-dichloropyridine, 2-chloropyridine, chloroform, and chlorobenzene that were greater than the instrument calibration range. These dilutions ranged from two to twenty thousand times. Results were reported from the lowest diluted analytical run that met validation criteria.

The predilution table was not originally followed for SVOC samples in SDG 6241. The samples were re-extracted outside of holding times in order to follow the dilution schedule. Results were reported from the original analytical runs which were analyzed within holding times, so no qualifications were necessary.

### 3.0 ANALYTICAL RESULTS

#### 3.1 GROUNDWATER

The validated results from the Spring 2007 groundwater monitoring event are provided in Tables 2 and 3. Table 4 provides a comparison of the Spring 2007 analytical results for selected chloropyridines and VOCs in representative wells to mean concentrations of the prior five years (Spring 2002 through Fall 2006). Long term trends for both selected chloropyridines and VOCs are also presented as time-series plots for representative wells in Appendix B. A summary of the analytical findings is presented below by parameter class.

##### 3.1.1 Chloropyridines

**On-Site.** Chloropyridines were detected above sample quantitation limits in all 22 on-site wells sampled in the Spring 2007 event. Concentrations of chloropyridines ranged from 29 micrograms per liter (µg/L) (sum of all chloropyridine and pyridine isomer concentrations) in monitoring well E-3 to 1,120,000 µg/L in monitoring well B-17. Thirteen of the on-site wells exhibited total chloropyridine concentrations that were below their respective means from monitoring events over the previous five years (see Table 4). Wells B-17, BR-3, BR-7A, BR-9, E-1, MW-127, PW-14, PZ-105 and PZ-107 contained chloropyridines at levels exceeding their prior 5-year means.

**Off-Site.** Chloropyridines were detected above sample quantitation limits in 22 of 25 off-site wells that were sampled. Concentrations of total selected chloropyridines ranged from non-detect (in BR-116, MW-114, and NESS-W) to 4,400 µg/L in monitoring well MW-106. Seventeen of the off-site wells contained total chloropyridine concentrations that were below their respective 5-year prior means, while wells BR-103, BR-104, BR-112D, BR-113D, BR-116D, BR-122D, MW-103, and MW-104 exceeded their prior 5-year means.



**Concentration Contours.** Chloropyridine distribution in groundwater is shown as a set of concentration contours on Figure 8. The contours were developed using data from both overburden and bedrock monitoring wells. Contours are approximated (shown as dashed lines) where they are based on data from previous sampling rounds.

### **3.1.2 Selected VOCs.**

**On-Site.** Selected VOCs were detected in 6 of the 22 on-site wells sampled in the Spring 2007 event. Total concentrations of selected VOCs ranged from non-detect (in wells BR-8, E-1, E-3, MW-127, PW-13, PZ-105, and S-4) to 260,000 µg/L in PZ-106 for the sum of the principal site-related contaminants (carbon tetrachloride, chloroform, methylene chloride, tetrachloroethene, and trichloroethene). Only three of the 22 on-site wells (B-17, B-7, and BR-127) contained concentrations of total VOCs above their 5-year prior means. In addition to the selected VOCs, other notable constituents detected in on-site wells include chlorobenzene (in 18 out of 22 wells), benzene (15 of 22), toluene (15 of 22), vinyl chloride (12 of 22), carbon disulfide (10 of 22), 1,2-dichloroethene (10 of 22), acetone (8 of 22), ethylbenzene (7 of 22), xylenes (6 of 22), bromoform (5 of 22), and 1,1-dichloroethane (4 of 22).

**Off-Site.** Selected VOCs were detected in 6 of the 12 off-site wells sampled for VOCs in the Spring 2007 event. Total concentrations of selected VOCs ranged from non-detect (in MW-106, BR-106, BR-114, PZ-101, PZ-103, and PZ-104) to 87 µg/L (in MW-103). Only three of the 12 off-site wells (BR-103, BR-105, and MW-114) had selected VOC concentrations above their prior 5-year means. In addition to the selected VOCs, other notable constituents detected in off-site wells include benzene (in 9 out of 12 wells), chlorobenzene (9 of 12), 1,2-dichloroethene (7 of 12), carbon disulfide (5 of 12), toluene (5 of 12), vinyl chloride (4 of 12), acetone (4 of 12), and ethyl benzene (3 of 12).

**Concentration Contours.** The distribution of selected VOCs in groundwater is shown as a set of concentration contours on Figure 9. These contours were developed using both overburden and bedrock groundwater data, and are dashed where approximated using data from previous sampling rounds.

## **3.2 SURFACE WATER**

Results from the Spring 2007 canal and quarry monitoring event are presented in Table 5, and summarized below.

### **3.2.1 Quarry**

One quarry seep was sampled in the Spring 2007 monitoring event. Quarry seep QS-4 contained 240 µg/L total chloropyridines. Concentrations remain at or below historical averages.

### **3.2.2 Quarry Discharge Ditch**

One sample was collected from the quarry discharge ditch and analyzed for chloropyridines. Sample QO-2 was collected at the point where the ditch discharges to the canal. Total chloropyridines were detected in the ditch sample at an estimated concentration of 6 µg/L, which is slightly above the 5-year prior mean for this location.



### **3.2.3 Barge Canal**

No chloropyridines were detected in the surface water sample collected from the Erie Barge Canal (QO-2S1, located approximately 100 feet downstream of QO-2).

## **4.0 EXTRACTION SYSTEM PERFORMANCE AND MAINTENANCE**

Table 6 is a summary of the system flow measurements for the on-site extraction wells from December 2006 through May 2007. The total volume pumped during the six-month period is approximately 5.6 million gallons.

Pump and/or meter repairs were required on wells BR-5A, BR-7A, BR-9, PW-11, PW-13, and PW-14.

In November 2006, pumping well PW-10 partially collapsed while Arch was attempting to remove the pump for service. This well is no longer operational, and Arch is in the process of replacing it with a new pumping well at a location slightly south of PW-10.

Table 7 provides a calculation of mass removal rates since the previous groundwater monitoring event (i.e., from December 2006 through May 2007). Arch estimates that approximately 6 pounds of target VOCs and 306 pounds of chloropyridine compounds were removed by the groundwater extraction system and treated by the plant's activated carbon adsorption units over that time period.

## **5.0 OTHER ISSUES**

For other issues related to the remedial action program at the Arch Rochester Plant Site, please see the monthly progress reports, which commenced in February 2005.

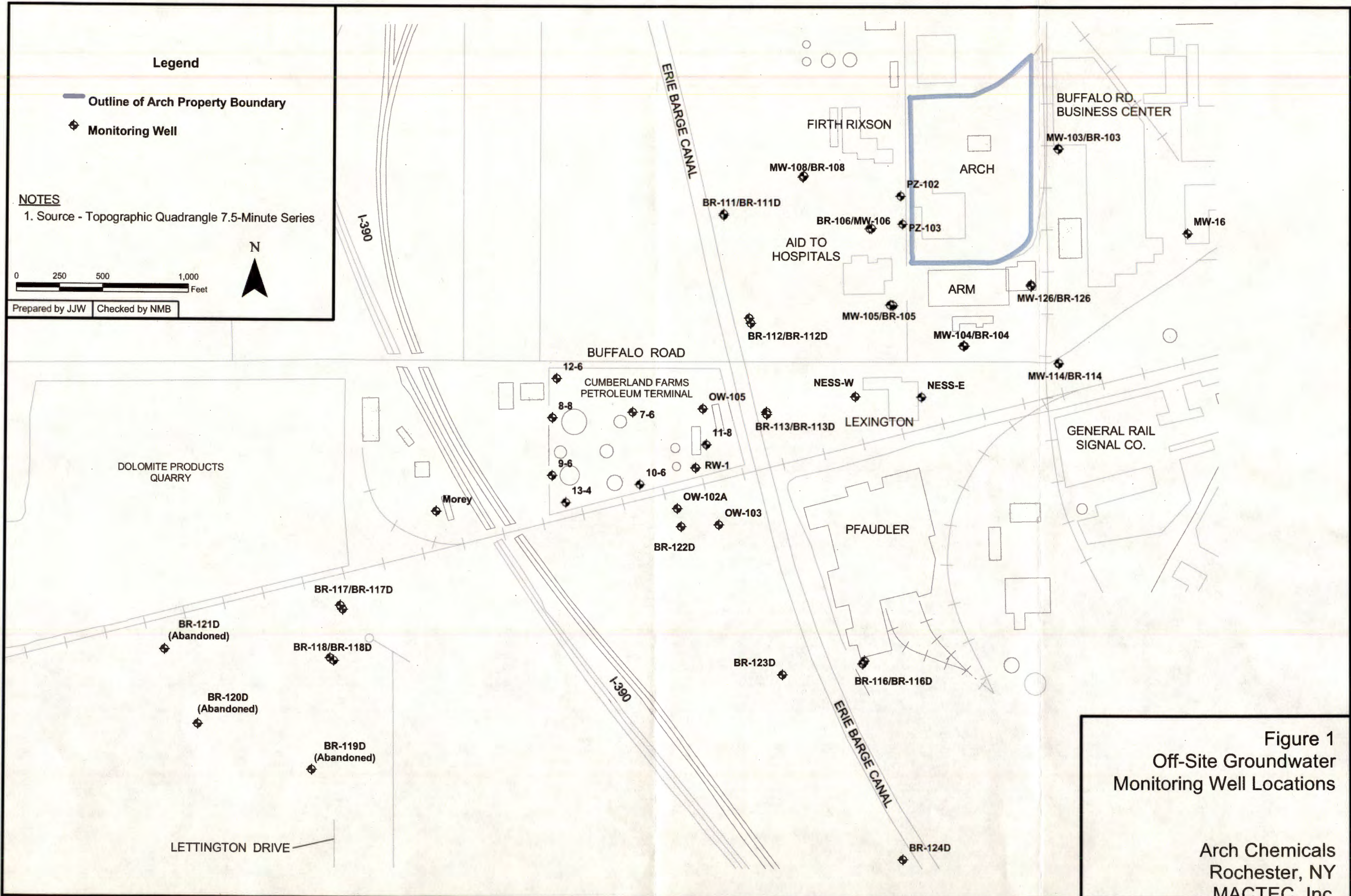
## **6.0 NEXT MONITORING EVENT**

The next regular monitoring event will occur in November 2007 and will include groundwater, surface water, and seep sampling.

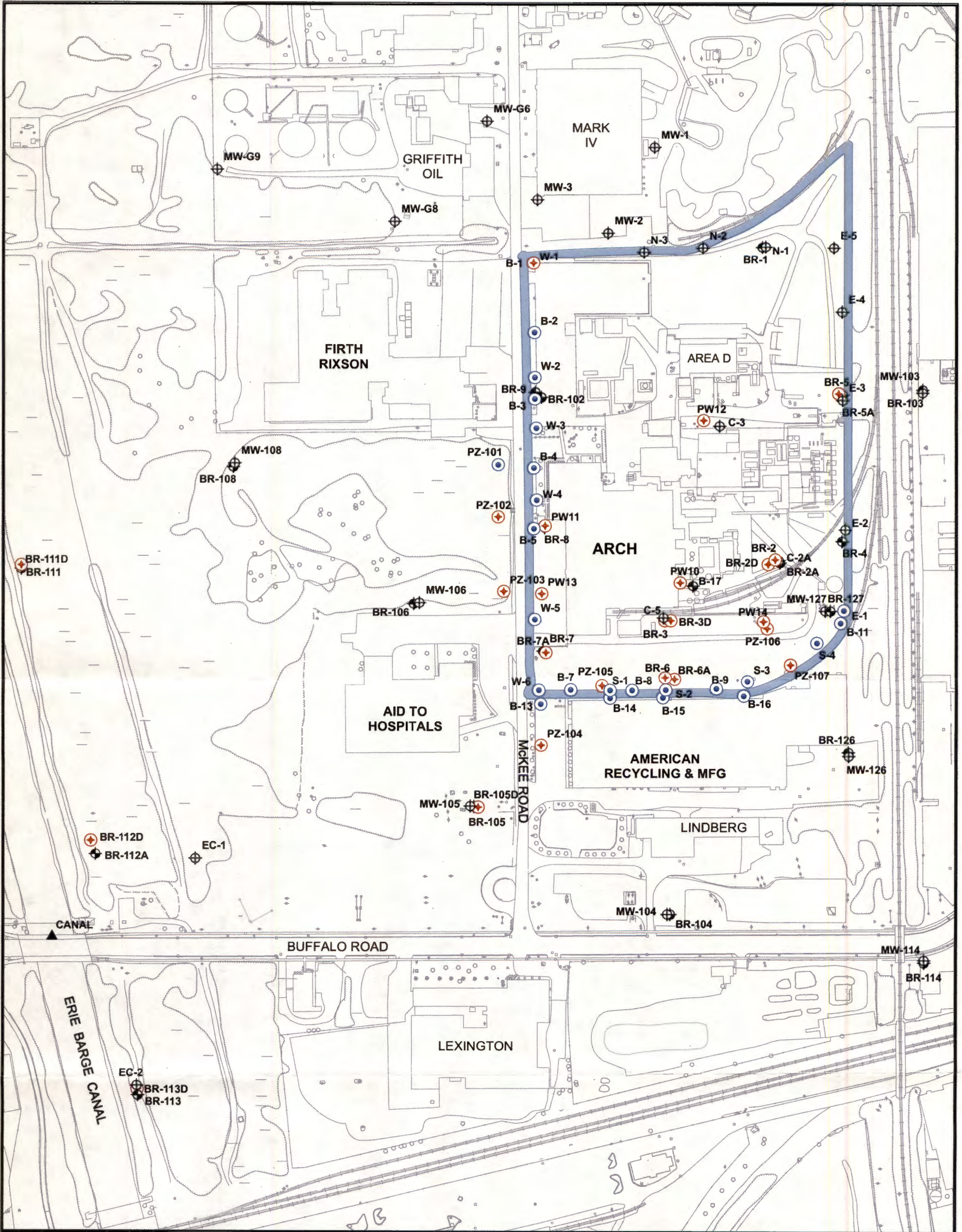
Table 8 shows the current monitoring program for the Arch Rochester site.



## Figures







**NOTES:**

1. Off-Site Well Locations also Included on Figure 1

**Legend**

- Outline of Arch Property Boundary
- Overburden Piezometer / Pumping Well
- ⊕ Bedrock Piezometer / Pumping Well / Deep Bedrock Monitoring Well
- ⊕ Overburden Monitoring Well
- ⊕ Bedrock Monitoring Well
- ▲ Surface Water Measurement Point

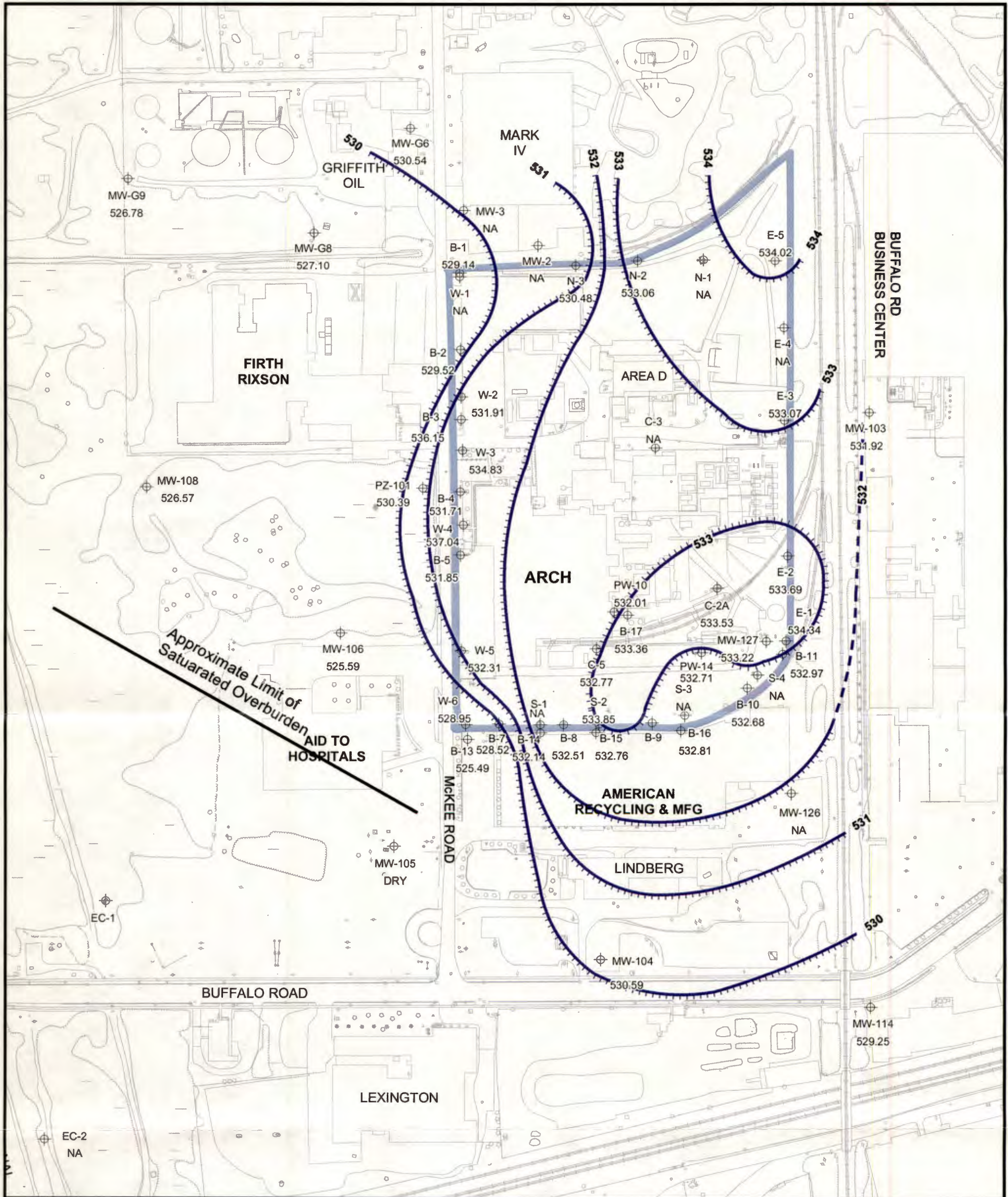


Prepared by JJW | Checked by NMB

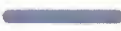



**Figure 2**  
Onsite Monitoring Well Locations

Arch Chemicals  
Rochester, NY  
MACTEC, Inc.





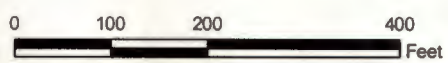
**Legend**

-  Outline of Arch Property Boundary
-  Overburden Piezometric Elevation Contour (MSL)
-  528 Interpreted Groundwater Flow Direction
-  MW-114 (528.76) Piezometric Elevation at Well or Piezometer

**NOTES:**

1. Water Levels Measured on June 5, 2006
2. NA = Not Available
- BLANK
3. Dashed Contours Reflect Uncertainty
4. (<518.01) Reflects Bottom of Well Elevation, Well Observed Dry

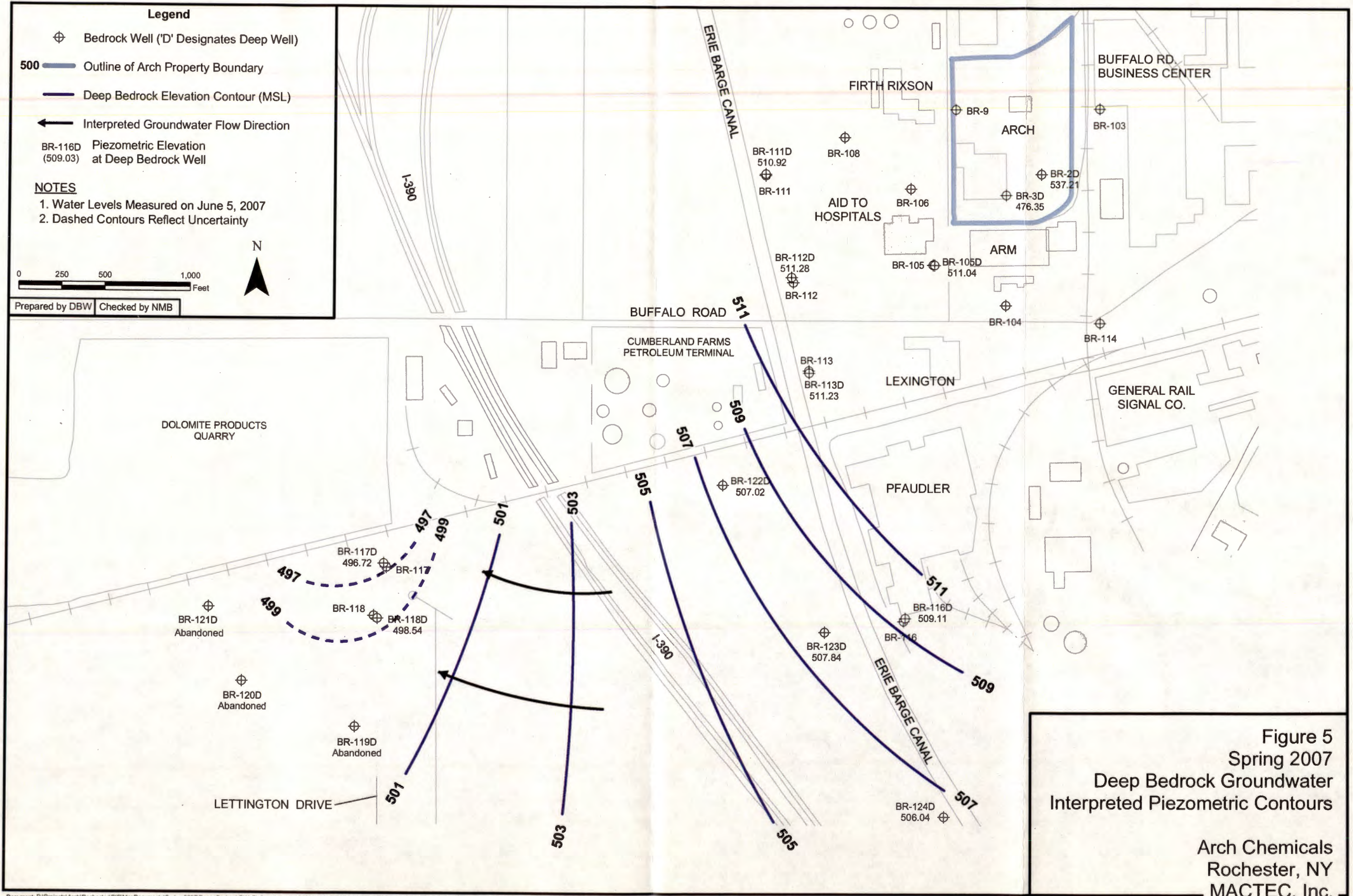
Prepared by DBW Checked by NMB



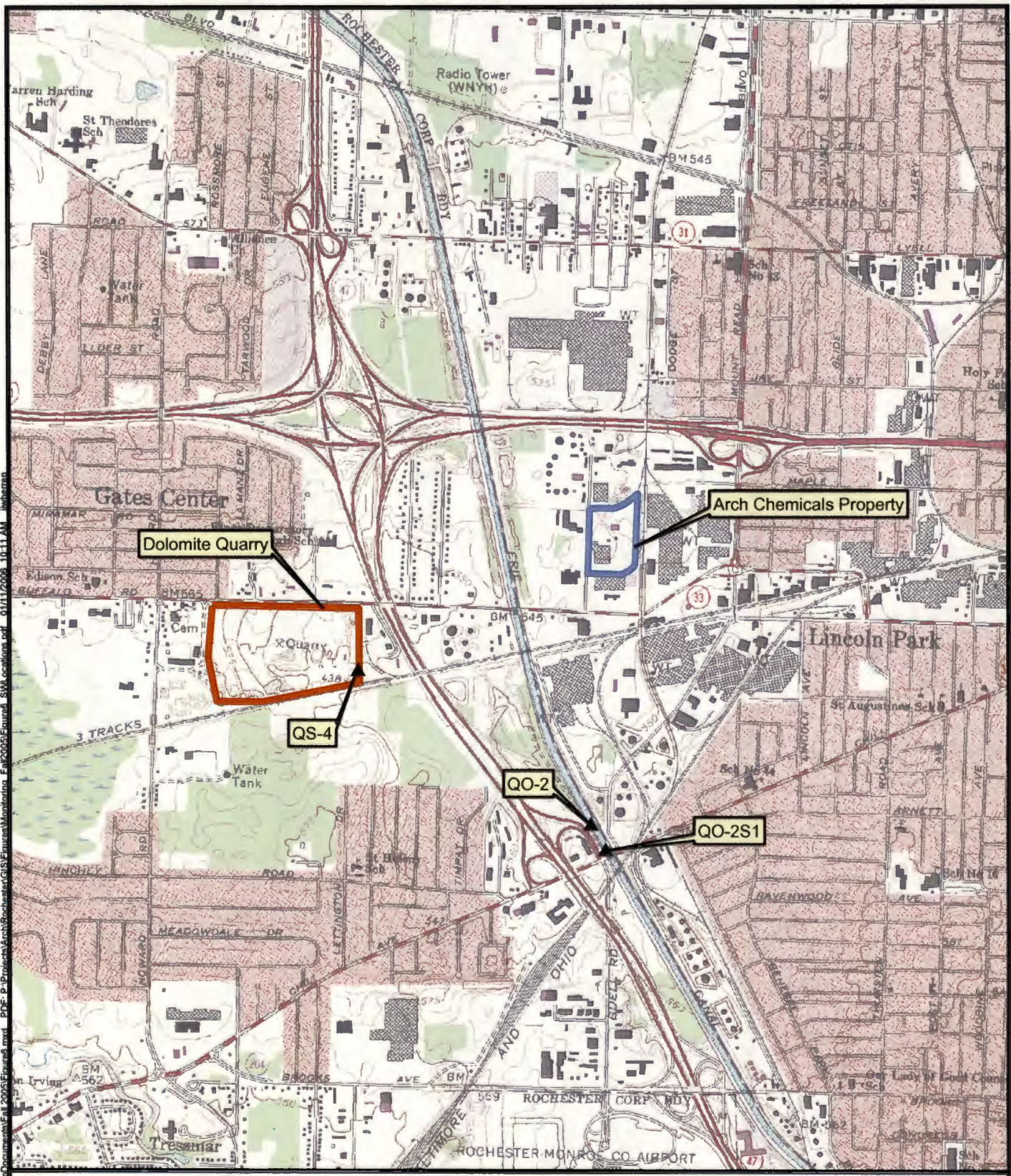
**Figure 3**  
**Spring 2007**  
**Overburden Groundwater**  
**Interpreted Piezometric Contours**

Arch Chemicals  
 Rochester, NY  
 MACTEC, Inc.

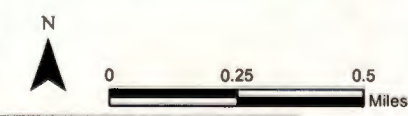








Source:  
 1:24,000 scale digital topographic map  
 obtained from New York State GIS  
 Clearinghouse at: [www.nysgis.state.ny.us](http://www.nysgis.state.ny.us)



Prepared by JJW Checked by JEB

**Legend**

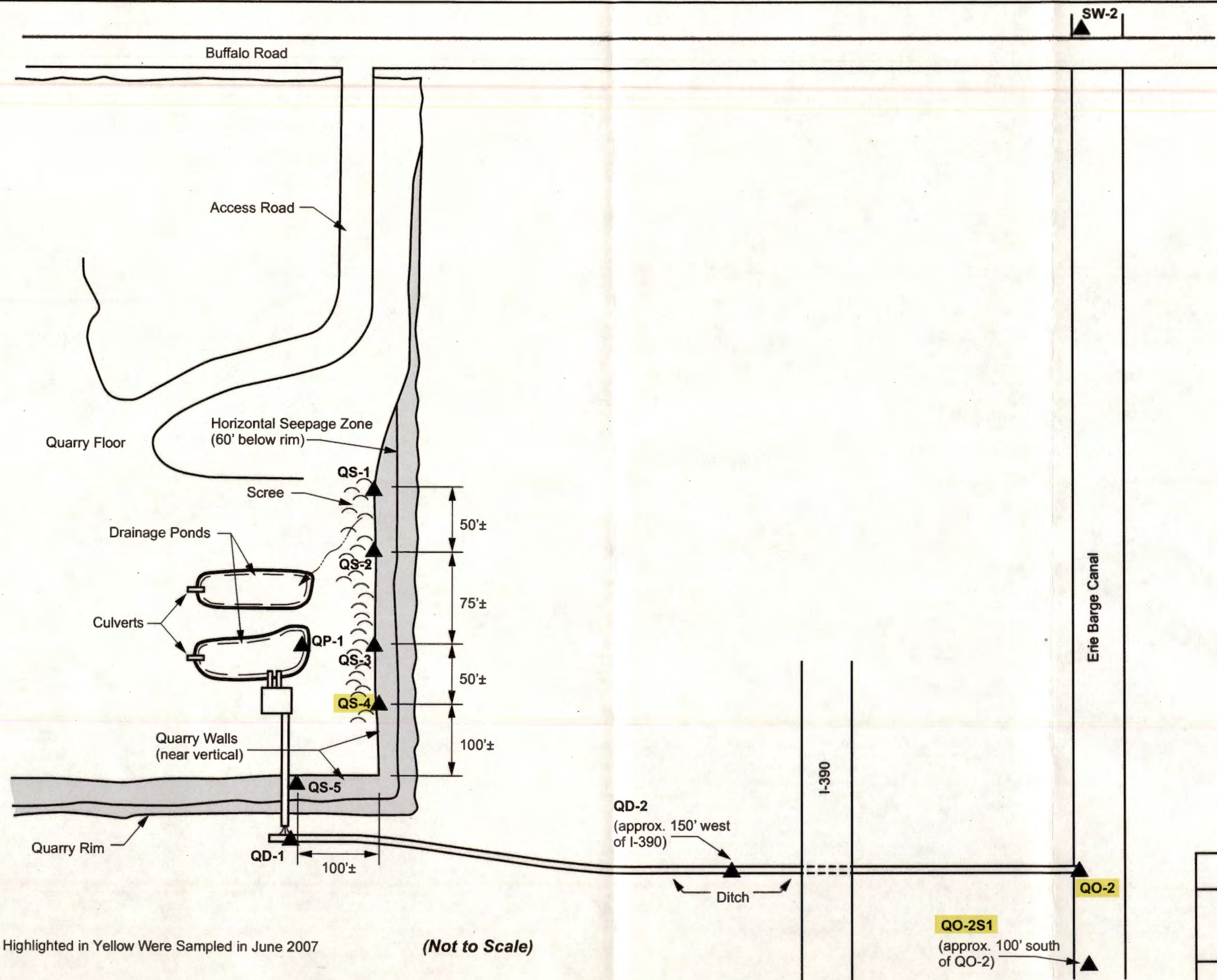
- Arch Property Boundary
- Dolomite Quarry Boundary
- ▲ Surface Water Sample Location

**Figure 6**  
**Sample Locations**  
**Erie Barge Canal**

Arch Chemicals  
 Rochester, New York  
 MACTEC, Inc.

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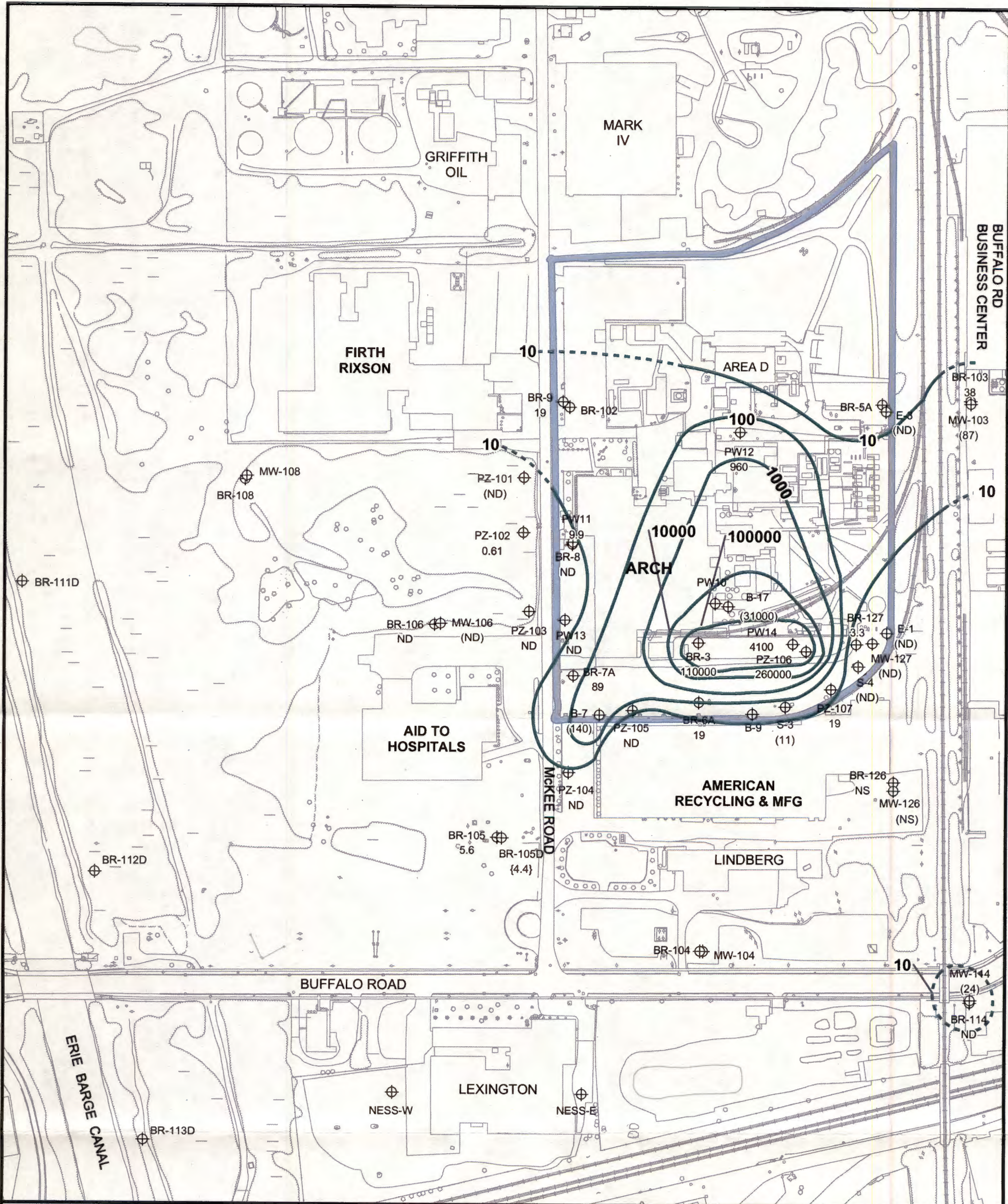


Sample Locations Highlighted in Yellow Were Sampled in June 2007

(Not to Scale)

<b>FIGURE 7</b>
<b>SAMPLE LOCATIONS DOLOMITE PRODUCTS QUARRY</b>
ARCH CHEMICALS ROCHESTER, NEW YORK



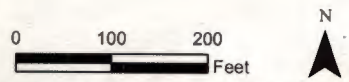


**Legend**

- Outline of Arch Property Boundary
- VOC Concentration Contour
- Monitoring Location with Concentration
- {1000} Deep Bedrock Well
- (1000) Overburden Well
- 1000 Bedrock Well
- NS Not Sampled
- ND Not Detected

**NOTES:**

1. Samples Collected in June, 2007
2. Selected VOCs consist of Carbon tetrachloride, Methylene chloride, Chloroform, TCE, and PCE.
3. Concentration contours represented for Bedrock Wells and selected Overburden and Deep Bedrock Wells.
4. Dashed concentration contours represent inferences from historical analytical results.



Prepared by DBW | Checked by NMB

**Figure 9**  
**Spring 2007**  
**Selected Volatile Organic Compound**  
**Concentration Contours**

**Arch Chemicals**  
**Rochester, NY**  
**MACTEC, Inc.**



**Tables**



**TABLE 1**  
**SPRING 2007 GROUNDWATER SAMPLING AND ANALYTICAL PROGRAM**

**ARCH CHEMICALS, INC**  
**ROCHESTER, NEW YORK**

SITE / AREA	WELL / POINT	DATE	ANALYSIS QC TYPE	PYRIDINES	VOCs
AID TO HOSPITALS	BR-106	6/13/2007	Sample	X	X
	BR-108	6/12/2007	Sample	X	
	MW-106	6/13/2007	Sample	X	X
	PZ-101	6/13/2007	Sample	X	X
	PZ-102	6/13/2007	Sample	X	X
	PZ-103	6/13/2007	Sample	X	X
AMERICAN RECYCLING & MANUFACTURING (58 MCKEE ROAD)	PZ-104	6/13/2007	Sample	X	X
ARCH ROCHESTER	B-17	6/11/2007	Sample	X	X
	B-7	6/11/2007	Sample	X	X
	BR-127	6/7/2007	Sample	X	X
	BR-3	6/11/2007	Sample	X	X
	BR-5A	6/8/2007	Sample	X	X
	BR-6A	6/6/2007	Sample	X	X
	BR-7A	6/8/2007	Sample	X	X
	BR-8	6/6/2007	Sample	X	X
	BR-9	6/8/2007	Sample	X	X
	E-1	6/6/2007	Sample	X	X
	E-3	6/7/2007	Sample	X	X
	MW-127	6/7/2007	Sample	X	X
	PW10	6/8/2007	Sample	X	X
	PW11	6/6/2007	Sample	X	X
	PW12	6/11/2007	Sample	X	X
	PW13	6/8/2007	Sample	X	X
	PW14	6/8/2007	Sample	X	X
	PZ-105	6/7/2007	Sample	X	X
	PZ-106	6/7/2007	Sample	X	X
	PZ-107	6/7/2007	Sample	X	X
	S-3	6/6/2007	Sample	X	X
	S-4	6/6/2007	Duplicate	X	X
	S-4	6/6/2007	Sample	X	X
DOLOMITE PRODUCTS, INC.	BR-117D	6/12/2007	Sample	X	
	BR-118D	6/12/2007	Sample	X	
	QS-4	6/12/2007	Sample	X	
EASTMAN KODAK (FORMERLY GERBER PROPERTY)	BR-103	6/11/2007	Sample	X	X
	MW-103	6/11/2007	Sample	X	X
ERIE BARGE CANAL (Samples in canal or property along canal)	BR-112D	6/14/2007	Sample	X	
	BR-113D	6/14/2007	Sample	X	
	BR-122D	6/12/2007	Sample	X	
	BR-123D	6/12/2007	Sample	X	
	QO-2	6/12/2007	Sample	X	
	QO-2S1	6/12/2007	Sample	X	
JACKSON WELDING	BR-114	6/14/2007	Sample	X	X
	MW-114	6/14/2007	Sample	X	X
LEXINGTON MACHINING	NESS-E	6/13/2007	Sample	X	
	NESS-W	6/13/2007	Sample	X	
PFAUDLER, INC.	BR-116	6/12/2007	Sample	X	
	BR-116D	6/12/2007	Sample	X	
RG & E RIGHT OF WAY	BR-104	6/12/2007	Sample	X	
	BR-105	6/13/2007	Sample	X	X
	BR-105D	6/13/2007	Sample	X	X
	MW-104	6/12/2007	Sample	X	

**TABLE 2**  
**SPRING 2007 GROUNDWATER MONITORING RESULTS**  
**CHLOROPYRIDINES**

**ARCH CHEMICALS, INC.**  
**ROCHESTER, NEW YORK**

LOCATION:	B-17	B-7	BR-103	BR-104	BR-105	BR-105D	BR-106	BR-108	BR-112D	BR-113D
SAMPLE DATE:	06/11/07	06/11/07	06/11/07	06/12/07	06/13/07	06/13/07	06/13/07	06/12/07	06/14/07	06/14/07
QC TYPE:	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample
BY SW-846 Method 8270C (µg/L)										
2,6-Dichloropyridine	61000	220	13	4 J	100	54 J	680 J	2 J	5 J	6 J
2-Chloropyridine	990000	600	41	20	850	760	2300	14	27	46
3-Chloropyridine	7600 J	50 U	9 U	9 U	100 U	100 U	1000 U	10 U	9 U	9 U
4-Chloropyridine	9700 J	50 U	9 U	9 U	100 U	100 U	1000 U	10 U	9 U	9 U
p-Fluoroaniline	10000 U	50 U	2 J	9 U	100 U	10 J	1000 U	10 U	9 U	9 U
Pyridine	150000	120 U	24 U	24 U	250 U	250 U	2500 U	24 U	24 U	24 U

Notes:

U = Compound not detected; value  
represents sample quantitation  
limit.



**TABLE 2**  
**SPRING 2007 GROUNDWATER MONITORING RESULTS**  
**CHLOROPYRIDINES**

**ARCH CHEMICALS, INC.**  
**ROCHESTER, NEW YORK**

<b>LOCATION:</b>	BR-114	BR-116	BR-116D	BR-117D	BR-118D	BR-122D	BR-123D	BR-127	BR-3	BR-5A
<b>SAMPLE DATE:</b>	06/14/07	06/12/07	06/12/07	06/12/07	06/12/07	06/12/07	06/12/07	06/07/07	06/11/07	06/08/07
<b>QC TYPE:</b>	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample
<b>BY SW-846 Method 8270C (µg/L)</b>										
2,6-Dichloropyridine	15 J	9 U	4 J	9 U	3 J	18	7 J	220	12000	37
2-Chloropyridine	36 J	9 U	28	4 J	56	130	46	1500	88000	170
3-Chloropyridine	47 U	9 U	10 U	9 U	9 U	9 U	9 U	95 U	10000 U	9 U
4-Chloropyridine	47 U	9 U	10 U	9 U	6 J	9 U	9 U	95 U	10000 U	9 U
p-Fluoroaniline	47 U	9 U	10 U	9 U	9 U	1 J	9 U	12 J	10000 U	17
Pyridine	120 U	24 U	24 U	24 U	24 U	24 U	24 U	73 J	11000 J	61

Notes:

U = Compound not detected; value  
represents sample quantitation  
limit.



**TABLE 2  
 SPRING 2007 GROUNDWATER MONITORING RESULTS  
 CHLOROPYRIDINES**

**ARCH CHEMICALS, INC.  
 ROCHESTER, NEW YORK**

<b>LOCATION:</b>	BR-6A	BR-7A	BR-8	BR-9	E-1	E-3	MW-103	MW-104	MW-106	MW-114
<b>SAMPLE DATE:</b>	06/06/07	06/08/07	06/06/07	06/08/07	06/06/07	06/07/07	06/11/07	06/12/07	06/13/07	06/14/07
<b>QC TYPE:</b>	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample
<b>BY SW-846 Method 8270C (µg/L)</b>										
2,6-Dichloropyridine	540	4000	71	52	4000 J	12	23	4 J	1400	10 U
2-Chloropyridine	4100	15000	280	260	72000	17	73	10	3000	10 U
3-Chloropyridine	500 U	1900 U	47 U	38 U	10000 U	10 U	9 U	9 U	50 U	10 U
4-Chloropyridine	500 U	1900 U	47 U	38 U	10000 U	10 U	9 U	9 U	50 U	10 U
p-Fluoroaniline	500 U	1900 U	14 J	3 J	10000 U	10 U	0.9 J	9 U	32 J	10 U
Pyridine	1200 U	4800 U	120 U	95 U	25000 U	24 U	24 U	24 U	120 U	24 U

Notes:

U = Compound not detected; value represents sample quantitation limit.



**TABLE 2  
 SPRING 2007 GROUNDWATER MONITORING RESULTS  
 CHLOROPYRIDINES**

**ARCH CHEMICALS, INC.  
 ROCHESTER, NEW YORK**

LOCATION:	MW-127	NESS-E	NESS-W	PW10	PW11	PW12	PW13	PW14	PZ-101	PZ-102
SAMPLE DATE:	06/07/07	06/13/07	06/13/07	06/08/07	06/06/07	06/11/07	06/08/07	06/08/07	06/13/07	06/13/07
QC TYPE:	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample
BY SW-846 Method 8270C (µg/L)										
2,6-Dichloropyridine	1400 J	26	9 U	5800	330 J	1200	360	2000	25 J	510
2-Chloropyridine	7500	200	9 U	87000	1200	2100	1400	34000	65	1600
3-Chloropyridine	1900 U	9 U	9 U	530 J	500 U	400 U	190 U	470 U	47 U	100 U
4-Chloropyridine	1900 U	9 U	9 U	1400 J	500 U	400 U	190 U	370 J	47 U	100 U
p-Fluoroaniline	1900 U	1 J	9 U	1900 U	500 U	88 J	190 U	470 U	47 U	14 J
Pyridine	4800 U	24 U	24 U	2600 J	1200 U	1000 U	470 U	2200	120 U	250 U

Notes:

U = Compound not detected; value  
 represents sample quantitation  
 limit.



**TABLE 2**  
**SPRING 2007 GROUNDWATER MONITORING RESULTS**  
**CHLOROPYRIDINES**

**ARCH CHEMICALS, INC.**  
**ROCHESTER, NEW YORK**

LOCATION:	PZ-103	PZ-104	PZ-105	PZ-106	PZ-107	S-3	S-4	S-4
SAMPLE DATE:	06/13/07	06/13/07	06/07/07	06/07/07	06/07/07	06/06/07	06/06/07	06/06/07
QC TYPE:	Sample	Sample	Sample	Sample	Sample	Sample	Duplicate	Sample
BY SW-846 Method 8270C (µg/L)								
2,6-Dichloropyridine	940	250 J	2500	4500 J	1500	1600	16	16
2-Chloropyridine	2200	1800	16000	22000	27000	5800	56	57
3-Chloropyridine	200 U	400 U	270	210	480 U	1000 U	10 U	10 U
4-Chloropyridine	200 U	400 U	44 J	71 J	340 J	1000 U	10 U	10 U
p-Fluoroaniline	55 J	400 U	40 J	33 J	480 U	1000 U	10 U	10 U
Pyridine	500 U	1000 U	120 U	1400	2000	2500 U	24 U	24 U

Notes:

U = Compound not detected; value  
represents sample quantitation  
limit.



**TABLE 3  
 SPRING 2007 GROUNDWATER MONITORING RESULTS  
 VOLATILE ORGANIC COMPOUNDS**

**ARCH CHEMICALS, INC.  
 ROCHESTER, NEW YORK**

LOCATION:	B-17	B-7	BR-103	BR-105	BR-105D	BR-106	BR-114	BR-127	BR-3	BR-5A
SAMPLE DATE:	06/11/07	06/11/07	06/11/07	06/13/07	06/13/07	06/13/07	06/14/07	06/07/07	06/11/07	06/08/07
QC TYPE:	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample
VOLATILE ORGANIC COMPOUNDS BY SW-846 Method 8260/5ML (µg/L)	B-17									
1,1,1-Trichloroethane	500 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	5 U
1,1,2,2-Tetrachloroethane	500 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	5 U
1,1,2-Trichloroethane	500 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	5 U
1,1-Dichloroethane	500 U	5 U	5 U	0.84 J	4 J	5 U	5 U	5 U	5000 U	5 U
1,1-Dichloroethene	500 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	5 U
1,2,4-Trimethylbenzene	500 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	5 U
1,2-Dichloroethane	500 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	5 U
1,2-Dichloroethene (total)	1000 U	10 U	4.3 J	42	8.6 J	0.87 J	1.1 J	5.9 J	10000 U	13
1,2-Dichloropropane	500 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	5 U
1,3,5-Trimethylbenzene	500 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	5 U
2-Butanone	2500 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25000 U	25 U
2-Hexanone	2500 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25000 U	25 U
4-Methyl-2-pentanone	2500 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25000 U	25 U
Acetone	460 J	1.7 J	2.6 J	25 U	25 U	25 U	25 U	2.4 J	25000 U	3.2 J
Benzene	59 J	0.93 J	5 U	2 J	6	18	3.5 J	0.81 J	5000 U	9.1
Bromodichloromethane	500 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	5 U
Bromoform	500 U	2.2 J	0.6 J	5 U	5 U	5 U	5 U	5 U	880 J	5 U
Bromomethane	500 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	5 U
Carbon disulfide	220 J	16	3.1 J	5 U	0.91 J	0.99 J	5 U	1.4 J	17000	5 U
Carbon tetrachloride	620	29	12	2.5 J	5 U	5 U	5 U	5 U	12000	5 U
Chlorobenzene	150 J	37	8	4.9 J	5 U	140	5 U	0.8 J	5000 U	12
Chlorodibromomethane	500 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	5 U
Chloroethane	500 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	5 U
Chloroform	28000	100	22	1.2 J	4.4 J	5 U	5 U	2.3 J	81000	2 J
Chloromethane	500 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	5 U
cis-1,3-Dichloropropene	500 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	5 U
Ethyl benzene	500 U	2.6 J	0.78 J	5 U	0.46 J	5 U	5 U	5 U	5000 U	5 U
Methylene chloride	1200	2.7 J	5 U	5 U	5 U	5 U	5 U	5 U	15000	5 U
Styrene	500 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	5 U
Tetrachloroethene	1400	8.6	3.9 J	1.2 J	5 U	5 U	5 U	5 U	2200 J	5 U
Toluene	160 J	54	15	5 U	5 U	2 J	5 U	0.59 J	4300 J	5.2
trans-1,3-Dichloropropene	500 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	5 U
Trichloroethene	80 J	5 U	5 U	0.7 J	5 U	5 U	5 U	0.98 J	5000 U	2.9 J
Vinyl acetate	2500 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25000 U	25 U
Vinyl chloride	500 U	0.73 J	15	20	2.3 J	5 U	5 U	4.1 J	5000 U	2.7 J
Xylenes, Total	1500 U	14 J	4.2 J	15 U	15 U	15 U	15 U	15 U	15000 U	1.6 J

Notes:  
 U = Compound not detected; value represents sample quantitation limit.  
 J = Estimated value.



**TABLE 3  
 SPRING 2007 GROUNDWATER MONITORING RESULTS  
 VOLATILE ORGANIC COMPOUNDS**

**ARCH CHEMICALS, INC.  
 ROCHESTER, NEW YORK**

LOCATION:	BR-6A	BR-7A	BR-8	BR-9	E-1	E-3	MW-103	MW-106	MW-114	MW-127
SAMPLE DATE:	06/06/07	06/08/07	06/06/07	06/08/07	06/06/07	06/07/07	06/11/07	06/13/07	06/14/07	06/07/07
QC TYPE:	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample
<b>VOLATILE ORGANIC COMPOUNDS                  BY SW-846 Method 8260/5ML (µg/L)</b>										
1,1,1-Trichloroethane	10 U	10 U	5 U	25 U	50 U	5 U	5 U	25 U	5 U	5 U
1,1,2,2-Tetrachloroethane	10 U	10 U	5 U	25 U	50 U	5 U	5 U	25 U	5 U	5 U
1,1,2-Trichloroethane	10 U	10 U	5 U	25 U	50 U	5 U	5 U	25 U	5 U	5 U
1,1-Dichloroethane	10 U	1.9 J	5 U	6.3 J	50 U	5 U	5 U	25 U	5 U	5 U
1,1-Dichloroethene	10 U	10 U	5 U	3.3 J	50 U	5 U	5 U	25 U	5 U	5 U
1,2,4-Trimethylbenzene	10 U	10 U	5 U	25 U	50 U	5 U	5 U	25 U	5 U	5 U
1,2-Dichloroethane	10 U	10 U	5 U	25 U	50 U	5 U	5 U	25 U	5 U	5 U
1,2-Dichloroethene (total)	68	3.4 J	0.81 J	370	10 J	10 U	10 U	50 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	5 U	25 U	50 U	5 U	5 U	25 U	5 U	5 U
1,3,5-Trimethylbenzene	10 U	10 U	5 U	25 U	50 U	5 U	5 U	25 U	5 U	5 U
2-Butanone	50 U	50 U	25 U	120 U	250 U	25 U	25 U	120 U	25 U	25 U
2-Hexanone	50 U	50 U	25 U	120 U	250 U	25 U	25 U	120 U	25 U	25 U
4-Methyl-2-pentanone	50 U	50 U	25 U	120 U	250 U	25 U	25 U	120 U	25 U	25 U
Acetone	50 U	50 U	25 U	120 U	250 U	25 U	25 U	120 U	25 U	1.5 J
Benzene	0.97 J	17	3.2 J	64	50 U	5 U	5 U	25	5 U	0.68 J
Bromodichloromethane	10 U	10 U	5 U	25 U	50 U	5 U	5 U	25 U	5 U	5 U
Bromoform	10 U	10 U	5 U	25 U	50 U	5 U	1.4 J	25 U	5 U	5 U
Bromomethane	10 U	10 U	5 U	25 U	50 U	5 U	5 U	25 U	5 U	5 U
Carbon disulfide	10 U	6.3 J	5 U	25 U	16 J	5 U	7.8	25 U	5 U	5 U
Carbon tetrachloride	10 U	7.2 J	5 U	25 U	50 U	5 U	21	25 U	0.5 J	5 U
Chlorobenzene	13	170	62	17 J	19 J	5 U	16	250	5 U	0.88 J
Chlorodibromomethane	10 U	10 U	5 U	25 U	50 U	5 U	5 U	25 U	5 U	5 U
Chloroethane	10 U	10 U	5 U	25 U	50 U	5 U	5 U	25 U	5 U	5 U
Chloroform	11	50	5 U	15 J	50 U	5 U	59	25 U	12	5 U
Chloromethane	10 U	10 U	5 U	25 U	50 U	5 U	5 U	25 U	5 U	5 U
cis-1,3-Dichloropropene	10 U	10 U	5 U	25 U	50 U	5 U	5 U	25 U	5 U	5 U
Ethyl benzene	10 U	10 U	5 U	10 J	5.7 J	5 U	1.4 J	25 U	5 U	5 U
Methylene chloride	10 U	28	5 U	25 U	50 U	5 U	0.86 J	25 U	5 U	5 U
Styrene	10 U	10 U	5 U	25 U	50 U	5 U	5 U	25 U	5 U	5 U
Tetrachloroethene	5.4 J	2.2 J	5 U	25 U	50 U	5 U	6.4	25 U	3.8 J	5 U
Toluene	10 U	6.6 J	0.54 J	4.5 J	50 U	5 U	30	25 U	5 U	5 U
trans-1,3-Dichloropropene	10 U	10 U	5 U	25 U	50 U	5 U	5 U	25 U	5 U	5 U
Trichloroethene	2.9 J	1.8 J	5 U	3.6 J	50 U	5 U	5 U	25 U	7.5	5 U
Vinyl acetate	50 U	50 U	25 U	120 U	250 U	25 U	25 U	120 U	25 U	25 U
Vinyl chloride	1.2 J	2.2 J	5 U	140	5.8 J	5 U	5 U	25 U	5 U	5 U
Xylenes, Total	30 U	2.8 J	15 U	75 U	150 U	15 U	8 J	75 U	15 U	15 U

Notes:  
 U = Compound not detected; value represents sample quantitation limit.  
 J = Estimated value.



**TABLE 3  
 SPRING 2007 GROUNDWATER MONITORING RESULTS  
 VOLATILE ORGANIC COMPOUNDS**

**ARCH CHEMICALS, INC.  
 ROCHESTER, NEW YORK**

LOCATION:	PW10	PW11	PW12	PW13	PW14	PZ-101	PZ-102	PZ-103	PZ-104	PZ-105
SAMPLE DATE:	06/08/07	06/06/07	06/11/07	06/08/07	06/08/07	06/13/07	06/13/07	06/13/07	06/13/07	06/07/07
QC TYPE:	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample
VOLATILE ORGANIC COMPOUNDS BY SW-846 Method 8260/5ML (µg/L)										
1,1,1-Trichloroethane	50 U	50 U	1000 U	10 U	250 U	5 U	5 U	50 U	5 U	20 U
1,1,2,2-Tetrachloroethane	50 U	50 U	1000 U	10 U	250 U	5 U	5 U	50 U	5 U	20 U
1,1,2-Trichloroethane	50 U	50 U	1000 U	10 U	250 U	5 U	5 U	50 U	5 U	20 U
1,1-Dichloroethane	50 U	12 J	1000 U	10 U	250 U	5 U	5 U	50 U	5 U	20 U
1,1-Dichloroethene	50 U	50 U	1000 U	10 U	250 U	5 U	5 U	50 U	5 U	20 U
1,2,4-Trimethylbenzene	50 U	50 U	1000 U	10 U	250 U	5 U	5 U	50 U	5 U	20 U
1,2-Dichloroethane	50 U	50 U	1000 U	10 U	250 U	5 U	5 U	50 U	5 U	20 U
1,2-Dichloroethene (total)	100 U	63 J	2000 U	20 U	500 U	10 U	1 J	100 U	1.2 J	40 U
1,2-Dichloropropane	50 U	50 U	1000 U	10 U	250 U	5 U	5 U	50 U	5 U	20 U
1,3,5-Trimethylbenzene	50 U	50 U	1000 U	10 U	250 U	5 U	5 U	50 U	5 U	20 U
2-Butanone	250 U	250 U	5000 U	50 U	1200 U	25 U	25 U	250 U	25 U	100 U
2-Hexanone	250 U	250 U	5000 U	50 U	1200 U	25 U	25 U	250 U	25 U	100 U
4-Methyl-2-pentanone	250 U	250 U	5000 U	50 U	1200 U	25 U	25 U	250 U	25 U	100 U
Acetone	42 J	250 U	5000 U	50 U	1200 U	2.2 J	2.1 J	250 U	2.1 J	7.4 J
Benzene	5.8 J	27 J	1000 U	11	250 U	0.66 J	20	29 J	1.9 J	10 J
Bromodichloromethane	50 U	50 U	1000 U	10 U	250 U	5 U	5 U	50 U	5 U	20 U
Bromoform	5.3 J	50 U	330 J	10 U	250 U	5 U	5 U	50 U	5 U	20 U
Bromomethane	50 U	50 U	1000 U	10 U	250 U	5 U	5 U	50 U	5 U	20 U
Carbon disulfide	50 U	50 U	1000 U	10 U	96 J	5 U	0.42 J	50 U	5 U	20 U
Carbon tetrachloride	140	50 U	1000 U	10 U	390	5 U	5 U	50 U	5 U	20 U
Chlorobenzene	19 J	140	7500	100	250 U	2.9 J	310	510	4.1 J	140
Chlorodibromomethane	50 U	50 U	1000 U	10 U	250 U	5 U	5 U	50 U	5 U	20 U
Chloroethane	50 U	50 U	1000 U	10 U	250 U	5 U	5 U	50 U	5 U	20 U
Chloroform	630	9.9 J	350 J	10 U	3400	5 U	0.61 J	50 U	5 U	20 U
Chloromethane	50 U	50 U	1000 U	10 U	250 U	5 U	5 U	50 U	5 U	20 U
cis-1,3-Dichloropropene	50 U	50 U	1000 U	10 U	250 U	5 U	5 U	50 U	5 U	20 U
Ethyl benzene	26 J	5.1 J	850 J	10 U	250 U	5 U	5 U	50 U	5 U	20 U
Methylene chloride	50 U	50 U	510 J	10 U	250 U	5 U	5 U	50 U	5 U	20 U
Styrene	50 U	50 U	1000 U	10 U	250 U	5 U	5 U	50 U	5 U	20 U
Tetrachloroethene	260	50 U	99 J	10 U	260	5 U	5 U	50 U	5 U	20 U
Toluene	35 J	50 U	12000	1.2 J	92 J	5 U	4.6 J	9.6 J	5 U	2.4 J
trans-1,3-Dichloropropene	50 U	50 U	1000 U	10 U	250 U	5 U	5 U	50 U	5 U	20 U
Trichloroethene	210	50 U	1000 U	10 U	250 U	5 U	5 U	50 U	5 U	20 U
Vinyl acetate	250 U	250 U	5000 U	50 U	1200 U	25 U	25 U	250 U	25 U	100 U
Vinyl chloride	9.8 J	47 J	1000 U	1.3 J	250 U	5 U	0.48 J	50 U	5 U	20 U
Xylenes, Total	180	150 U	4600	30 U	750 U	15 U	15 U	150 U	15 U	60 U

Notes:

- U = Compound not detected; value represents sample quantitation limit.
- J = Estimated value.



**TABLE 3  
 SPRING 2007 GROUNDWATER MONITORING RESULTS  
 VOLATILE ORGANIC COMPOUNDS**

**ARCH CHEMICALS, INC.  
 ROCHESTER, NEW YORK**

LOCATION:	PZ-106	PZ-107	S-3	S-4
SAMPLE DATE:	06/07/07	06/07/07	06/06/07	06/06/07
QC TYPE:	Sample	Sample	Sample	Duplicate
<b>VOLATILE ORGANIC COMPOUNDS</b>				
<b>BY SW-846 Method 8260/5ML (µg/L)</b>				
1,1,1-Trichloroethane	12000 U	20 U	1.2 J	5 U
1,1,2,2-Tetrachloroethane	12000 U	20 U	5 U	5 U
1,1,2-Trichloroethane	12000 U	20 U	5 U	5 U
1,1-Dichloroethane	12000 U	20 U	7.1	5 U
1,1-Dichloroethene	12000 U	20 U	1.1 J	5 U
1,2,4-Trimethylbenzene	12000 U	20 U	0.61 J	5 U
1,2-Dichloroethane	12000 U	20 U	5 U	5 U
1,2-Dichloroethene (total)	25000 U	28 J	120	10 U
1,2-Dichloropropane	12000 U	20 U	5 U	5 U
1,3,5-Trimethylbenzene	12000 U	20 U	5 U	5 U
2-Butanone	62000 U	100 U	25 U	25 U
2-Hexanone	62000 U	100 U	25 U	25 U
4-Methyl-2-pentanone	62000 U	100 U	25 U	25 U
Acetone	62000 U	22 J	25 U	25 U
Benzene	12000 U	3.9 J	35	5 U
Bromodichloromethane	12000 U	20 U	5 U	5 U
Bromoform	5000 J	20 U	5 U	5 U
Bromomethane	12000 U	20 U	5 U	5 U
Carbon disulfide	46000	12 J	2 J	5 U
Carbon tetrachloride	55000	20 U	5 U	5 U
Chlorobenzene	12000 U	5.9 J	110	0.93 J
Chlorodibromomethane	12000 U	20 U	5 U	5 U
Chloroethane	12000 U	20 U	5 U	5 U
Chloroform	200000	6.4 J	8.1	5 U
Chloromethane	12000 U	20 U	5 U	5 U
cis-1,3-Dichloropropene	12000 U	20 U	5 U	5 U
Ethyl benzene	12000 U	20 U	4.6 J	5 U
Methylene chloride	12000 U	20 U	5 U	5 U
Styrene	12000 U	20 U	5 U	5 U
Tetrachloroethene	1400 J	20 U	1.2 J	5 U
Toluene	12000 U	9.1 J	4.5 J	5 U
trans-1,3-Dichloropropene	12000 U	20 U	5 U	5 U
Trichloroethene	12000 U	13 J	2 J	5 U
Vinyl acetate	62000 U	100 U	25 U	25 U
Vinyl chloride	12000 U	8.3 J	70	5 U
Xylenes, Total	38000 U	60 U	3.1 J	15 U

Notes:  
 U = Compound not detected; value represents sample quantitation limit.  
 J = Estimated value.



**TABLE 4**  
**COMPARISON OF FALL 2006**  
**CHLOROPYRIDINES AND VOLATILE ORGANICS CONCENTRATIONS**  
**IN GROUNDWATER TO PREVIOUS RESULTS (ug/L)**

**ARCH ROCHESTER**  
**SEMI-ANNUAL GROUNDWATER MONITORING REPORT - FEBRUARY 2007**

WELL	SELECTED CHLOROPYRIDINES				SELECTED VOCs			
	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	NOV-2006 RESULT	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	NOV-2006 RESULT
<b>ON-SITE WELLS/LOCATIONS</b>								
B-17	5	28,000,000	150,000		5	345,000	25,000	
B-7	5	9,100	2,700		5	256	51	
BR-127	4	4,700	3,100	1,478	4	3	2	ND
BR-3	5	6,500,000	75,000		5	920,000	520,000	
BR-5A	10	1,700	580	227	10	9,400	91	5.31
BR-6A	10	144,500	30,000	450	10	26,000	5,600	55
BR-7A	10	510,000	15,000	<b>35,052</b>	10	3,000	290	73.7
BR-8	5	57,000	900		5	6,900	5.2	
BR-9	10	720	210	119	10	160	19	<b>27.8</b>
E-1	9	171,680	50,000	16,500	9	5,300	66	28
E-3	5	600	100		5	12,000	100	
MW-127	4	15,000	4,700	<b>10,210</b>	4	180	45	ND
PW10	10	244,000	90,000	<b>323,900</b>	10	120,000	22,000	4139
PW11	10	27,000	1,800	<b>2,741</b>	11	30,000	6,500	735.4
PW12	10	15,000	3,600	2,938	10	120,000	2,700	1580
PW13	4	7,500	2,500	786	4	920	270	<b>295.8</b>
PW14	3	29,000	19,000	<b>26,500</b>	3	160,000	71000	10500
PZ-105	6	190,000	7,900	3,570	6	9,700	1,000	3.5
PZ-106	6	124,000	51,000	11,080	6	1,359,000	850,000	383500
PZ-107	10	11,000	2,900	<b>4,250</b>	10	12,000	270	1.2
S-3	9	21,000	8,000	6,246	9	2,500	370	37.44
S-4	9	3,200	210	21	9	870	99	ND
<b>OFF-SITE WELLS/LOCATIONS</b>								
BR-103	5	400	0.6		5	3	0.54	
BR-104	5	3,100	1.2		0	9	NA	
BR-105	10	24,000	1,300	731	10	310	3.8	1.21
BR-105D	10	10,000	1,900	414	10	230	5.4	<b>5.7</b>
BR-106	10	24,600	6,900	5,544	11	6,300	330	0.62
BR-108	5	1,700	26		0	ND	NA	
BR-112D	5	310	26		0	4.3	NA	
BR-113D	5	490	40			2.8		
BR-114	5	521	330		5	12	0.73	
BR-116	5	12	0.0			84		
BR-116D	5	710	13			120		
BR-117D	5	80	17			1.9		
BR-118D	5	330	100			6.6		
BR-122D	5	650	140			ND		
BR-123D	5	860	130			4		
BR-126	2	NA	5700	3,390	3	NA	110	<b>225.2</b>
MW-103	5	82	5.2		5	ND	150	
MW-104	5	180	1.6		0	1	NA	



**TABLE 4**  
**COMPARISON OF FALL 2006**  
**CHLOROPYRIDINES AND VOLATILE ORGANICS CONCENTRATIONS**  
**IN GROUNDWATER TO PREVIOUS RESULTS (ug/L)**

**ARCH ROCHESTER**  
**SEMI-ANNUAL GROUNDWATER MONITORING REPORT - FEBRUARY 2007**

WELL	SELECTED CHLOROPYRIDINES				SELECTED VOCs			
	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	NOV-2006 RESULT	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	NOV-2006 RESULT
MW-106	10	130,000	9,500	8,240	10	453	46	ND
MW-114	5	18	0.4		5	19	16	
MW-126	1	NA	63		1	NA	ND	
MW-16	5	360	180	3	1	NA	8.0	
NESS-E	5	5,000	310		0	700	NA	
NESS-W	5	2,100	130		0	89	NA	
PZ-101	10	27,000	1,100	361	10	6.1	0.77	<b>2.47</b>
PZ-102	10	58,000	3,800	1,116	10	10,000	2.2	<b>4.9</b>
PZ-103	10	73,000	12,000	5,950	11	44,300	7,200	13
PZ-104	10	9,100	4,000	2,280	10	40	1.1	1.4
QD-1	5	ND	2		2	ND	ND	
QO-2	11	380	2.2	<b>4</b>	7	ND	ND	
QO-2S1	11	27	0.05	0	7	ND	ND	
QS-4	14	3,400	250	240	9	ND	ND	

Note:

- 1) Number of samples and mean reflect 5-year sampling period from November 2001 through June 2006. Historic maximum based on all available results from March 1990 through May 2006.
- 2) Chloropyridines represented by: 2-Chloropyridine, 2,6-Dichloropyridine, and 3-Chloropyridine, 4-Chloropyridine, p-Fluoroaniline, and Pyridine.
- 3) Selected VOCs represented by Carbon Tetrachloride, Chloroform, Methylene Chloride, Tetrachloroethene, and Trichloroethene.
- 4) **Bold and shade** - November 2006 exceeds 5-year mean.
- 5) NA = Not analyzed or not applicable  
 ND = Not detected  
 BLANK = Not sampled



**TABLE 5**  
**SPRING 2007 QUARRY SEEP AND OUTFALL WATER SAMPLE RESULTS**  
**VOLATILE ORGANIC COMPOUNDS**

**ARCH CHEMICALS, INC.**  
**ROCHESTER, NEW YORK**

LOCATION	QS-4	QO-2	QO-2S1
DATE	6/12/2007	6/12/2007	6/12/2007
SAMPLE ID	Sample	Sample	Sample
<b>SELECTED CHLOROPYRIDINES</b>			
<b>BY SW-846 Method 8270C (µg/L)</b>			
2,6-Dichloropyridine	41 J	4 J	9 U
2-Chloropyridine	200	2 J	9 U
3-Chloropyridine	48 U	10 U	9 U
4-Chloropyridine	48 U	10 U	9 U
p-Fluoroaniline	48 U	10 U	9 U
Pyridine	120 U	24 U	24 U

Notes:

U = Compound not detected; value represents  
sample quantitation limit.

J = Estimated value.



**TABLE 6**  
**EXTRACTION WELL WEEKLY FLOW MEASUREMENTS - DECEMBER 2006 THROUGH MAY 2007**

ARCH CHEMICALS, INC.  
 ROCHESTER, NEW YORK

Week Ending	BR-5A [Gal./Wk.]	BR-7A [Gal./Wk.]	BR-9 [Gal./Wk.]	PW-11 [Gal./Wk.]	PW-13 [Gal./Wk.]	PW-14 [Gal./Wk.]	Total [Gal.]
<b>Dec '06</b>							
12/06/06	39,690	49,973	0 **	25,138	0 **	1,706	116,507
12/13/06	30,595	27,972	11,273 **	32,492	39,508	3,326	145,166
12/20/06	42,642	24,412	42,845	22,663	32,679	2,106 *	167,347
12/27/06	33,888	21,183	46,847	21,802	36,187	1,798	161,705
						<b>Total [Gal.]</b>	<b>590,725</b>
<b>Jan '07</b>							
01/03/07	41,165	23,057	59,565	22,363	50,111	3,347	199,608
01/10/07	35,189	47,562	60,703	13,452	44,871	1,563	203,340
01/17/07	56,136	71,289	81,097	17,009	38,902 *	1,615	266,048
01/24/07	58,462	60,736	86,303	15,446	55,964	1,599	278,510
01/31/07	50,400 *	39,642	76,906	9,682	53,430	888	230,948
						<b>Total [Gal.]</b>	<b>1,178,454</b>
<b>Feb '07</b>							
02/07/07	50,400 *	34,047	67,467	8,330	51,853	642	212,739
02/14/07	50,400 *	48,430	60,016 *	11,470	45,394	562	216,272
02/21/07	50,400 *	52,459	60,480 *	6,553 *	33,303	1,246	204,441
02/28/07	57,748	50,422	64,269	4,566 *	40,234 *	934	218,173
						<b>Total [Gal.]</b>	<b>851,625</b>
<b>Mar '07</b>							
03/07/07	39,869	28,917	68,868	11,379 *	40,320 *	786	190,139
03/14/07	45,436	31,698	74,148	14,253 *	40,320 *	1,124	206,979
03/21/07	28,237	44,792	88,840	15,120 *	40,320 *	570	217,879
03/28/07	51,445	42,679 *	81,176	24,065	40,320 *	411	240,096
						<b>Total [Gal.]</b>	<b>855,093</b>
<b>Apr '07</b>							
04/04/07	27,407	39,618 *	82,214	22,037	40,320 *	1,473	213,069
04/11/07	12,684 **	42,906 *	74,647	19,511	40,320 *	861	190,929
04/18/07	7,495 **	53,844	77,915	20,160 *	40,320 *	1,151	200,885
04/25/07	6,871 **	50,592	94,242	20,160 *	40,320 *	2,424	214,609
						<b>Total [Gal.]</b>	<b>1,068,162</b>
<b>May '07</b>							
05/02/07	4,226 **	58,839 *	93,267	20,160 *	40,320 *	374	217,186
05/09/07	4,537 **	42,611	90,242	20,160 *	40,320 *	2,327	200,197
05/16/07	32,429	86,079	91,105	20,160 *	40,320 *	34	270,127
05/23/07	55,224	66,547	138,576	28,344 *	40,320 *	44	329,055
05/30/07	28,706	65,551	146,500	37,188	40,320 *	52	318,317
						<b>Total [Gal.]</b>	<b>1,117,697</b>
<b>Total 6 Mo. Removal (Gal.)</b>							
	941,681	1,205,857	1,919,511	483,663	1,046,596	32,964	5,630,272

**Notes:**

- 1) \* - Flow rate is estimated due to a meter failure
- 2) \*\* - Not operating (or operating at reduced rate) due to pump failure or clogged line



TABLE 8  
2007 SAMPLING SCHEDULE  
ARCH CHEMICALS, INC.  
ROCHESTER, NEW YORK

ARCH ROCHESTER						2007					
MONITORING PROGRAM						SPRING		FALL		TOTAL	
	Well	zone	area	Frequency/Parameters	Purpose	Pyridines	VOCs	Pyridines	VOCs	Pyridines	VOCs
OFF-SITE MONITORING	MW-103	OB	KODAK EAST	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	BR-103	BR	KODAK EAST	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	MW-104	OB	BUFFALO RD	annual monitoring, PYR	trend monitoring	1				1	0
	BR-104	BR	BUFFALO RD	annual monitoring, PYR	trend monitoring	1				1	0
	BR-105	BR	AID-HOSP	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	BR-105D	BR deep	AID-HOSP	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	MW-106	OB	AID-HOSP	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	BR-106	BR	AID-HOSP	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	BR-108	BR	AID-HOSP	annual monitoring, PYR	trend monitoring	1				1	0
	BR-112D	BR deep	NYSDOT	annual monitoring, PYR	trend monitoring	1				1	0
	BR-113D	BR deep	NYSDOT	annual monitoring, PYR	trend monitoring	1				1	0
	MW-114	OB	JACKSON	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	BR-114	BR	JACKSON	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	BR-116	BR	PFAUDLER	annual monitoring, PYR	trend monitoring	1				1	0
	BR-116D	BR deep	PFAUDLER	annual monitoring, PYR	trend monitoring	1				1	0
	BR-117D	BR deep	QUARRY	annual monitoring, PYR	trend monitoring	1				1	0
	BR-118D	BR deep	QUARRY	annual monitoring, PYR	trend monitoring	1				1	0
	BR-122D	BR deep	QUARRY	annual monitoring, PYR	trend monitoring	1				1	0
	BR-123D	BR deep	QUARRY	annual monitoring, PYR	trend monitoring	1				1	0
	NESS-E	BR deep	NESS	annual monitoring, PYR	trend monitoring	1				1	0
	NESS-W	BR deep	NESS	annual monitoring, PYR	trend monitoring	1				1	0
	PZ-101	BR	McKee Rd	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	PZ-102	BR	McKee Rd	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	PZ-103	BR	McKee Rd	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	PZ-104	BR	ARM	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	MW-16	BR	Gen'l Circuits	annual monitoring, PYR	trend monitoring	1		1		1	0
ON-SITE MONITORING	PZ-107	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	PZ-106	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	PZ-105	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	BR-127	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	BR-3	BR	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	BR-8	BR	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	BR-9	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	BR-5A	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	BR-6A	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	BR-7A	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	B-17	OB	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	B-7	OB	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	S-3	OB	ON-SITE	semi-annual monitoring, VOCs & PYR	continue until replaced by trench	1	1	1	1	2	2
	S-4	OB	ON-SITE	semi-annual monitoring, VOCs & PYR	continue until replaced by trench	1	1	1	1	2	2
	E-1	OB	ON-SITE	semi-annual monitoring, VOCs & PYR	continue until replaced by trench	1	1	1	1	2	2
	E-3	OB	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	MW-127	OB	ON-SITE	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	PW10	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	PW11	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	PW12	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
PW13	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2	
PW14	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2	
QUARRY/CANAL MONITORING	QS-4	quarry seep	QUARRY	semi-annual monitoring, VOCs & PYR	trend monitoring	1		1		2	0
	QO-2	quarry outfall	DITCH	semi-annual monitoring, VOCs & PYR	trend monitoring	1		1		2	0
	QO-2S1	canal at outfall	CANAL	semi-annual monitoring, VOCs & PYR	surface water monitoring	1				2	0
<b>TOTAL SAMPLES</b>						<b>50</b>	<b>34</b>	<b>29</b>	<b>25</b>	<b>79</b>	<b>59</b>



**Appendix A**

**Groundwater Field Sampling Data Sheets**



# STL

**STL Buffalo**  
10 Hazelwood Drive, Suite 106  
Amherst, NY 14228

Tel: 716 691 2600 Fax: 716 691 7991  
www.stl-inc.com

## FIELD REPORT

### REMEDIAL INVESTIGATION SAMPLING ARCH CHEMICAL ROCHESTER, NEW YORK

SPRING 2007 Event

**Prepared For:**

**MacTec, Inc.**  
511 Congress Street  
Portland, Maine 04101

Attention: Mr. Nelson Breton

**Prepared By:**

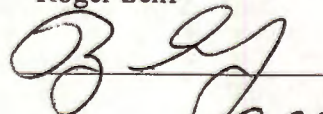
**SEVERN TRENT LABORATORIES, INC.**  
Audubon Business Center  
10 Hazelwood Drive  
Amherst, New York 14228-2298

NY5A5762

Written By:

Roger Senf

Reviewed By:



Date:

8-21-07



## 1.0 INTRODUCTION

This report describes the sampling of the following points:

- Forty-eight (48) groundwater samples (BR-126 & MW-126 not located)
- One (1) barge canal sample
- One (1) quarry outfall samples
- One (1) quarry seep/pond sample

These activities were in support of the Phase II Remediation Investigation being conducted at the Arch Chemical facility in Rochester, New York. The samples were collected from June 6- July 6, 2007 by Severn Trent Laboratories, Inc. (STL) personnel.

## 2.0 METHODOLOGIES

### 2.1 Water Level Measurements

Static water levels in all groundwater wells were measured from the top of the well casing/riser with an electronic water level indicator. All well bottoms were sounded with the weighted steel measuring tape. All measurements were recorded to the nearest hundredth of a foot (0.01 feet). The length of the measuring device which contacted the water was cleaned between wells with a deionized water rinse and paper towel wipe. These data are presented on Sampling Summary Table and Field Observation forms.

### 2.2 Well Purging

Monitoring wells were evacuated prior to sampling employing one of the following methods:

- 1) Purging three (3) times the standing water volume using precleaned or dedicated 1.25" X 5' stainless steel bailers, 2" X 5' polyvinyl chloride bailers, peristaltic pump or QED Low-Flow Bladder pumps.
- 2) Evacuated with the low flow/low stress purging technique using either QED Low-Flow Bladder pumps or a variable rate peristaltic pump.

Wells that were purged of three (3) standing volumes were mainly wells located on or very near the Eric Canal and historically purged with this method prior to sampling. The remaining wells were evacuated with a low flow/low stress purging technique. This technique involves the use of a variable flow rate bladder or peristaltic pump. The pumps were employed to purge the monitoring wells at a flow rate such that drawdown of the water column from static conditions is minimal. Field measurements of pH, specific



conductance, temperature, ORP, dissolved oxygen and turbidity are monitored every 3-5 minutes until stabilization of parameters is realized. Once stabilization has occurred, sampling can be conducted. All purged water was collected into 55-gallon drums for disposal at the on-site wastewater treatment facility. Data pertaining to each evacuation are presented on the Sampling Summary Table and field Observation Forms.

### 2.3 Surface Water Samples

Surface water samples were collected from one (1) location on the Erie Barge Canal, one (1) outfall sample and one (1) seep location. Sample locations were noted on the Field Forms.

## 3.0 SAMPLING

### 3.1 Monitoring Wells

All groundwater wells were sampled using precleaned or dedicated 1.25" X 1.25" X 5' stainless steel bailers, perisaltic pumps or bladder (SamplePro) pumps when low flow purging techniques were used. Each bailer was constructed with teflon, bottom-filling check valve and was assembled without glues or welds. New ¼" poly rope was attached to each bailer. The bailer was slowly lowered into the water column, minimizing agitation and devolatilization. Low density polyethylene (LDPE) tubing was used with both the bladder (QED) and the peristaltic pumps. The bladder pumps were decontaminated between sample locations in accordance with the work plan. Personnel exercised care in all aspects of the sampling to ensure the collection of a representative sample. An additional sample container was collected from each well in order to facilitate the measurement of field analytical parameters. Data pertaining to sampling are presented on the Sampling Summary Table and the Field Observation Forms.

### 3.2 Canal Sampling

When possible, samples were collected directly from the canal into appropriate sample containers. Otherwise, samples were collected with the use of a unique, laboratory-cleaned stainless steel bailer. The bailers were immersed just below the surface and removed. Sample was poured directly into the appropriate container. An additional container was collected to facilitate the measurement of field parameters. Additional data pertaining to these samples is presented in the Sampling Summary Table and Field Observation Forms.

### 3.3 Seep Sampling

Groundwater samples were collected from seeps at the quarry (QS4) located on Buffalo Road. The samples were collected with the use of a laboratory cleaned stainless steel bucket



and was then poured directly into the appropriate containers. An additional container was collected to facilitate the measurement of field parameters. Data pertaining to this sampling is presented in the Sampling Summary Table and Field Observation Forms.

#### **4.0 SAMPLE CONTAINERS**

Monitoring wells and surface water samples requiring analysis for volatile organics were collected into 40 ml glass vials with teflon septa. Samples for semi-volatile and Pyridine analysis were collected into one (1) liter amber glass bottles with teflon-lined caps. All bottles were purchased new and cleaned (Protocol A, 300 series) from Environmental Supply Services. Each container was labeled with the following information:

- Sample Identification (Well/Point I.D.)
- Date
- Project Number
- Sampler's Initials

#### **5.0 FIELD MEASUREMENTS**

On-site field measurements were made of each sample's pH, specific conductance and temperature. All measurements were made in accordance with protocols outlined in Methods for Chemical Analysis of Water and Wastes (EPA – 600/4-79-9020). These data were presented on the Sampling Summary Table and Field Observation Forms.

#### **6.0 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)**

##### **6.1 Trip Blanks**

Trip blanks were collected with each sample shipment requiring volatile organic analysis. Each trip blank consisted of two 40 ml glass vials with teflon septa which were filled with deionized water at the STL laboratory. These blanks were transported to the site, stored with field collected samples and submitted to the STL facility for analysis.

##### **6.2 Equipment Rinse Blank**

Equipment rinse blanks were collected as required by the work plan.

#### **7.0 CHAIN OF CUSTODY**



Chain of custody was initiated at the time of sample collection and maintained through delivery to the STL facility in Amherst, New York. Copies of these documents are included in the analytical report package.



Sampling Summary Table  
 ARCH CHEMICAL  
 JUNE 2007  
 RI SAMPLING/ROCHESTER NY FACILITY

Sample Point	Water Level		Water Level (ft)*	Water Elevation (ft)**	Bottom Of Well (ft)*	Field Measurements		pH (STD) (Units)	Spec. Cond. (umhos)	Temp (°C)	Turb. (NTU)	Other Field Measurements
	Date	Time				Date	Time					
B-17	06/11/2007	1102	5.72	N/A	N/A	06/11/2007	1130	8.22	13200	15.6	31.60	EH(mv)= -151 DO(ppm)= 0.90
	Comments: SL.TURBID AMBER											
B-7	06/11/2007	1211	12.77	N/A	N/A	06/11/2007	1240	7.25	1686	17.5	19.70	EH(mv)= -84 DO(ppm)= 0.92
	Comments: CLEAR											
BR-103	06/11/2007	1310	5.27	N/A	N/A	06/11/2007	1345	7.00	783	18.7	1.47	EH(mv)= -11 DO(ppm)= 0.70
	Comments: CLEAR											
BR-104	06/12/2007	1143	9.14	N/A	N/A	06/12/2007	1220	7.28	766	15.7	30.20	EH(mv)= -4 DO(ppm)= 0.63
	Comments: CLEAR											
BR-105	06/13/2007	1324	23.14	N/A	N/A	06/13/2007	1403	7.31	1774	13.1	3.23	EH(mv)= -183 DO(ppm)= 0.46
	Comments: CLEAR											
BR-105D	06/13/2007	1322	25.10	N/A	N/A	06/13/2007	1350	7.47	11760	15.7	0.84	EH(mv)= -293 DO(ppm)= 0.33
	Comments: CLEAR											
BR-106	06/13/2007	1200	23.37	N/A	N/A	06/13/2007	1232	7.00	2887	12.2	45.60	EH(mv)= -96 DO(ppm)= 1.04
	Comments: SL.TURBID											
BR-108	06/12/2007	1037	28.40	N/A	29.75	06/12/2007	1305	7.10	1075	17.1	217.00	EH(mv)= 16
	Comments: TURBID ORANGE											
BR-112D	06/14/2007	1035	36.46	N/A	72.26	06/14/2007	1203	7.32	2054	13.4	26.90	EH(mv)= -77
	Comments: SL.TURBID											
BR-113D	06/14/2007	1113	31.47	N/A	79.25	06/14/2007	1227	7.10	3065	13.1	40.50	EH(mv)= -185
	Comments: SL.TURBID GREY											
BR-114	06/14/2007	950	13.72	N/A	N/A	06/14/2007	1030	7.24	1778	14.8	0.19	EH(mv)= -155 DO(ppm)= 0.23
	Comments: CLEAR											
BR-116	06/12/2007	1422	27.85	N/A	N/A	06/12/2007	1455	7.14	2559	18.5	7.66	EH(mv)= -143 DO(ppm)= 0.56
	Comments: CLEAR											
BR-116D	06/12/2007	1404	35.89	N/A	N/A	06/12/2007	1430	9.60	1963	18.4	20.40	EH(mv)= -282 DO(ppm)= 0.33
	Comments: CLEAR											
BR-117D	06/12/2007	1128	50.44	N/A	N/A	06/12/2007	1157	7.82	511	11.3	49.60	EH(mv)= -39 DO(ppm)= 0.34
	Comments: SL.TURBID											
BR-118D	06/12/2007	1017	49.30	N/A	N/A	06/12/2007	1053	7.31	1307	12.4	38.20	EH(mv)= -266 DO(ppm)= 0.16
	Comments: SL.TURBID											
BR-122D	06/12/2007	1229	45.18	N/A	N/A	06/12/2007	1255	7.07	2213	13.4	N/A	EH(mv)= -291 DO(ppm)= 0.33
	Comments: CLEAR											

SG - Specific Gravity \* From Top of Riser  
 EH - Redox \*\* Elevation Above Sea Level  
 DO - Dissolved Oxygen



Sampling Summary Table  
ARCH CHEMICAL  
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RI SAMPLING/ROCHESTER NY FACILITY

Sample Point	—Water Level—		Water Level (ft)*	Water Elevation (ft)**	Bottom Of Well (ft)*	Field Measurements		pH (STD) (Units)	Spec. Cond. (umhos)	Temp (°C)	Turb. (NTU)	Other Field Measurements	
	Date	Time				Date	Time					EH(mv)	DO(ppm)
BR-123D	06/12/2007	1317	45.58	N/A	N/A	06/12/2007	1347	7.96	2023	12.5	19.16	EH(mv)= -276	DO(ppm)= 0.17
	Comments: BLACK TINT												
BR-127	06/07/2007	1202	2.97	N/A	N/A	06/07/2007	1225	7.46	1634	17.3	5.99	EH(mv)= -237	DO(ppm)= 1.00
	Comments: CLEAR BLACK SPECKS												
BR-3	06/11/2007	1017	6.75	N/A	N/A	06/11/2007	1045	7.55	13590	14.5	10.61	EH(mv)= -207	DO(ppm)= 0.90
	Comments: CLEAR YELLOW TINT												
BR-5A	06/08/2007	1050	10.17	N/A	N/A	06/08/2007	1053	7.58	1684	14.7	14.60	EH(mv)= -105	
	Comments: CLEAR YELLOW TINT												
BR-6A	06/06/2007	1136	8.81	N/A	N/A	06/06/2007	1200	7.74	1063	14.7	4.48	EH(mv)= 7	DO(ppm)= 1.22
	Comments: CLEAR												
BR-7A	06/08/2007	1110	24.69	N/A	N/A	06/08/2007	1113	7.61	2581	14.2	14.80	EH(mv)= -167	
	Comments: CLEAR 8.68 G.P.M.												
BR-8	06/06/2007	1002	8.30	N/A	N/A	06/06/2007	1025	7.23	4259	13.6	70.10	EH(mv)= -97	DO(ppm)= 0.99
	Comments: YELLOW BLACK SPECKS												
BR-9	06/08/2007	1100	24.88	N/A	N/A	06/08/2007	1103	7.99	2179	15.6	1.87	EH(mv)= -111	
	Comments: CLEAR 13.24 G.P.M												
E-1	06/06/2007	1330	0.66	N/A	N/A	06/06/2007	1415	9.91	15640	16.4	54.00	EH(mv)= -280	DO(ppm)= 0.88
	Comments: SL.TURBID												
E-3	06/06/2007	1117	5.53	N/A	N/A	06/07/2007	1015	7.23	1474	13.6	21.20	EH(mv)= 18	DO(ppm)= 1.36
	Comments: CLEAR												
MW-103	06/11/2007	1247	1.38	N/A	N/A	06/11/2007	1315	7.15	680	21.4	0.90	EH(mv)= -99	DO(ppm)= 0.93
	Comments: CLEAR												
MW-104	06/12/2007	1100	7.43	N/A	N/A	06/12/2007	1135	7.33	875	16.4	283.00	EH(mv)= -85	DO(ppm)= 0.87
	Comments: TURBID												
MW-106	06/13/2007	1158	10.06	N/A	N/A	06/13/2007	1230	7.11	2503	13.1	18.35	EH(mv)= -108	DO(ppm)= 0.57
	Comments: CLEAR												
MW-114	06/14/2007	928	10.72	N/A	N/A	06/14/2007	953	7.04	2058	15.3	5.94	EH(mv)= 20	DO(ppm)= 1.00
	Comments: CLEAR												
MW-127	06/07/2007	1228	3.71	N/A	N/A	06/07/2007	1258	7.39	4365	17.6	3.17	EH(mv)= -190	DO(ppm)= 1.02
	Comments: CLEAR												
NESS-E	06/13/2007	1104	9.18	N/A	N/A	06/13/2007	1130	6.53	3119	17.2	22.70	EH(mv)= -2	DO(ppm)= 0.34
	Comments: CLEAR												

SG - Specific Gravity \* From Top of Riser  
EH - Redox \*\* Elevation Above Sea Level  
DO - Dissolved Oxygen



Sampling Summary Table  
ARCH CHEMICAL  
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RI SAMPLING/ROCHESTER NY FACILITY

Sample Point	Water Level		Water Level (ft)*	Water Elevation (ft)**	Bottom Of Well (ft)*	Field Measurements		pH (STD) (Units)	Spec. Cond. (umhos)	Temp (°C)	Turb. (NTU)	Other Field Measurements
	Date	Time				Date	Time					
NESS-W	06/13/2007	1020	31.17	N/A	N/A	06/13/2007	1045	6.99	2266	14.5	36.20	EH(mv)= -172 DO(ppm)= 0.27
	Comments: SL.TURBID											
PW-10	06/08/2007	1012	6.77	N/A	N/A	06/08/2007	1030	7.15	10030	15.6	26.70	EH(mv)= -116 DO(ppm)= 0.95
	Comments: YELLOW TINT											
PW-11	06/06/2007	1040	22.16	N/A	N/A	06/06/2007	1048	6.97	3691	16.4	108.90	EH(mv)= -68
	Comments: SL.TURBID GREY											
PW-12(BR-101)	06/11/2007	1142	5.31	N/A	N/A	06/11/2007	1210	7.20	2227	15.4	0.98	EH(mv)= -132 DO(ppm)= 0.90
	Comments: CLEAR											
PW-13	06/08/2007	1120	24.20	N/A	N/A	06/08/2007	1125	7.17	2891	14.1	4.12	EH(mv)= -113
	Comments: CLEAR											
PW-14	06/08/2007	1020	4.82	N/A	N/A	06/08/2007	1023	8.08	6667	19.2	2.58	EH(mv)= -267
	Comments: CLEAR YELLOW TINT											
PW-15	07/06/2007	1320	6.33	N/A	N/A	07/06/2007	1355	10.27	12760	16.9	4.15	EH(mv)= -280
	Comments: CLEAR AMBER TINT											
PZ-101	06/13/2007	1231	12.98	N/A	N/A	06/13/2007	1300	7.00	3717	16.5	2.25	EH(mv)= 17 DO(ppm)= 1.05
	Comments: CLEAR											
PZ-102	06/13/2007	1313	20.26	N/A	N/A	06/13/2007	1340	6.77	4342	15.1	1.09	EH(mv)= 8 DO(ppm)= 0.93
	Comments: CLEAR											
PZ-103	06/13/2007	1358	12.08	N/A	N/A	06/13/2007	1425	6.88	5175	14.5	0.83	EH(mv)= 90 DO(ppm)= 0.97
	Comments: CLEAR											
PZ-104	06/13/2007	1151	12.82	N/A	N/A	06/13/2007	1220	7.27	1534	16.3	1.18	EH(mv)= -115 DO(ppm)= 0.90
	Comments: CLEAR											
PZ-105	06/07/2007	1040	6.79	N/A	N/A	06/07/2007	1103	7.05	3723	15.2	502.00	EH(mv)= -124 DO(ppm)= 0.99
	Comments: TURBID											
PZ-106	06/07/2007	1315	9.50	N/A	N/A	06/07/2007	1338	6.65	5187	14.3	14.60	EH(mv)= -167 DO(ppm)= 0.98
	Comments: CLEAR BLACK SPECKS											
PZ-107	06/07/2007	1122	5.47	N/A	N/A	06/07/2007	1150	7.89	4582	12.8	1.84	EH(mv)= -187 DO(ppm)= 0.98
	Comments: CLEAR AMBER											
QO-2	06/12/2007	1350	0.00	N/A	N/A	06/12/2007	1356	7.61	2027	24.3	7.28	EH(mv)= 110
	Comments: CLEAR											
QO-2S1	06/12/2007	1405	0.00	N/A	N/A	06/12/2007	1411	7.87	577	25.6	19.70	EH(mv)= 201
	Comments: CLEAR											

SG - Specific Gravity \* From Top of Riser  
EH - Redox \*\* Elevation Above Sea Level  
DO - Dissolved Oxygen



Date: 08/21/2007  
 Time: 17:10:56

Sampling Summary Table  
 ARCH CHEMICAL  
 JUNE 2007  
 RI SAMPLING/ROCHESTER NY FACILITY

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Sample Point	Water Level		Water Level (ft)*	Water Elevation (ft)**	Bottom Of Well (ft)*	Field Measurements		pH (STD) (Units)	Spec. Cond. (umhos)	Temp (°C)	Turb. (NTU)	Other Field Measurements
	Date	Time				Date	Time					
QS-4	06/12/2007	950	0.00	N/A	N/A	06/12/2007	957	7.56	1602	13.9	2.73	EH(mv)= 20
S-3	06/06/2007	1212	0.87	N/A	N/A	06/06/2007	1235	7.12	2510	14.1	7.55	EH(mv)= -91 DO(ppm)= 0.97
S-4	06/06/2007	1247	0.72	N/A	N/A	06/06/2007	1310	7.23	3572	13.2	11.50	EH(mv)= -122 DO(ppm)= 1.06

SG - Specific Gravity  
 EH - Redox  
 DO - Dissolved Oxygen

\* From Top of Riser  
 \*\* Elevation Above Sea Level



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: B-17

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-11-07 1102

Cond of seal:  Good  Cracked  None  Buried \_\_\_\_\_ %

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-11-07 1105

Date / Time Completed: 6-11-07 1125

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 5.72

Elevation. GW MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Peristaltic Pump

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated:  Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness SC TUBES  Y  N

Purge Observations: Low Flow

Start Amber Finish Amber

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1110	<u>100</u> <u>5.75</u>		<u>15.7</u>	<u>7.50</u>	<u>13,320</u>	<u>201</u>	<u>-130</u>	<u>1.16</u>
1115	<u>↓</u>		<u>15.9</u>	<u>7.97</u>	<u>13,220</u>	<u>118</u>	<u>-139</u>	<u>1.02</u>
1120	<u>↓</u>		<u>15.6</u>	<u>8.13</u>	<u>13,200</u>	<u>70.9</u>	<u>-142</u>	<u>0.97</u>
1125	<u>↓</u>		<u>15.6</u>	<u>8.20</u>	<u>13,250</u>	<u>46.5</u>	<u>-145</u>	<u>0.93</u>



# FIELD OBSERVATIONS (continued)

**MPLING INFORMATION:**

Date/Time: 6-11-07 11:30      POINT ID: B-17  
 Method of Sampling: PERSISTENT TUB      Water Level @ Sampling, Feet: 5.75  
 Dedicated:  IN  
 Multi-phased/layered:  Yes  No      If YES:  light  heavy

**MPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
130	15.6	8.22	13,200	31.6	-151	0.90

**UMENT CHECK DATA:**

Turbidity Serial #: 3925 NTU std. =    NTU      20.0 NTU std. = 20.0 NTU  
 Turbidity Sensor: 3912  
 Conductivity Serial #: 614162      4.0 std. = 4.00      7.0 std. = 7.00      10.0 std. =     
 Conductivity Sensor: KR1-4      KR1-7  
 Dissolved Oxygen Serial #: 614162      1000 umhos/cm = 1000         umhos/cm =     
 Dissolved Oxygen Sensor: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: Sun 75°  
 Site Characteristics: SE TOWN AREA

**REMARKS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/11/07      By: [Signature]      Company: STR



## FIELD OBSERVATIONS

Facility: ARCH. CHEMICAL

Sample Point ID: B-7

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-11-07 1 1211

Cond of seal:  Good  Cracked  None  Buried \_\_\_\_\_ %

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot. casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-11-07 1215

Date / Time Completed: 6-11-07 1235

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 20

Initial Water Level, Feet: 12.77

Elevation, GW MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Peristaltic Pump

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated:  Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness  Y  N

Purge Observations: Low Flow

Start Clear Finish Clear

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1220	n/a 10	14.10	18.1	7.39	1721	25.8	-98	1.02
1225		14.16	17.6	7.31	1698	24.3	-90	0.98
1230		14.21	17.5	7.27	1690	21.0	-89	0.96
1235		14.29	17.6	7.25	1688	20.2	-85	0.94



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID B-7

Date/Time 6-11-07 1 1240

Water Level @ Sampling, Feet: 14.32

Method of Sampling: peristaltic pump Dedicated:  IN

Multi-phased/ layered: ( ) Yes  No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
1240	17.5	7.25	1680	19.70	-84	0.92

**INSTRUMENT CHECK DATA:**

Dirty Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Readings: 396/2

Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Readings: KR1-4 KR1-7

Activity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Readings: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: Sun 77°

Water Characteristics: Clear

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

6/11/07

By: [Signature]

Company: STL



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-103

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-11-07 1 1310

Cond of seal:  Good  Cracked  None  Buried \_\_\_\_\_ %

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot. casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 27

**PURGE INFORMATION:**

Date / Time Initiated: 6-11-07 1 1320

Date / Time Completed: 6-11-07 1 1340

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 5.27

Elevation, G/W MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: per state req

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated:  Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness  Y  N

Purge Observations: Low Flow

Start Clear Finish Clear

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	ml/min	hr							
1325	200	5.31		21.1	7.02	766	3.03	-10	.88
1330	↓	↓		18.9	7.00	772	3.44	-11	.80
1335	↓	↓		18.8	7.00	780	1.61	-11	0.76
1340	↓	↓		18.7	7.01	782	1.53	-10	.75



# FIELD OBSERVATIONS (continued)

**MPLING INFORMATION:**

POINT ID BA-103

Date/Time 6-11-07 1 1345

Water Level @ Sampling, Feet: 5.31

Method of Sampling: Peristaltic Pump Dedicated:  Yes  No

Multi-phased/ layered: ( ) Yes  No If YES: ( ) light ( ) heavy

**MPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
1345	18.7	7.00	783	1.47	-11	0.70

**INSTRUMENT CHECK DATA:**

Identify Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Readings: 396/2

Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Readings: KR1-4 KR1-7.

Activity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Readings: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: Sw 83°

Water Characteristics: Clear

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Verify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/11/07 By: [Signature] Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL Sample Point ID: BR-104  
 Field Personnel: PL, TP, JS Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-12-07 1 1143 Cond of seal:  Good ( ) Cracked \_\_\_\_\_ %  
 ( ) None ( ) Buried  
 Prof. Casing/riser height: \_\_\_\_\_ Cond of prot. Casing/riser: ( ) Unlocked ( ) Good  
 ( ) Loose  Flush Mount  
 ( ) Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_  
 Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1  
 Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-12-07 1150 Date / Time Completed: 6-12-07 1 1215  
 Surf. Meas. Pt: ( ) Prot. Casing  Riser Riser Diameter, Inches: 4.0  
 Initial Water Level, Feet: 9.14 Elevation. GW MSL: \_\_\_\_\_  
 Well Total Depth, Feet: \_\_\_\_\_ Method of Well Purge: PERISTALTIC  
 One (1) Riser Volume, Gal: \_\_\_\_\_ Dedicated: Y  N  
 Total Volume Purged, Gal: \_\_\_\_\_ Purged To Dryness Y  N  
 Purge Observations: Low Flow Start SL TO 1/2 Finish Clear

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1200	<i>ml/hr</i> 150 <i>wt</i> 9.17		16.9	7.41	778	55.6	-8	.77
1205	↓		15.9	7.39	777	50.1	-7	.75
1210	↓		16.0	7.35	770	43.4	-6	.70
1215	↓		15.8	7.30	768	39.8	-5	.67



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID BK-104

Date/Time 6-12-07 1 1220

Water Level @ Sampling, Feet: 9.17

Method of Sampling: Peristaltic Dedicated: Y  N

Multi-phased/ layered: ( ) Yes  No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
1220	15.7	7.28	766	30.2	-4	.63

**INSTRUMENT CHECK DATA:**

Conductivity Serial #: 7925 NTU std. =      NTU 200 NTU std. = 20.0 NTU

Temperature Serial #: 39612

pH Serial #: 614162 4.0 std. = 4.00 7.0 std. = 7.00 10.0 std. =       
 Serial #: KR1-4 KR1-7

Conductivity Serial #: 614162 1000 umhos/cm = 1000 umhos/cm =       
 Serial #: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: Sun 83

Water Characteristics: Clear

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

that sampling procedures were in accordance with all applicable EPA, State and Site-Specific

By: 6/12/07      Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-105

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-13-07 , 1324

Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot. casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1

% LEL: 1

Vol. Organic Meter (Calibration/Reading):

Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-13-07 , 1338

Date / Time Completed: 6-13-07 , 1403

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 23.14

Elevation. GW MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Bladder Pump

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated:  Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness  Y  N

Purge Observations: Low Flow

Start St-Turbid Finish Clear

Orange few orange specks

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other <u>orp</u>	Other <u>DO</u>
	nl/min	wt							
1343	360	2329		13.1	7.49	1786	9.09	-219	1.37
1348				13.0	7.40	1780	4.54	-202	0.63
1353				13.1	7.35	1772	4.86	-193	0.59
1358				13.1	7.36	1781	3.94	-189	0.53
1403				13.1	7.31	1774	3.23	-183	0.46

Sampled @ 1403 on 6-13-07

*[Handwritten Signature]*



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_

Date/Time \_\_\_\_\_ / \_\_\_\_\_

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Multiphased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)

**INSTRUMENT CHECK DATA:**

Identity Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Readings: 396/2

Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Readings: KR1-4 KR1-7

Activity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Readings: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Site Characteristics: \_\_\_\_\_

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific rules.

By: 11 Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-105D

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-13-07 , 1322

Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot. casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: -1 % LEL: -1

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): -1

**PURGE INFORMATION:**

Date / Time Initiated: 6-13-07, 1330

Date / Time Completed: 6-13-07, 1350

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 20

Initial Water Level, Feet: 25.10

Elevation, GW MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Shedder Pump

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated: Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness Y  N

Purge Observations: Low Flow

Start Gray Ink Finish Clear

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1335	<u>320</u> <small>ml/min</small> / <u>26.13</u> <small>WL</small>		<u>16.1</u>	<u>7.36</u>	<u>9870</u>	<u>4.86</u>	<u>-294</u>	<u>0.40</u>
1340	<u>I</u> / <u>26.20</u>		<u>15.8</u>	<u>7.42</u>	<u>11,470</u>	<u>2.75</u>	<u>-291</u>	<u>0.36</u>
1345	<u>I</u> / <u>26.22</u>		<u>15.7</u>	<u>7.46</u>	<u>11,600</u>	<u>1.12</u>	<u>-290</u>	<u>0.32</u>
1350	<u>I</u> / <u>I</u>		<u>15.7</u>	<u>7.47</u>	<u>11,760</u>	<u>0.84</u>	<u>-293</u>	<u>0.33</u>

Sample @ 1350 on 6-13-07  
W. J. H.



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_  
 Date/Time \_\_\_\_\_ / \_\_\_\_\_  
 Method of Sampling: \_\_\_\_\_ Water Level @ Sampling, Feet: \_\_\_\_\_  
 Dedicated: Y / N  
 Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)

**INSTRUMENT CHECK DATA:**

Conductivity Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU  
 Location: 39C/2  
 Turbidity Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_  
 Location: KR1-4 KR1-7  
 Conductivity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_  
 Location: 3715 \_\_\_\_\_ umhos/cm = \_\_\_\_\_

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_  
 Site Characteristics: \_\_\_\_\_

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

that sampling procedures were in accordance with all applicable EPA, State and Site-Specific  
 rules.

By: 11 Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-106

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-13-07 , 1200

Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot. casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-13-07 , 1212

Date / Time Completed: 6-13-07 , 1232

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 23.37

Elevation. GW MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Bladder Pump

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated: Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness Y  N

Purge Observations: Low Flow

Start Turbid Finish SL Turbid  
Black Specks Black Specks

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other <i>orp</i>	Other <i>DO</i>
	<i>m/min</i>	<i>WL</i>							
1217	360	2342		12.5	6.83	2931	51.4	-77	1.87
1222				12.3	6.91	2906	55.1	-88	1.17
1227				12.3	6.98	2883	49.3	-91	1.08
1232				12.2	7.00	2887	45.6	-96	1.04

Well sampled @ 1232 on 6-13-07

*Phyllis Rubin*



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_  
 Date/Time \_\_\_\_\_ / \_\_\_\_\_  
 Method of Sampling: \_\_\_\_\_ Water Level @ Sampling, Feet: \_\_\_\_\_  
 Dedicated: Y / N  
 Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)

**INSTRUMENT CHECK DATA:**

Identify Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU  
 Readings: 396/2  
 Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_  
 Readings: KR1-4 KR1-7  
 Conductivity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_  
 Readings: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_  
 Site Characteristics: \_\_\_\_\_

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Verify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

By: 11 Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-108

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-12-07 1 1037

Cond of seal: ( ) Good ( ) Cracked \_\_\_\_\_ %  
( ) None ( ) Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser: ( ) Unlocked ( ) Good  
( ) Loose ( ) Flush Mount  
( ) Damaged \_\_\_\_\_

If prot. casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1

% LEL: 1

Vol. Organic Meter (Calibration/Reading):

Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-12-07 1040

Date / Time Completed: 6-12-07 1050

Surf. Meas. Pt: ( ) Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 28.40

Elevation. GW MSL: \_\_\_\_\_

Well Total Depth, Feet: 29.75

Method of Well Purge: S/S BAILEY

One (1) Riser Volume, Gal: .88

Dedicated:  N

Total Volume Purged, Gal: 1.0 TO DIR

Purged To Dryness  N

Purge Observations: Low Flow

Start TURBID ORANGE Finish TURBID ORANGE

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID BR-108

Date/Time 6-12-07 1 1300

Water Level @ Sampling, Feet: 28.77

Method of Sampling: S/S BAILEY Dedicated:  IN

Multi-phased/ layered: ( ) Yes  No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
1305	17.1	7.10	1075	217	16	—

**INSTRUMENT CHECK DATA:**

Conductivity Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Readings: 396/2

Temperature Serial #: \_\_\_\_\_ 4.0 std.= \_\_\_\_\_ 7.0 std.= \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Readings: KR1-4 KR1-7.

Dissolved Oxygen Activity Serial #: \_\_\_\_\_ umhos/cm= \_\_\_\_\_ umhos/cm= \_\_\_\_\_

Readings: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: SUN 83°

Water Characteristics: TURBID ORANGE

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

that sampling procedures were in accordance with all applicable EPA, State and Site-Specific  
 Methods.

Date: 6/12/07 By: M. Lu Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BA-112D

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-14-07 1 1035

Cond of seal:  Good ( ) Cracked \_\_\_\_\_ %  
 None ( ) Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser: ( ) Unlocked  Good  
 Loose ( ) Flush Mount  
 Damaged \_\_\_\_\_

If prot. casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-14-07 1041

Date / Time Completed: 6-14-07 1110

Surf. Meas. Pt: ( ) Prot. Casing  Riser

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 36.46

Elevation, GW MSL: \_\_\_\_\_

Well Total Depth, Feet: 72.26

Method of Well Purge: Tellon BAILER

One (1) Riser Volume, Gal: 5.84

Dedicated: Y  N

Total Volume Purged, Gal: 18.0

Purged To Dryness Y  N

Purge Observations: Low Flow

Start Clear Finish Clear

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
<del> </del>								
<del> </del>								
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# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID BA-1120

Date/Time 6-14-07 1 1200

Water Level @ Sampling, Feet: 30.51

Method of Sampling: Teflon Bottle Dedicated: Y  N

Multi-phased/ layered: ( ) Yes  No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
203	13.4	7.32	2054	26.9	-77	—

**INSTRUMENT CHECK DATA:**

Identify Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Readings: 39612

Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Readings: KR1-4 KR1-7

Activity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Readings: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: SUN 71°

Site Characteristics: SL TUND

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

6114107

By: M Za

Company: STL



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BA-1130

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-14-07 1 1113

Cond of seal:  Good ( ) Cracked \_\_\_\_\_ %  
 None ( ) Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser: ( ) Unlocked  Good  
 Loose ( ) Flush Mount  
 Damaged \_\_\_\_\_

If prot. casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1

% LEL: 1

Vol. Organic Meter (Calibration/Reading):

Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-14-07 1 1115

Date / Time Completed: 6-14-07 1 1145

Surf. Meas. Pt: ( ) Prot. Casing  Riser

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 31.47

Elevation. GW MSL: \_\_\_\_\_

Well Total Depth, Feet: 79.25

Method of Well Purge: YELLOW BALLER

One (1) Riser Volume, Gal: 7.80

Dedicated: Y  N

Total Volume Purged, Gal: 24

Purged To Dryness Y  N

Purge Observations: LOW FLOW

Start Clear Finish SE PURGED

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO



## FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID BA-1130

Date 6-14-07 1 1225

Water Level @ Sampling, Feet: 31.45

Method of Sampling: Teflon Bailor Dedicated:  Y  N

Multi-phased/ layered:  Yes  No If YES:  light  heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
227	13.1	7.10	3065	40.5	-185	(00)

**INSTRUMENT CHECK DATA:**

Conductivity Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Conductivity Sensor: 39612

pH Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

pH Sensor: KR1-4 KR1-7

Conductivity Activity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Conductivity Sensor: 3715

**WEATHER INFORMATION:**

Weather conditions @ time of sampling: SW 75°

Water Characteristics: SL TURBID Grey tint

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6 11 41 07 By: AL 25 Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-114

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-14-07 , 950

Cond of seal:  Good  Cracked  None  Buried \_\_\_\_\_ %

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): \_\_\_\_\_ % Gas: 1

% LEL: 1

Vol. Organic Meter (Calibration/Reading): \_\_\_\_\_

Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-14-07, 1010

Date / Time Completed: 6-14-07, 1030

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 13.72

Elevation, GW MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Perstat HC

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated:  Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness  Y  N

Purge Observations: Low Flow

Start Clean Finish Clean

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1015	<u>200</u>	<u>13.76</u>		<u>14.7</u>	<u>7.30</u>	<u>1781</u>	<u>0.41</u>	<u>-125</u>	<u>0.36</u>
1020				<u>14.8</u>	<u>7.23</u>	<u>1790</u>	<u>0.00</u>	<u>-148</u>	<u>0.29</u>
1025				<u>14.8</u>	<u>7.21</u>	<u>1783</u>	<u>0.15</u>	<u>-153</u>	<u>0.26</u>
1030				<u>14.8</u>	<u>7.24</u>	<u>1778</u>	<u>0.19</u>	<u>-155</u>	<u>0.23</u>

Sampled @ 1030 on 6-14-07

*Handwritten signature*







## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-116

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-12-07 , 1422

Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: — / —

% LEL: — / —

Vol. Organic Meter (Calibration/Reading):

Volatiles (ppm): — / —

**PURGE INFORMATION:**

Date / Time Initiated: 6-12-07, 1435

Date / Time Completed: 6-12-07, 1455  
4.0

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: \_\_\_\_\_

Initial Water Level, Feet: 27.85

Elevation. GW MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Bladder Pump

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated: Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness Y  N

Purge Observations: Low Flow

Start Clean w/ Finish Clean  
Blank specks

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1440	ml/min 200	wt 2799	18.3	7.37	2590	25.5	-164	0.97
1445	↓	↓	18.4	7.09	2365	8.82	-149	0.61
1450	↓	↓	18.4	7.12	2362	9.07	-144	0.58
1455	↓	↓	18.5	7.14	2559	7.66	-143	0.56

Sampled @ 1455 on 6-12-07

*[Signature]*



## FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_

Date/Time \_\_\_\_\_ / \_\_\_\_\_

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)

**INSTRUMENT CHECK DATA:**

Dirty Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Locations: 396/2

Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Locations: KQ1-4 KR1-7

Activity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Locations: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Site Characteristics: \_\_\_\_\_

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific methods.

1/1

By: \_\_\_\_\_

Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-116D

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-12-07 , 1404

Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot. casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): \_\_\_\_\_ % Gas: 1

% LEL: 1

Vol. Organic Meter (Calibration/Reading): \_\_\_\_\_

Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-12-07 , 1410

Date / Time Completed: 6-12-07 , 1430

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 35.89

Elevation, GW MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Bladder Pump

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated:  Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness  Y  N

Purge Observations: Low Flow

Start Clear Finish Clear

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other <i>orp</i>	Other <i>DO</i>
	M/min	W							
1415	200	35.93		18.3	8.99	1942	20.5	-281	0.52
1420	↓	↓		18.4	9.51	1956	21.3	-286	0.39
1425	↓	↓		18.4	9.55	1959	20.8	-283	0.35
1430	↓	↓		18.4	9.60	1963	20.4	-282	0.33

Sampled @ 1430 on 6-12-07

*Handwritten signature/initials*



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_  
 Date/Time \_\_\_\_\_ / \_\_\_\_\_  
 Water Level @ Sampling, Feet: \_\_\_\_\_  
 Method of Sampling: \_\_\_\_\_ Dedicated: Y / N  
 Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)

**INSTRUMENT CHECK DATA:**

Conductivity Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU  
 NTU std. = \_\_\_\_\_ NTU  
 Date: 3/9/12  
 Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_  
 Locations: KR1-4 KR1-7  
 Activity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_  
 Date: 3/15

**ADDITIONAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_  
 Sample Characteristics: \_\_\_\_\_

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

By: 11 Company: STR







# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_

Date/Time \_\_\_\_\_ / \_\_\_\_\_

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)

**INSTRUMENT CHECK DATA:**

Conductivity Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Readings: 396/2

Temperature Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Readings: KQ1-4 KR1-7

Conductivity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Readings: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Site Characteristics: \_\_\_\_\_

**COMMENTS AND OBSERVATIONS:**  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

By:   /  /   \_\_\_\_\_ Company:   STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-118D

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-12-07 , 1017

Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: — / —

% LEL: — / —

Vol. Organic Meter (Calibration/Reading):

Volatiles (ppm): — / —

**PURGE INFORMATION:**

Date / Time Initiated: 6-12-07 , 1023

Date / Time Completed: 6-12-07 , 1053

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 49.30

Elevation. GW MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Bladder Pump

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated: Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness Y  N

Purge Observations: Low Flow

Start SI-Turbid Finish SI-Turbid

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1028	<u>200</u> <u>49.79</u>		<u>13.0</u>	<u>7.63</u>	<u>1155</u>	<u>23.7</u>	<u>-297</u>	<u>0.23</u>
1033			<u>12.1</u>	<u>7.47</u>	<u>1232</u>	<u>30.1</u>	<u>-284</u>	<u>0.21</u>
1038			<u>12.3</u>	<u>7.45</u>	<u>1284</u>	<u>31.7</u>	<u>-273</u>	<u>0.20</u>
1043			<u>12.3</u>	<u>7.36</u>	<u>1293</u>	<u>37.5</u>	<u>-268</u>	<u>0.19</u>
1048			<u>12.3</u>	<u>7.33</u>	<u>1302</u>	<u>39.1</u>	<u>-271</u>	<u>0.17</u>
1053			<u>12.4</u>	<u>7.31</u>	<u>1307</u>	<u>38.2</u>	<u>-266</u>	<u>0.16</u>

Sampled @ 1053 on 6-12-07

*John Lake*



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_

Date/Time \_\_\_\_\_ / \_\_\_\_\_

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)

**INSTRUMENT CHECK DATA:**

Calibration Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Readings: 396/2

Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Readings: KQ1-4 KR1-7.

Activity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Readings: 3715

**ADDITIONAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Site Characteristics: \_\_\_\_\_

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific Methods.

By: 11 Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-1221

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-12-07 , 1229

Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: - / -

% LEL: - / -

Vol. Organic Meter (Calibration/Reading):

Volatiles (ppm): - / -

**PURGE INFORMATION:**

Date / Time Initiated: 6-12-07 , 1235

Date / Time Completed: 6-12-07 , 1255

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 45.18

Elevation. G/W MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Bladder Pump

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated: Y /  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness Y /  N

Purge Observations: Low Flow

Start Black Tint Finish Clear

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other <i>orp</i>	Other <i>DO</i>
	ml/min	WL							
1240	200	45.24		13.3	7.28	2205	0.37	-292	0.37
1245				13.4	7.14	2206	0.00	-294	0.34
1250				13.4	7.09	2216	0.00	-289	0.35
1255				13.4	7.07	2213	0.00	-291	0.33

Sampled @ 1255 on 6-12-07  
*PL* *TP* *JS*



## FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_

Date/Time \_\_\_\_\_ / \_\_\_\_\_

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)

**INSTRUMENT CHECK DATA:**

Calibration Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Readings: 396/2

Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Readings: KR1-4 KR1-7

Conductivity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Readings: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Site Characteristics: \_\_\_\_\_

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

By: 11 \_\_\_\_\_ Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-123D

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-12-07 1 1317

Cond of seal:  Good  Cracked  None  Buried \_\_\_\_\_ %

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): \_\_\_\_\_ % Gas: 1

% LEL: 1

Vol. Organic Meter (Calibration/Reading): \_\_\_\_\_

Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-12-07, 1322

Date / Time Completed: 6-12-07, 1347

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 45.58

Elevation. GW MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Bladder Pump

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated: Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness Y  N

Purge Observations: Low Flow

Start Black Tank Finish Black Tank

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1327	<u>200</u>	<u>45.62</u>	<u>13.0</u>	<u>7.66</u>	<u>2019</u>	<u>18.14</u>	<u>-269</u>	<u>0.19</u>
1332			<u>12.7</u>	<u>7.77</u>	<u>2003</u>	<u>18.75</u>	<u>-270</u>	<u>0.18</u>
1337			<u>12.6</u>	<u>7.90</u>	<u>2000</u>	<u>19.32</u>	<u>-268</u>	<u>0.18</u>
1342			<u>12.6</u>	<u>7.93</u>	<u>2018</u>	<u>19.27</u>	<u>-273</u>	<u>0.17</u>
1347			<u>12.5</u>	<u>7.96</u>	<u>2023</u>	<u>19.16</u>	<u>-276</u>	<u>0.17</u>

Sampled @ 1347 on 6-12-07

*[Handwritten signature]*



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_

Date/Time \_\_\_\_\_ / \_\_\_\_\_

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)

**INSTRUMENT CHECK DATA:**

Calibration Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Readings: 39612

Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Readings: KQ1-4 KR1-7.

Activity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Readings: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Site Characteristics: \_\_\_\_\_

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific Methods.

By: 11 \_\_\_\_\_ Company: STR



## FIELD OBSERVATIONS

Facility: Arch Chemical Sample Point ID: BR-127  
 Field Personnel: TP JS Sample Matrix: GW

### MONITORING WELL INSPECTION:

Date/Time 6-7-07, 1202 Cond of seal:  Good ( ) Cracked \_\_\_\_\_ %  
 ( ) None ( ) Buried  
 Prot. Casing/riser height: \_\_\_\_\_ Cond of prot. Casing/riser: ( ) Unlocked  Good  
 ( ) Loose ( ) Flush Mount  
 ( ) Damaged \_\_\_\_\_  
 If prot. casing; depth to riser below: \_\_\_\_\_  
 Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

### PURGE INFORMATION:

Date / Time Initiated: 6-7-07, 1205 Date / Time Completed: 6-7-07, 1225  
 Surf. Meas. Pt:  Prot. Casing ( ) Riser Riser Diameter, Inches: 6  
 Initial Water Level, Feet: 2.97 Elevation. G/W MSL: \_\_\_\_\_  
 Well Total Depth, Feet: \_\_\_\_\_ Method of Well Purge: Peristaltic Pump  
 One (1) Riser Volume, Gal: \_\_\_\_\_ Dedicated: Q / N  
 Total Volume Purged, Gal: \_\_\_\_\_ Purged To Dryness Y / (N)  
 Purge Observations: \_\_\_\_\_ Start Clean Finish Clean  
Black specks w/ Black specks

### PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	ml/min	WL							
1210	160	2.97		17.3	7.40	1714	8.86	-228	1.04
1215				17.3	7.43	1697	10.13	-229	1.02
1220				17.2	7.45	1643	7.76	-234	1.00
1225				17.3	7.46	1634	5.99	-237	1.00

Sampled @ 1225 on 6-7-07

*Thurston*



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_

Date/Time \_\_\_\_\_ / \_\_\_\_\_

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ( )	Other ( )

**INSTRUMENT CHECK DATA:**

Identify Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Locations: \_\_\_\_\_

Serial #: \_\_\_\_\_ 4.0 std.= \_\_\_\_\_ 7.0 std.= \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Locations: \_\_\_\_\_

Activity Serial #: \_\_\_\_\_ umhos/cm= \_\_\_\_\_ umhos/cm= \_\_\_\_\_

Locations: \_\_\_\_\_

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Site Characteristics: \_\_\_\_\_

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

that sampling procedures were in accordance with all applicable EPA, State and Site-Specific rules.

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_ By: \_\_\_\_\_ Company: \_\_\_\_\_



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-3

Field Personnel: PL, TP, JS

Sample Matrix: GW

### MONITORING WELL INSPECTION:

Date/Time 6-11-07 1 10 17

Cond of seal:  Good  Cracked  None  Buried \_\_\_\_\_ %

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

### PURGE INFORMATION:

Date / Time Initiated: 6-11-07 1 10 20

Date / Time Completed: 6-11-07 1 10 46

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 6.75

Elevation, GW MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: PERMEABLE FOOT

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated:  Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness  Y  N

Purge Observations: Low Flow

Start Yellow tint Finish Yellow tint

### PURGE DATA: (if applicable)

Time	Purge Rate (gpm/ftz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1025	m/min 100	6.97		14.4	7.80	14,200	65.9	-222	1.17
1030		7.13		14.7	7.77	13,900	29.6	-219	1.08
1035		7.20		14.6	7.60	13,790	20.8	-215	0.96
1040		7.27		14.4	7.58	13,620	15.2	-210	0.93



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID BA-3  
 Date/Time 6-11-07 1 1045 Water Level @ Sampling, Feet: 7.36  
 Method of Sampling: Peristaltic Pump Dedicated: (Y)IN  
 Multi-phased/ layered: ( ) Yes () No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
045	14.5	7.55	13,590	10.61	-207	0.90

**INSTRUMENT CHECK DATA:**

Identify Serial #: 3925 NTU std. =    NTU 20 NTU std. = 20 NTU  
 Ions: 39612  
 Serial #: 616806 4.0 std. = 4.00 7.0 std. = 7.00 10.0 std. =     
 Ions: KR1-4 KR1-7  
 Conductivity Serial #: 616806 1000 umhos/cm = 1000    umhos/cm =     
 Ions: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: clouds 73°  
 Sample Characteristics: Clear Yellow tint

**COMMENTS AND OBSERVATIONS:**  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific standards.

6/11/07 By: M. [Signature] Company: STR



# FIELD OBSERVATIONS

LeachField Form  
Revision 0  
March 15, 2002

Facility: ARCH

Sample Point ID: BR-5A

Field Personnel: P. Little, JJ

Sample Matrix: GW

Grab  Composite

**SAMPLING INFORMATION:**

Date/Time 6-8-07 11050

Water Level @ Sampling, Feet: 10.17

Method of Sampling: SAMPLE PORT Dedicated:  N

Multi-phased/ layered:  Yes  No If YES:  light  heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ( )	Other ( )
1057	14.7	7.58	1684	14.6	-105	

**INSTRUMENT CHECK DATA:**

Turbidity Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Solutions: \_\_\_\_\_

pH Serial #: \_\_\_\_\_ 4.0 std.= \_\_\_\_\_ 7.0 std.= \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Solutions: \_\_\_\_\_

Conductivity Serial #: \_\_\_\_\_ umhos/cm= \_\_\_\_\_ umhos/cm= \_\_\_\_\_

Solutions: \_\_\_\_\_

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: SUN 83°

Sample Characteristics: Clear yellow tint

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 618107 By: [Signature] Company: STL



### FIELD OBSERVATIONS

Facility: Arch Chemical

Sample Point ID: BR-CA

Field Personnel: TP. JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-6-07 / 1136

*\*Former Pumping Well*

Cond of seal: ( ) Good ( ) Cracked \_\_\_\_\_ %  
( ) None ( ) Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser: ( ) Unlocked ( ) Good  
( ) Loose ( ) Flush Mount  
( ) Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1

% LEL: 1

Vol. Organic Meter (Calibration/Reading):

Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-6-07, 1140

Date / Time Completed: 6-6-07, 1200

Surf. Meas. Pt: ( ) Prot. Casing (X) Riser

Riser Diameter, Inches: \_\_\_\_\_

Initial Water Level, Feet: 8.81

Elevation. GW MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Peristaltic Pump

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated: (Y) N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness Y (X)

Purge Observations: \_\_\_\_\_

Start Clear Finish Clear

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other D.O.
1145	ml/min 180	gal 8.97	14.8	7.40	1058	8.08	28	1.62
1150		8.99	14.7	7.68	1061	4.71	8	1.24
1155			14.7	7.71	1062	4.50	9	1.21
1200			14.7	7.74	1063	4.48	7	1.22

*Sampled @ 1200 on 6-6-07*  
*Adrian Alon*



# FIELD OBSERVATIONS (continued)

**GENERAL INFORMATION:**

POINT ID \_\_\_\_\_

Date/Time \_\_\_\_\_ / \_\_\_\_\_

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ( )	Other ( )

**INSTRUMENT CHECK DATA:**

Calibration Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Notes: \_\_\_\_\_

Standard Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Conductivity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

**ADDITIONAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Other Characteristics: \_\_\_\_\_

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific

By: \_\_\_\_\_ Company: \_\_\_\_\_



# FIELD OBSERVATIONS

LeachField Form  
Revision 0  
March 15, 2002

Facility: ARCH

Sample Point ID: DR-7A

Field Personnel: P. Little, JS

Sample Matrix: GW

Grab  Composite

**SAMPLING INFORMATION:**

Date/Time 6-8-07 1 1110

Water Level @ Sampling, Feet: 24.69

Method of Sampling: SAMPLE POINT Dedicated:  N

Multi-phased/ layered:  Yes  No If YES:  light  heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (0.1)	Other ( )
1113	14.2	7.61	2591	14.8	-167	

**INSTRUMENT CHECK DATA:**

Turbidity Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Solutions: \_\_\_\_\_

pH Serial #: \_\_\_\_\_ 4.0 std.= \_\_\_\_\_ 7.0 std.= \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Solutions: \_\_\_\_\_

Conductivity Serial #: \_\_\_\_\_ umhos/cm= \_\_\_\_\_ umhos/cm= \_\_\_\_\_

Solutions: \_\_\_\_\_

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: SUN 85°

Sample Characteristics: clear

COMMENTS AND OBSERVATIONS: 8.68 cm

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/8/07 By: [Signature] Company: STL



## FIELD OBSERVATIONS

Facility: Arch Chemical

Sample Point ID: BR-8

Field Personnel: TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-6-07 , 1002

Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-6-07 , 1010

Date / Time Completed: 6-6-07 , 1025

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: \_\_\_\_\_

Initial Water Level, Feet: 8.30

Elevation, GW MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Peristaltic Pump

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated: Q / N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness Y / (N)

Purge Observations: \_\_\_\_\_

Start Clear <sup>Turbid</sup> Finish Turbid  
Yellow w/ Black specks Yellow w/ Black specks

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other D.O
1010	<u>150</u>	<u>9.37</u>	<u>13.5</u>	<u>7.70</u>	<u>4178</u>	<u>71.0</u>	<u>-79</u>	<u>1.09</u>
1015	<u>150</u>	<u>9.39</u>	<u>13.5</u>	<u>7.29</u>	<u>4208</u>	<u>72.7</u>	<u>-93</u>	<u>1.02</u>
1020	<u>150</u>	<u>9.40</u>	<u>13.5</u>	<u>7.26</u>	<u>4242</u>	<u>69.8</u>	<u>-94</u>	<u>0.99</u>
1025	<u>150</u>	<u>9.40</u>	<u>13.6</u>	<u>7.23</u>	<u>4259</u>	<u>70.1</u>	<u>-97</u>	<u>0.99</u>

Sampled @ 1025 on 6-6-07



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_

Date/Time \_\_\_\_\_ / \_\_\_\_\_

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ( )	Other ( )

**INSTRUMENT CHECK DATA:**

Conductivity Serial #: 3925-5202 NTU std. = \_\_\_\_\_ NTU 20 NTU std. = 20 NTU  
 Location: 20-396/2

pH Serial #: \_\_\_\_\_ 4.0 std. = 4.02 7.0 std. = 6.99 10.0 std. = \_\_\_\_\_  
 Location: 4-KAI 7-KRI

Conductivity Serial #: \_\_\_\_\_ 1000 umhos/cm = 1000 \_\_\_\_\_ umhos/cm = \_\_\_\_\_  
 Location: 1000-3715

**ADDITIONAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Water Characteristics: \_\_\_\_\_

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific Methods.

By:   /  /   \_\_\_\_\_ Company: \_\_\_\_\_



# FIELD OBSERVATIONS

LeachField Form  
Revision 0  
March 15, 2002

Facility: ARCH

Sample Point ID: BA-7A

Field Personnel: P. Little, JS

Sample Matrix: GW

Grab  Composite

## SAMPLING INFORMATION:

Date/Time 6-8-07 1 100

Water Level @ Sampling, Feet: 24.88

Method of Sampling: SAMPLE POINT Dedicated:  N

Multi-phased/ layered:  Yes  No If YES:  light  heavy

## SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ( )	Other ( )
1103	15.6	7.99	2171	1.87	-111	

## INSTRUMENT CHECK DATA:

Turbidity Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Solutions: \_\_\_\_\_

pH Serial #: \_\_\_\_\_ 4.0 std.= \_\_\_\_\_ 7.0 std.= \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Solutions: \_\_\_\_\_

Conductivity Serial #: \_\_\_\_\_ umhos/cm= \_\_\_\_\_ umhos/cm= \_\_\_\_\_

Solutions: \_\_\_\_\_

## GENERAL INFORMATION:

Weather conditions @ time of sampling: Sun 83°

Sample Characteristics: CLR

COMMENTS AND OBSERVATIONS: 13.24 604

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/8/07

By: [Signature]

Company: STL



## FIELD OBSERVATIONS

Facility: Arch Chemical

Sample Point ID: E-1

Field Personnel: TP, JS

Sample Matrix: GW

### MONITORING WELL INSPECTION:

Date/Time 6-6-07 , 1330

Cond of seal: Vault  
 Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot. casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

### PURGE INFORMATION:

Date / Time Initiated: 6-6-07 , 1350

Date / Time Completed: 6-6-07 , 1415

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: \_\_\_\_\_

Initial Water Level, Feet: 0.64

Elevation. G/W MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Peristaltic Pump

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated: Q / N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness Y  N

Purge Observations: \_\_\_\_\_

Start Turned Black Finish SI. Turned Yellowish Brown

### PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other <u>OP</u>	Other <u>DO</u>
1355	<u>200</u> <u>0.64</u>		17.0	9.16	15360	177	-165	0.98
1400			16.4	9.74	15520	85.9	-196	0.92
1405			16.4	9.83	15530	77.4	-260	0.89
1410			16.3	9.89	15590	56.0	-273	0.90
1415			16.4	9.91	15640	54.0	-280	0.88

Sampled @ 1415 on 6-6-07  
*[Signature]*



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_

Date/Time \_\_\_\_\_ / \_\_\_\_\_

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Depth-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ( )	Other ( )

**INSTRUMENT CHECK DATA:**

Activity Serial #: 3925 NTU std. = \_\_\_\_\_ NTU      2000 NTU std. = 20.0 NTU

Locations: 39C/2

Cal #: 61462 4.0 std. = 4.00      7.0 std. = 7.00      10.0 std. = \_\_\_\_\_  
 S/Ns: 4-KQE, 7-KAE

Activity Serial #: 61462      1000 umhos/cm = 1000      \_\_\_\_\_ umhos/cm = \_\_\_\_\_  
 S/Ns: 3715

**ADDITIONAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Other Characteristics: \_\_\_\_\_

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

that sampling procedures were in accordance with all applicable EPA, State and Site-Specific

By:   /  /   Company: \_\_\_\_\_



## FIELD OBSERVATIONS

Facility: ARcell Chemical Sample Point ID: PW-15

Field Personnel: P. Little, T. Palmer Sample Matrix: GW

### MONITORING WELL INSPECTION:

Date/Time 7-6-07 1 1320 Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prot. Casing/riser height: \_\_\_\_\_ Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot. casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

### PURGE INFORMATION:

Date / Time Initiated: 7-6-07 1 1325 Date / Time Completed: 7-6-07 1 1355

Surf. Meas. Pt:  Prot. Casing  Riser Riser Diameter, Inches: 6.0

Initial Water Level, Feet: 6.33 Elevation, G/W MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_ Method of Well Purge: Peristaltic Pump

One (1) Riser Volume, Gal: \_\_\_\_\_ Dedicated:  Y  N

Total Volume Purged, Gal: \_\_\_\_\_ Purged To Dryness  Y  N

Purge Observations: \_\_\_\_\_ Start 7:00 AM Finish 7:15 AM

### PURGE DATA: (if applicable)

Time	Purge Rate (gpm/hz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other OAP	Other
1335	<u>2.00</u>	<u>6.38</u>	<u>16.6</u>	<u>8.80</u>	<u>12,570</u>	<u>8.36</u>	<u>-248</u>	
1340			<u>17.0</u>	<u>9.90</u>	<u>12,720</u>	<u>3.84</u>	<u>-261</u>	
1345			<u>16.8</u>	<u>10.16</u>	<u>12,730</u>	<u>4.32</u>	<u>-270</u>	
1350			<u>16.7</u>	<u>10.22</u>	<u>12,750</u>	<u>4.19</u>	<u>-275</u>	
1355			<u>16.9</u>	<u>10.27</u>	<u>12,760</u>	<u>4.15</u>	<u>-280</u>	

SAMPLED AT 1355 7-6-07

*RL dt*







## FIELD OBSERVATIONS

Facility: ARCH Sample Point ID: PW-13  
 Field Personnel: P. Little, JS Sample Matrix: GW  
 Grab  Composite

**SAMPLING INFORMATION:**

Date/Time 6-8-07 1 1120 Water Level @ Sampling, Feet: 24.20  
 Method of Sampling: SAMPLE POINT Dedicated:  N  
 Multi-phased/ layered:  Yes  No If YES:  light  heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (O <sub>2</sub> )	Other ( )
1125	14.1	7.17	2891	4.12	-113	

**INSTRUMENT CHECK DATA:**

Turbidity Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU  
 Solutions: \_\_\_\_\_  
 pH Serial #: \_\_\_\_\_ 4.0 std.= \_\_\_\_\_ 7.0 std.= \_\_\_\_\_ 10.0 std. = \_\_\_\_\_  
 Solutions: \_\_\_\_\_  
 Conductivity Serial #: \_\_\_\_\_ umhos/cm= \_\_\_\_\_ umhos/cm= \_\_\_\_\_  
 Solutions: \_\_\_\_\_

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: sun 87°  
 Sample Characteristics: clear

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 618107 By: M to Company: STL



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID PW-12

Time 6-11-07 1 1210

Water Level @ Sampling, Feet: 5.49

Method of Sampling: Peristaltic Pump Dedicated:  Y  N

Multi-phased/ layered:  Yes  No If YES:  light  heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
210	15.4	7.20	2227	0.98	-132	0.80

**INSTRUMENT CHECK DATA:**

Conductivity Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Readings: 396/2

pH #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_  
 Readings: KR1-4 KR1-7.

Conductivity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_  
 Readings: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: Sun 75°

Water Characteristics: Clear

**COMMENTS AND OBSERVATIONS:**  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Verify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific

Date: 6/11/07 By: [Signature] Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: PW-12

Field Personnel: PL, TP, JS

Sample Matrix: GW

### MONITORING WELL INSPECTION:

Date/Time 6-11-07 1 1142

Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

### PURGE INFORMATION:

Date / Time Initiated: 6-11-07 1 1145

Date / Time Completed: 6-11-07 1 1205

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 6.0

Initial Water Level, Feet: 5.31

Elevation, GW MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Permeable bed

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated:  Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness  Y  N

Purge Observations: Low Flow

Start Clear Finish Clear

### PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1150	<sup>m/hr</sup> 200 5.49		15.6	7.37	2244	5.07	-117	1.13
1155	↓	↓	15.5	7.30	2240	2.60	-121	1.06
1200	↓	↓	15.3	7.28	2237	1.55	-122	0.97
1205	↓	↓	15.5	7.25	2230	1.01	-121	0.95



### FIELD OBSERVATIONS

Facility: Arch Chemical Sample Point ID: PW-11  
Field Personnel: TP, JS Sample Matrix: GW  
 Grab  Composite

#### SAMPLING INFORMATION:

Date/Time 6-6-07 , 1040 Water Level @ Sampling, Feet: 22.16  
Method of Sampling: Peristaltic Dedicated: Y/N  
Multi-phased/ layered:  Yes  No If YES:  light  heavy

#### SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other ( )
1048	16.4	6.97	3691	108.9	-68	

#### INSTRUMENT CHECK DATA:

Turbidity Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU  
Solutions: \_\_\_\_\_  
pH Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_  
Solutions: \_\_\_\_\_  
Conductivity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_  
Solutions: \_\_\_\_\_

#### GENERAL INFORMATION:

Weather conditions @ time of sampling: Clouds, 62°  
Sample Characteristics: Clouds, light gray, slight odor

COMMENTS AND OBSERVATIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/6/07 By: [Signature] Company: STL



## FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID PW-10  
 Date/Time 6-8-07 1 1035 Water Level @ Sampling, Feet: 6.77  
 Method of Sampling: Peristaltic Dedicated:  Y  N  
 Multi-phased/ layered:  Yes  No If YES:  light  heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
035	15.4	7.17	10,050	24.4	-121	.93

**INSTRUMENT CHECK DATA:**

Identify Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU  
 Ions: 396/2  
 Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_  
 Ions: KQ1-4 KR1-7  
 Conductivity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_  
 Ions: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: Sun 83°  
 Sample Characteristics: Yellow Tint

**COMMENTS AND OBSERVATIONS:**  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific regulations.

Date: 6/8/07 By: [Signature] Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: PW-10

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-8-07 1 1012

Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading):      % Gas: 1      % LEL: 1

Vol. Organic Meter (Calibration/Reading):      Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-8-07 1 1015

Date / Time Completed: 6-8-07 1 1030

Surf. Meas. Pt:  Prot. Casing       Riser

Riser Diameter, Inches: 6.0

Initial Water Level, Feet: 6.77

Elevation. GW MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Percussive Pump

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated:  Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness  Y  N

Purge Observations: Low Flow

Start Yellow Tur Finish Yellow Tur

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1020	ML/min 200	WL 6.79		16.1	7.09	10,000	31.6	-109	1.06
1025	↓	↓		15.5	7.13	10,010	29.1	-111	.99
1030	↓	↓		15.6	7.15	10,030	26.7	-116	.95



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_

Date/Time \_\_\_\_\_ / \_\_\_\_\_

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)

**INSTRUMENT CHECK DATA:**

Calibration Serial #: 364075 NTU std. = \_\_\_\_\_ NTU .02 = .02  
20 NTU std. = 20 NTU

Temperature: 39.12  
 Serial #: 614162 4.0 std. = 4.01 7.0 std. = 7.00  
 Serial #: KR1-4 KR1-7 10.0 std. = \_\_\_\_\_

Conductivity Serial #: 614162 100 umhos/cm = 1000  
 Serial #: 3715-1000 \_\_\_\_\_ umhos/cm = \_\_\_\_\_

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Site Characteristics: \_\_\_\_\_

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Verify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 1 / 1 By: \_\_\_\_\_ Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: Ness - W

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-13-07 1 1020

Cond of seal:  Good  Cracked  None  Buried \_\_\_\_\_ %

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot. casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-13-07, 1025

Date / Time Completed: 6-13-07, 1045

Surf. Meas. Pt:  Prot. Casing  Riser  
 Initial Water Level, Feet: 31.17

Riser Diameter, Inches: 4.0

Well Total Depth, Feet: \_\_\_\_\_

Elevation. GW MSL: \_\_\_\_\_

One (1) Riser Volume, Gal: \_\_\_\_\_

Method of Well Purge: Bladder Pump

Total Volume Purged, Gal: \_\_\_\_\_

Dedicated:  Y  N

Purge Observations: Low Flow

Purged To Dryness  Y  N

Start St. Turbid w/ white specks Finish St. Turbid w/ white specks

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1030	m/min 200	WL 3123	14.4	7.17	2232	35.7	-160	0.37
1035	I	31.24	14.3	7.03	2260	40.8	-167	0.31
1040	I	I	14.4	7.00	2264	38.7	-170	0.29
1045	I	I	14.5	6.99	2266	36.2	-172	0.27

Sampled @ 1045 on 6-13-07  
 9/1. PLH



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_

Date/Time \_\_\_\_\_

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)

**INSTRUMENT CHECK DATA:**

Conductivity Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Readings: 39612

Temperature Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Readings: KR1-4 KR1-7

Activity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Readings: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Site Characteristics: \_\_\_\_\_

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific rules.

By: 11 Company: STL



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: Ness-E

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-13-07 , 1104

Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot. casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1

% LEL: 1

Vol. Organic Meter (Calibration/Reading):

Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-13-07 , 1110

Date / Time Completed: 6-13-07 , 1130

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 9.18

Elevation. G/W MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Bladder Pump

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated: Y 1 Q

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness Y 1 Q

Purge Observations: Low Flow

Start Sl. Turbn Finish Clear

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1115	<u>140</u> <u>9.7</u>		<u>17.1</u>	<u>6.75</u>	<u>3098</u>	<u>18.29</u>	<u>17</u>	<u>0.42</u>
1120	<u>1</u> <u>9.85</u>		<u>17.1</u>	<u>6.58</u>	<u>3137</u>	<u>22.5</u>	<u>-1</u>	<u>0.34</u>
1125	<u>1</u> <u>9.87</u>		<u>17.2</u>	<u>6.56</u>	<u>3129</u>	<u>23.1</u>	<u>-1</u>	<u>0.33</u>
1130	<u>1</u> <u>1</u>		<u>17.2</u>	<u>6.53</u>	<u>3119</u>	<u>22.7</u>	<u>-2</u>	<u>0.34</u>

Sampled @ 1130 on 6-13-07  
Thom Palmer



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_  
 Date/Time \_\_\_\_\_ / \_\_\_\_\_  
 Water Level @ Sampling, Feet: \_\_\_\_\_  
 Method of Sampling: \_\_\_\_\_ Dedicated: Y / N  
 Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ( )	Other ( )

**INSTRUMENT CHECK DATA:**

Quality Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU  
 Cons: \_\_\_\_\_  
 Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_  
 Cons: \_\_\_\_\_  
 Conductivity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_  
 Cons: \_\_\_\_\_

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_  
 Sample Characteristics: \_\_\_\_\_

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific requirements.

By: \_\_\_\_\_ / / \_\_\_\_\_ Company: \_\_\_\_\_



### FIELD OBSERVATIONS

Facility: Arch Chemical

Sample Point ID: MW-127

Field Personnel: TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-7-07 , 1228

Cond of seal:  Good ( ) Cracked \_\_\_\_\_ %  
 None ( ) Buried \_\_\_\_\_

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser: ( ) Unlocked  Good  
 Loose ( ) Flush Mount  
 Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): \_\_\_\_\_ % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): \_\_\_\_\_ Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-7-07 , 1238

Date / Time Completed: 6-7-07 , 1258

Surf. Meas. Pt: ( ) Prot. Casing  Riser

Riser Diameter, Inches: 2

Initial Water Level, Feet: 371

Elevation. GW MSL: \_\_\_\_\_

Well Total Depth, Feet: 1125

Method of Well Purge: Peristaltic Pump

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated:  Y ( ) N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness  Y ( ) N

Purge Observations: \_\_\_\_\_

Start Clean Finish Clean

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/hz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other D.O.
	ml/min	wt							
1243	50	4.57		17.5	7.47	4571	4.77	-203	1.13
1248		4.60		17.6	7.42	4486	2.91	-192	1.07
1253		4.62		17.5	7.43	4399	2.87	-189	1.04
1258		4.63		17.6	7.39	4365	3.17	-190	1.02

Sampled @ 1258 on 6-7-07

*M* *JS*



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_

Date/Time \_\_\_\_\_ / \_\_\_\_\_

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)

**INSTRUMENT CHECK DATA:**

Dirty Serial #: 364075 NTU std. = \_\_\_\_\_ NTU 20 NTU std. = 20 NTU

Readings: 396/2

Serial #: 614162 4.0 std. = 4.01 7.0 std. = 7.01 10.0 std. = \_\_\_\_\_

Readings: KR1-4 KR1-7

Activity Serial #: 614162 1000 umhos/cm = 1000 \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Readings: 3715-1000

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Site Characteristics: \_\_\_\_\_

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

By: 11 Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: MW-114

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-14-07 , 928

Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): \_\_\_\_\_ % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): \_\_\_\_\_ Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-14-07 , 933

Date / Time Completed: 6-14-07 , 953

Surf. Meas. Pt:  Prot. Casing  Riser  
 Initial Water Level, Feet: 10.72

Riser Diameter, Inches: 20

Well Total Depth, Feet: \_\_\_\_\_

Elevation, GW MSL: \_\_\_\_\_

One (1) Riser Volume, Gal: \_\_\_\_\_

Method of Well Purge: Peristaltic Pump

Total Volume Purged, Gal: \_\_\_\_\_

Dedicated:  Y  N

Purge Observations: Low Flow

Purged To Dryness  Y  N

Start Clear Finish Clear

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other <i>orp</i>	Other <i>DO</i>
938	<u>75</u> / <u>11.12</u>		15.8	7.11	2407	17.77	16	1.08
943	<u>1</u> / <u>11.31</u>		15.4	7.09	2134	12.09	18	1.03
948	<u>1</u> / <u>11.39</u>		15.3	7.03	2097	8.43	18	1.04
953	<u>1</u> / <u>1</u>		15.3	7.04	2058	5.94	20	1.00

Sampled @ 953 on 6-14-07

*Theresa Lahn*



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_

Time \_\_\_\_\_ / \_\_\_\_\_

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)

**INSTRUMENT CHECK DATA:**

Conductivity Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Readings: 396/2

Temperature Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Readings: KQ1-4 KR1-7.

Dissolved Oxygen Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Readings: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Site Characteristics: \_\_\_\_\_

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific Requirements.

By: 11 \_\_\_\_\_ Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: MW-106

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-13-07 , 1158

Cond of seal:  Good  Cracked  None  Buried \_\_\_\_\_ %

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-13-07, 1205

Date / Time Completed: 6-13-07, 1230  
2.0

Surf. Meas. Pt:  Prot. Casing  Riser  
 Initial Water Level, Feet: 10.06

Riser Diameter, Inches: \_\_\_\_\_  
 Elevation, GW MSL: \_\_\_\_\_  
 Method of Well Purge: Bladder Pump

Well Total Depth, Feet: \_\_\_\_\_  
 One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated: Y 1A  
 Purged To Dryness Y 1A

Total Volume Purged, Gal: \_\_\_\_\_  
 Purge Observations: Low Flow

Start Turbid Finish Clear  
Orange w/ orange specks

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1210	<u>280</u> / <u>10.70</u>		<u>13.2</u>	<u>7.27</u>	<u>2217</u>	<u>82.3</u>	<u>-97</u>	<u>1.27</u>
1215	<u>1</u> / <u>10.88</u>		<u>13.1</u>	<u>7.13</u>	<u>2387</u>	<u>67.2</u>	<u>-100</u>	<u>0.64</u>
1220	<u>200</u> / <u>10.91</u>		<u>13.1</u>	<u>7.10</u>	<u>2403</u>	<u>54.8</u>	<u>-107</u>	<u>0.60</u>
1225	<u>1</u> / <u>1</u>		<u>13.0</u>	<u>7.07</u>	<u>2468</u>	<u>32.7</u>	<u>-102</u>	<u>0.58</u>
1230	<u>1</u> / <u>1</u>		<u>13.1</u>	<u>7.11</u>	<u>2503</u>	<u>18.35</u>	<u>-108</u>	<u>0.57</u>

Sampled @ 1230 on 6-13-07

*[Handwritten Signature]*



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID MW-104  
 Date/Time 6-12-07 1 1135 Water Level @ Sampling, Feet 7.57  
 Method of Sampling: PASTA/TIL Dedicated: Y (N)  
 Multi-phased/ layered: ( ) Yes  No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
1135	16.4	7.33	875	283	-85	0.87

**INSTRUMENT CHECK DATA:**

Conductivity Serial #: 3925 NTU std. =    NTU 20 NTU std. = 20 NTU  
 Location: 39C/2  
 Turbidity Serial #: 616806 4.0 std. = 4.00 7.0 std. = 200 10.0 std. =     
 Location: KR1-4 KR1-7  
 Conductivity Serial #: 616806 1000 umhos/cm = 1000    umhos/cm =     
 Location: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: SUN 83°  
 Sample Characteristics: TURBID

**REMARKS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific methods.

By: M. Lu Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: M6-104

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-12-07 1 1100

Cond of seal: ( ) Good ( ) Cracked \_\_\_\_\_ %  
( ) None  Buried

Prof. Casing/riser height: \_\_\_\_\_

Cond of prof. Casing/riser: ( ) Unlocked ( ) Good  
( ) Loose  Flush Mount  
( ) Damaged \_\_\_\_\_

If prof. casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-12-07 1 1105

Date / Time Completed: 6-12-07 1 1130

Surf. Meas. Pt: ( ) Prot. Casing  Riser

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 7.43

Elevation. GW MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Peristaltic

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated: Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness Y  N

Purge Observations: Low Flow

Start TURBID Finish TURBID

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1115	<sup>ml/min</sup> 160 7.57		17.1	7.49	892	400	-76	1.07
1120	↓ ↓		16.9	7.40	887	357	-80	.98
1125	↓ ↓		16.4	7.37	880	300	-85	.94
1130	↓ ↓		16.2	7.35	877	289	-85	.90



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID MW-103

Date/Time 6-11-07 1 1315

Water Level @ Sampling, Feet: 2.06

Method of Sampling: Peristaltic Pump Dedicated:  ~~Y~~ ~~N~~

Multi-phased/ layered: ( ) Yes  No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
1315	21.4	7.15	680	0.80	-98	0.83

**INSTRUMENT CHECK DATA:**

Identify Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Readings: 396/2

Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Readings: KQ1-4 KR1-7

Activity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Readings: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: sun 80°

Water Characteristics: clear

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/11/07 By: [Signature] Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: MW 103

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-11-07 1 1247

Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1

% LEL: 1

Vol. Organic Meter (Calibration/Reading):

Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-11-07 1 1250

Date / Time Completed: 6-11-07 1 1310

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 1.38

Elevation. GW MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Perc. Static Level

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated:  Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness  Y  N

Purge Observations: Low Flow

Start Clear Finish Clear

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	ml/min	ml							
1255	150	1.79		23.0	7.44	707	2.24	-113	1.06
1300		1.82		21.5	7.29	687	1.56	-110	0.99
1305		1.87		21.4	7.19	690	0.98	-107	0.96
1310	√	1.92		21.5	7.18	688	0.94	-100	0.95



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

Date/Time: 6-7-07, 1008  
 POINT ID: E-3  
 Method of Sampling: Peristaltic Pump Water Level @ Sampling, Feet: 5.97  
 Dedicated:  Y  N  
 Multi-phased/ layered:  Yes  No If YES:  light  heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
015	13.6	7.23	1474	21.2	18	1.36

**INSTRUMENT CHECK DATA:**

Turbidity Serial #: 3925-5202 NTU std. =    NTU 20 NTU std. = 20 NTU  
 Calibration: 20-39612  
 pH Serial #: 616806 4.0 std. = 4.01 7.0 std. = 7.00 10.0 std. =     
 Calibration: 4-KAI 7, KRI  
 Conductivity Serial #: 616806 1000 umhos/cm = 1000    umhos/cm =     
 Calibration: 1000-3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: Clouds, 60°  
 Sample Characteristics: Clear with orange specks

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific methods.

Date: 6,7,07 By: [Signature] Company: ST



### FIELD OBSERVATIONS

Facility: Arch Chemical

Sample Point ID: E-3

Field Personnel: TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-6-07 , 1117

Cond of seal: ( ) Good  Cracked \_\_\_\_\_ %  
( ) None ( ) Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser: ( ) Unlocked ( ) Good  
( ) Loose ( ) Flush Mount  
 Damaged Bent

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-6-07 , 1120

Date / Time Completed: 6-6-07 , 1130

Surf. Meas. Pt: ( ) Prot. Casing  Riser

Riser Diameter, Inches: \_\_\_\_\_

Initial Water Level, Feet: 5.53

Elevation, G/W MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Peristaltic Pump

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated:  Y / N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness  Y / N

Purge Observations: \_\_\_\_\_

Start Sl. Turbid Finish Clear w/ orange specks  
orange specks

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other OKP	Other DO
1125			13.9	7.37	1236	35.7	-0	1.42
1130			14.1	7.22	1216	22.3	521	1.29
1133	- Dry							



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_

Date / /

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ( )	Other ( )

**INSTRUMENT CHECK DATA:**

Turbidity Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Notes: \_\_\_\_\_

pH Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Notes: \_\_\_\_\_

Conductivity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Notes: \_\_\_\_\_

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Site Characteristics: \_\_\_\_\_

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific procedures.

/ /

By: \_\_\_\_\_

Company: \_\_\_\_\_



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: P2-101

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-13-07 1 1231

Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading):      % Gas: 1      % LEL: 1

Vol. Organic Meter (Calibration/Reading):      Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-13-07 1 1235

Date / Time Completed: 6-13-07 1 1255

Surf. Meas. Pt:  Prot. Casing       Riser

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 12.98

Elevation, GW MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Peristaltic

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated:  Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness  Y  N

Purge Observations: Low Flow

Start Clear      Finish Clear

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1240	<u>M/L</u> <u>150</u>	<u>WL</u> <u>13.13</u>		<u>16.9</u>	<u>7.01</u>	<u>3641</u>	<u>3.78</u>	<u>23</u>	<u>1.17</u>
1245				<u>16.7</u>	<u>7.03</u>	<u>3704</u>	<u>3.76</u>	<u>23</u>	<u>1.15</u>
1250				<u>16.5</u>	<u>7.00</u>	<u>3710</u>	<u>2.88</u>	<u>20</u>	<u>1.11</u>
1255				<u>16.7</u>	<u>7.00</u>	<u>3715</u>	<u>2.84</u>	<u>18</u>	<u>1.07</u>



## FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID P2-101

Date 6-13-07 Time 1 1300

Water Level @ Sampling, Feet: 13.13

Method of Sampling: Peristaltic Dedicated:  IN

Multi-phased/ layered: ( ) Yes  No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
300	16.5	7.00	3717	2.25	17	1.05

**INSTRUMENT CHECK DATA:**

Calibration Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Readings: 396/2

Standard Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Readings: KR1-4 KR1-7

Conductivity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Readings: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: SW 83°

Water Characteristics: clear

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/13/07 By: M L Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL Sample Point ID: P2-102  
 Field Personnel: PL, TP, JS Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-13-07 1 1313 Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried  
 Prot. Casing/riser height: \_\_\_\_\_ Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_  
 Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1  
 Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-13-07 1317 Date / Time Completed: 6-13-07 1335  
 Surf. Meas. Pt:  Prot. Casing  Riser Riser Diameter, Inches: 2.0  
 Initial Water Level, Feet: 20.26 Elevation. GW MSL: \_\_\_\_\_  
 Well Total Depth, Feet: \_\_\_\_\_ Method of Well Purge: PERMEABLE  
 One (1) Riser Volume, Gal: \_\_\_\_\_ Dedicated:  Y  N  
 Total Volume Purged, Gal: \_\_\_\_\_ Purged To Dryness  Y  N  
 Purge Observations: LOW FLOW Start Clear Finish Clear

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	MC/HR	WL							
1320	150	20.41		15.4	6.59	4309	1.73	7	1.07
1325	↓	↓		15.6	6.70	4320	1.37	8	1.01
1330	↓	↓		15.2	6.77	4338	1.21	8	0.97
1335	↓	↓		15.0	6.75	4339	1.17	7	0.95



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID P2-102

Date 6-13-07 Time 1:1340

Water Level @ Sampling, Feet: 20.41

Method of Sampling: PERISTALTIC Dedicated:  Y  N

Multi-phased/ layered:  Yes  No If YES:  light  heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
340	15.1	6.77	4342	1.09	0	0.93

**QUALITY CONTROL CHECK DATA:**

Quality Control Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Quality Control Serial #: 39612

Quality Control Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Quality Control Serial #: KR1-4 KR1-7

Quality Control Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Quality Control Serial #: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: Sunny 85°

Water Characteristics: clear

REMARKS AND OBSERVATIONS:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date 6/13/07 By: [Signature] Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: P2-103

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-13-07 1 1358

Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged CM Broken

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-13-07 1400

Date / Time Completed: 6-13-07 1420

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 12.08

Elevation. G/W MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Peristaltic

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated: YIN

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness YIN

Purge Observations: Low Flow

Start Clear Finish Clear

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1405	<u>150</u>	<u>12.15</u>		<u>14.7</u>	<u>6.77</u>	<u>5250</u>	<u>1.87</u>	<u>106</u>	<u>1.22</u>
1410	↓	↓		<u>14.9</u>	<u>6.80</u>	<u>5199</u>	<u>1.01</u>	<u>96</u>	<u>1.17</u>
1415	↓	↓		<u>14.9</u>	<u>6.83</u>	<u>5186</u>	<u>0.90</u>	<u>94</u>	<u>1.09</u>
1420	↓	↓		<u>14.7</u>	<u>6.86</u>	<u>5178</u>	<u>0.85</u>	<u>92</u>	<u>1.00</u>



## FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID P2-103

Time 6-13-07 1 1425

Water Level @ Sampling, Feet: 12.15

Method of Sampling: PERISTALTIC Dedicated:  Y  N

Multi-phased/ layered:  ( ) Yes  (X) No If YES:  ( ) light  ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
425	14.5	6.88	5175	0.83	90	0.97

**INSTRUMENT CHECK DATA:**

Calibration Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Readings: 396/2

Filter Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Readings: KR1-4 KR1-7

Conductivity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Readings: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: Sun 86°

Water Characteristics: Clear

**COMMENTS AND OBSERVATIONS:**

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I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific standards.

6/13/07 By: [Signature] Company: STR



## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: P2-104

Field Personnel: PL, TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-13-07 1 1151

Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prot. Casing/riser height: \_\_\_\_\_

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prot. casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading):      % Gas: 1      % LEL: 1

Vol. Organic Meter (Calibration/Reading):      Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-13-07 1 1155

Date / Time Completed: 6-13-07 1 1215

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 12.82

Elevation, G/W MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: PERISTALTIC

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated:  Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness  Y  N

Purge Observations: Low Flow

Start clear      Finish clear

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1200	<u>200</u>	<u>12.80</u>	<u>16.2</u>	<u>7.44</u>	<u>1576</u>	<u>3.10</u>	<u>-111</u>	<u>1.07</u>
1205	<u>↓</u>	<u>↓</u>	<u>16.6</u>	<u>7.39</u>	<u>1540</u>	<u>1.37</u>	<u>-112</u>	<u>0.99</u>
1210	<u>↓</u>	<u>↓</u>	<u>16.3</u>	<u>7.30</u>	<u>1538</u>	<u>1.21</u>	<u>-114</u>	<u>0.95</u>
1215	<u>↓</u>	<u>↓</u>	<u>16.4</u>	<u>7.28</u>	<u>1536</u>	<u>1.20</u>	<u>-115</u>	<u>0.91</u>



## FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID P2-104

Date/Time 6-13-07 1 1220

Water Level @ Sampling, Feet: 12.88

Method of Sampling: Peristaltic Dedicated:  N

Multi-phased/ layered: ( ) Yes (  ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
1220	16.3	7.27	1534	1.10	-115	0.90

**INSTRUMENT CHECK DATA:**

Conductivity Serial #: 3925 NTU std. =    NTU 20 NTU std. = 20 NTU

Flow: 396/2

Temperature Serial #: 616801 4.0 std. = 4.0 7.0 std. = 7.00 10.0 std. =   

Flow: KR1-4 KR1-7

Conductivity Serial #: 616308 1000 umhos/cm = 1600 umhos/cm =   

Flow: 3715

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: SUN 81°

Water Characteristics: Clear

REMARKS AND OBSERVATIONS:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific methods.

Signature: 611716 By: [Signature] Company: STR



### FIELD OBSERVATIONS

Facility: Arch Chemical Sample Point ID: PZ-105  
 Field Personnel: TP, JS Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-7-07 , 1040 Cond of seal: ( ) Good ( ) Cracked \_\_\_\_\_ %  
 ( ) None  Buried

Prot. Casing/riser height: \_\_\_\_\_ Cond of prot. Casing/riser: ( ) Unlocked ( ) Good  
 ( ) Loose  Flush Mount  
 ( ) Damaged \_\_\_\_\_

If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): \_\_\_\_\_ % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): \_\_\_\_\_ Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-7-07 , 1043 Date / Time Completed: 6-7-07 , 1103

Surf. Meas. Pt: ( ) Prot. Casing  Riser Riser Diameter, Inches: 2

Initial Water Level, Feet: 6.79 Elevation. G/W MSL: \_\_\_\_\_

Well Total Depth, Feet: 32.86 Method of Well Purge: Peristaltic Pump

One (1) Riser Volume, Gal: \_\_\_\_\_ Dedicated:  Y /  N

Total Volume Purged, Gal: \_\_\_\_\_ Purged To Dryness  Y  N

Purge Observations: \_\_\_\_\_ Start TP Turbid Finish Turbid

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1048	<u>75</u>	<u>755</u>		<u>15.3</u>	<u>7.05</u>	<u>3714</u>	<u>486</u>	<u>-102</u>	<u>1.17</u>
1053	<u>1</u>	<u>822</u>		<u>15.2</u>	<u>7.04</u>	<u>3736</u>	<u>525</u>	<u>-119</u>	<u>1.01</u>
1058	<u>1</u>	<u>889</u>		<u>15.1</u>	<u>7.05</u>	<u>3718</u>	<u>532</u>	<u>-123</u>	<u>0.98</u>
1103	<u>1</u>	<u>935</u>		<u>15.2</u>	<u>7.05</u>	<u>3723</u>	<u>502</u>	<u>-124</u>	<u>0.99</u>

Sampled @ 1103 on 6-7-07  
 [Signature]



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_  
 Date/Time \_\_\_\_\_ / \_\_\_\_\_  
 Water Level @ Sampling, Feet: \_\_\_\_\_  
 Method of Sampling: \_\_\_\_\_ Dedicated: Y / N  
 Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ( )	Other ( )

**STANDARDIZATION CHECK DATA:**

Quality Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU  
 Cons: \_\_\_\_\_  
 Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_  
 Cons: \_\_\_\_\_  
 Conductivity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_  
 Cons: \_\_\_\_\_

**ADDITIONAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_  
 Other Characteristics: \_\_\_\_\_

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific standards.

By: \_\_\_\_\_ / / \_\_\_\_\_ Company: \_\_\_\_\_



## FIELD OBSERVATIONS

Facility: Arch Chemical Sample Point ID: PZ-106  
 Field Personnel: TP, JS Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-7-07 , 1315 Cond of seal: ( ) Good ( ) Cracked \_\_\_\_\_ %  
 ( ) None (X) Buried  
 Prot. Casing/riser height: \_\_\_\_\_ Cond of prot. Casing/riser: ( ) Unlocked (X) Good  
 ( ) Loose ( ) Flush Mount  
 ( ) Damaged \_\_\_\_\_  
 If prot.casing; depth to riser below: \_\_\_\_\_  
 Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1  
 Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-7-07 , 1318 Date / Time Completed: 6-7-07 , 1338  
 Surf. Meas. Pt: ( ) Prot. Casing (X) Riser Riser Diameter, Inches: 2  
 Initial Water Level, Feet: 9.50 Elevation. G/W MSL: \_\_\_\_\_  
 Well Total Depth, Feet: \_\_\_\_\_ Method of Well Purge: Peristaltic Pump  
 One (1) Riser Volume, Gal: \_\_\_\_\_ Dedicated: QIN  
 Total Volume Purged, Gal: \_\_\_\_\_ Purged To Dryness Y (X) W  
 Purge Observations: \_\_\_\_\_ Start Sl-Turbid Finish Clean  
Black specks Yellow tint Black specks Yellow tint

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other D.O.
	min/min	hr							
1323	10.0	10.14		15.2	7.08	5296	18.9	-145	1.15
1328		10.52		14.6	6.70	5272	19.2	-162	1.06
1333		10.66		14.5	6.68	5219	17.3	-159	1.01
1338		10.72		14.3	6.65	5187	14.6	-167	0.98

Sampled @ 1338 on 6-7-07  
*TP JS*



## FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_

Date / Time \_\_\_\_\_ / \_\_\_\_\_

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Depth-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ( )	Other ( )

**INSTRUMENT CHECK DATA:**

Quality Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Notes: \_\_\_\_\_

Flow Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Notes: \_\_\_\_\_

Conductivity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Notes: \_\_\_\_\_

**ADDITIONAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Special Characteristics: \_\_\_\_\_

COMMENTS AND OBSERVATIONS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific Methods.

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

By: \_\_\_\_\_

Company: \_\_\_\_\_



## FIELD OBSERVATIONS

Facility: Arch Chemical Sample Point ID: PZ-107  
 Field Personnel: TP, JS Sample Matrix: GW

### MONITORING WELL INSPECTION:

Date/Time 6-7-07 1 1122 Cond of seal:  Good  Cracked \_\_\_\_\_ %  
 None  Buried  
 Prof. Casing/riser height: \_\_\_\_\_ Cond of prof. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prof. casing; depth to riser below: \_\_\_\_\_  
 Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1  
 Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

### PURGE INFORMATION:

Date / Time Initiated: 6-7-07, 1125 Date / Time Completed: 6-7-07, 1150  
 Surf. Meas. Pt:  Prof. Casing  Riser Riser Diameter, Inches: 2  
 Initial Water Level, Feet: 5.47 Elevation, G/W MSL: \_\_\_\_\_  
 Well Total Depth, Feet: 27.90 Method of Well Purge: Peristaltic Pump  
 One (1) Riser Volume, Gal: \_\_\_\_\_ Dedicated:  Y  N  
 Total Volume Purged, Gal: \_\_\_\_\_ Purged To Dryness  Y  N  
 Purge Observations: \_\_\_\_\_ Start Clean Finish Clean, Amber  
Color, slight odor

### PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1130	<u>200</u>	<u>5.71</u>		<u>13.1</u>	<u>7.33</u>	<u>3821</u>	<u>295</u>	<u>-149</u>	<u>1.30</u>
1135		<u>5.73</u>		<u>12.9</u>	<u>7.54</u>	<u>4237</u>	<u>176</u>	<u>-155</u>	<u>1.11</u>
1140				<u>12.9</u>	<u>7.81</u>	<u>4486</u>	<u>226</u>	<u>-189</u>	<u>1.03</u>
1145				<u>12.9</u>	<u>7.87</u>	<u>4519</u>	<u>210</u>	<u>-188</u>	<u>1.00</u>
1150				<u>12.8</u>	<u>7.89</u>	<u>4582</u>	<u>184</u>	<u>-187</u>	<u>0.98</u>

Sampled @ 1150 on 6-7-07



# FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID \_\_\_\_\_

Date / Time \_\_\_\_\_ / \_\_\_\_\_

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Depth-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ( )	Other ( )

**INSTRUMENT CHECK DATA:**

Calibration Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Notes: \_\_\_\_\_

Flow rate: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Notes: \_\_\_\_\_

Conductivity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Notes: \_\_\_\_\_

**ADDITIONAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Characteristics: \_\_\_\_\_

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

That sampling procedures were in accordance with all applicable EPA, State and Site-Specific procedures.

\_\_\_\_ / \_\_\_\_ / \_\_\_\_

By: \_\_\_\_\_ Company: \_\_\_\_\_



### FIELD OBSERVATIONS

Facility: Arch Chemical Sample Point ID: Q0-2  
Field Personnel: TP, PL, JS Sample Matrix: SW  
 Grab  Composite

#### SAMPLING INFORMATION:

Date/Time 6-12-07, 1350 Water Level @ Sampling, Feet: \_\_\_\_\_  
Method of Sampling: Manual Grab Dedicated:  Y  N  
Multi-phased/ layered:  Yes  No If YES:  light  heavy

#### SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other ( )
1356	24.3	7.61	2027	7.28	110	

#### INSTRUMENT CHECK DATA:

Turbidity Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU  
Solutions: \_\_\_\_\_  
pH Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_  
Solutions: \_\_\_\_\_  
Conductivity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_  
Solutions: \_\_\_\_\_

#### GENERAL INFORMATION:

Weather conditions @ time of sampling: Sun, 86°  
Sample Characteristics: Clear

#### COMMENTS AND OBSERVATIONS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/12/07 By: [Signature] Company: STL



### FIELD OBSERVATIONS

Facility: Arch Chemical  
Field Personnel: TP, PL, JS

Sample Point ID: Q0-251  
Sample Matrix: SW  
 Grab  Composite

#### SAMPLING INFORMATION:

Date/Time 6-12-07, 1405

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: Dipper Dedicated:  N

Multi-phased/ layered:  Yes  No If YES:  light  heavy

#### SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other ( )
1411	25.6	7.87	577	19.7	201	

#### INSTRUMENT CHECK DATA:

Turbidity Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Solutions: \_\_\_\_\_

pH Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Solutions: \_\_\_\_\_

Conductivity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Solutions: \_\_\_\_\_

#### GENERAL INFORMATION:

Weather conditions @ time of sampling: Sun, 86°

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6, 12, 07 By: [Signature] Company: STC



### FIELD OBSERVATIONS

Facility: Arch

Sample Point ID: QS-4

Field Personnel: TP JS

Sample Matrix: GW

#### SAMPLING INFORMATION:

Date/Time 6-12-07, 950

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: Stainless Bucket

Dedicated: Y  N

Multi-phased/ layered: ( ) Yes  No

If YES: ( ) light ( ) heavy

#### SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other
9:51	13.9	7.56	1602	2.73	20	

#### INSTRUMENT CHECK DATA:

Turbidity Serial #: 364075 NTU std. = \_\_\_\_\_ NTU 20 NTU std. = 20 NTU

Solutions: 20-39612

pH Serial #: 614162 4.0 std. = 4.00 7.0 std. = 7.02 10.0 std. = \_\_\_\_\_

Solutions: 4-KQ1 7-KRI

Conductivity Serial #: 614162 1000 umhos/cm = 1000 umhos/cm = \_\_\_\_\_

Solutions: 1000-3715

#### GENERAL INFORMATION:

Weather conditions @ time of sampling: Sun 80°

Sample Characteristics: Clean

COMMENTS AND OBSERVATIONS:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/12/07

By: [Signature]

Company: STC



### FIELD OBSERVATIONS

Facility: Arch Chemical

Sample Point ID: S-3

Field Personnel: TP, JS

Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-6-07 , 1212

Cond of seal: Vault  
 Good  Cracked \_\_\_\_\_ %  
 None  Buried

Prof. Casing/riser height: \_\_\_\_\_

Cond of prof. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged \_\_\_\_\_

If prof. casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-6-07 , 1215

Date / Time Completed: 6-6-07 , 1235

Surf. Meas. Pt:  Prof. Casing  Riser

Riser Diameter, Inches: \_\_\_\_\_

Initial Water Level, Feet: 0.87

Elevation, G/W MSL: \_\_\_\_\_

Well Total Depth, Feet: \_\_\_\_\_

Method of Well Purge: Peristaltic Pump

One (1) Riser Volume, Gal: \_\_\_\_\_

Dedicated:  Y  N

Total Volume Purged, Gal: \_\_\_\_\_

Purged To Dryness  Y  N

Purge Observations: \_\_\_\_\_

Start Clean Finish Clean  
w/ Black Specks

**PURGE DATA: (if applicable)**

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1220	<u>inlet 200</u> <u>W/L 0.87</u>		14.0	7.41	2530	10.06	-71	1.08
1225	<u>↓</u>		14.0	7.18	2526	8.50	-100	1.03
1230	<u>↓</u>		14.1	7.17	2509	8.50	-94	0.99
1235	<u>↓</u>		14.1	7.12	2510	7.55	-91	0.97

*Sampled @ 1235 on 6-6-07*  
*Ther. Phil*



# FIELD OBSERVATIONS (continued)

**GENERAL INFORMATION:**

POINT ID \_\_\_\_\_

Date /Time \_\_\_\_\_ / \_\_\_\_\_

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Depth-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ( )	Other ( )

**INSTRUMENT CHECK DATA:**

Activity Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

Readings: \_\_\_\_\_

Material #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

Activity Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

Readings: \_\_\_\_\_

**ADDITIONAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Characteristics: \_\_\_\_\_

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific

By: \_\_\_\_\_ Company: \_\_\_\_\_



### FIELD OBSERVATIONS

Facility: Arch Chemical Sample Point ID: S-4  
 Field Personnel: TP, JS Sample Matrix: GW

**MONITORING WELL INSPECTION:**

Date/Time 6-6-07 , 1247 Cond of seal: ( ) Good ( ) Cracked \_\_\_\_\_ %  
 ( ) None ( ) Buried  
 Prot. Casing/riser height: \_\_\_\_\_ Cond of prot. Casing/riser: ( ) Unlocked ( ) Good  
 ( ) Loose ( ) Flush Mount  
 ( ) Damaged \_\_\_\_\_  
 If prot.casing; depth to riser below: \_\_\_\_\_

Gas Meter (Calibration/ Reading): % Gas: 1 % LEL: 1  
 Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): 1

**PURGE INFORMATION:**

Date / Time Initiated: 6-6-07, 1250 Date / Time Completed: 6-6-07, 1310  
 Surf. Meas. Pt: ( ) Prot. Casing ( ) Riser Riser Diameter, Inches: \_\_\_\_\_  
 Initial Water Level, Feet: 0.72 Elevation, GW MSL: \_\_\_\_\_  
 Well Total Depth, Feet: \_\_\_\_\_ Method of Well Purge: Peristaltic Pump  
 One (1) Riser Volume, Gal: \_\_\_\_\_ Dedicated: Q / N  
 Total Volume Purged, Gal: \_\_\_\_\_ Purged To Dryness Y (N)  
 Purge Observations: \_\_\_\_\_ Start clean w/ organic species Finish clean

**PURGE DATA: (if applicable)**

\* Field Dup Taken

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	ml/min	W/C							
1255	200	0.72		13.0	7.02	3587	18.7	-120	1.49
1300				13.0	7.16	3566	14.0	-119	1.13
1305				13.1	7.20	3553	10.77	-124	1.08
1310				13.2	7.23	3572	11.5	-122	1.06

Sampled @ 1310 on 6-6-07  
 Alan L...

DUP Taken



# FIELD OBSERVATIONS (continued)

**GENERAL INFORMATION:**

POINT ID \_\_\_\_\_

Date/Time \_\_\_\_\_ / \_\_\_\_\_

Water Level @ Sampling, Feet: \_\_\_\_\_

Method of Sampling: \_\_\_\_\_ Dedicated: Y / N

Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy

**SAMPLING DATA:**

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ( )	Other ( )

**INSTRUMENT CHECK DATA:**

NTU Serial #: \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU \_\_\_\_\_ NTU std. = \_\_\_\_\_ NTU

NTU Serial #: \_\_\_\_\_ 4.0 std. = \_\_\_\_\_ 7.0 std. = \_\_\_\_\_ 10.0 std. = \_\_\_\_\_

umhos/cm Serial #: \_\_\_\_\_ umhos/cm = \_\_\_\_\_ umhos/cm = \_\_\_\_\_

**ADDITIONAL INFORMATION:**

Weather conditions @ time of sampling: \_\_\_\_\_

Site Characteristics: \_\_\_\_\_

**COMMENTS AND OBSERVATIONS:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific

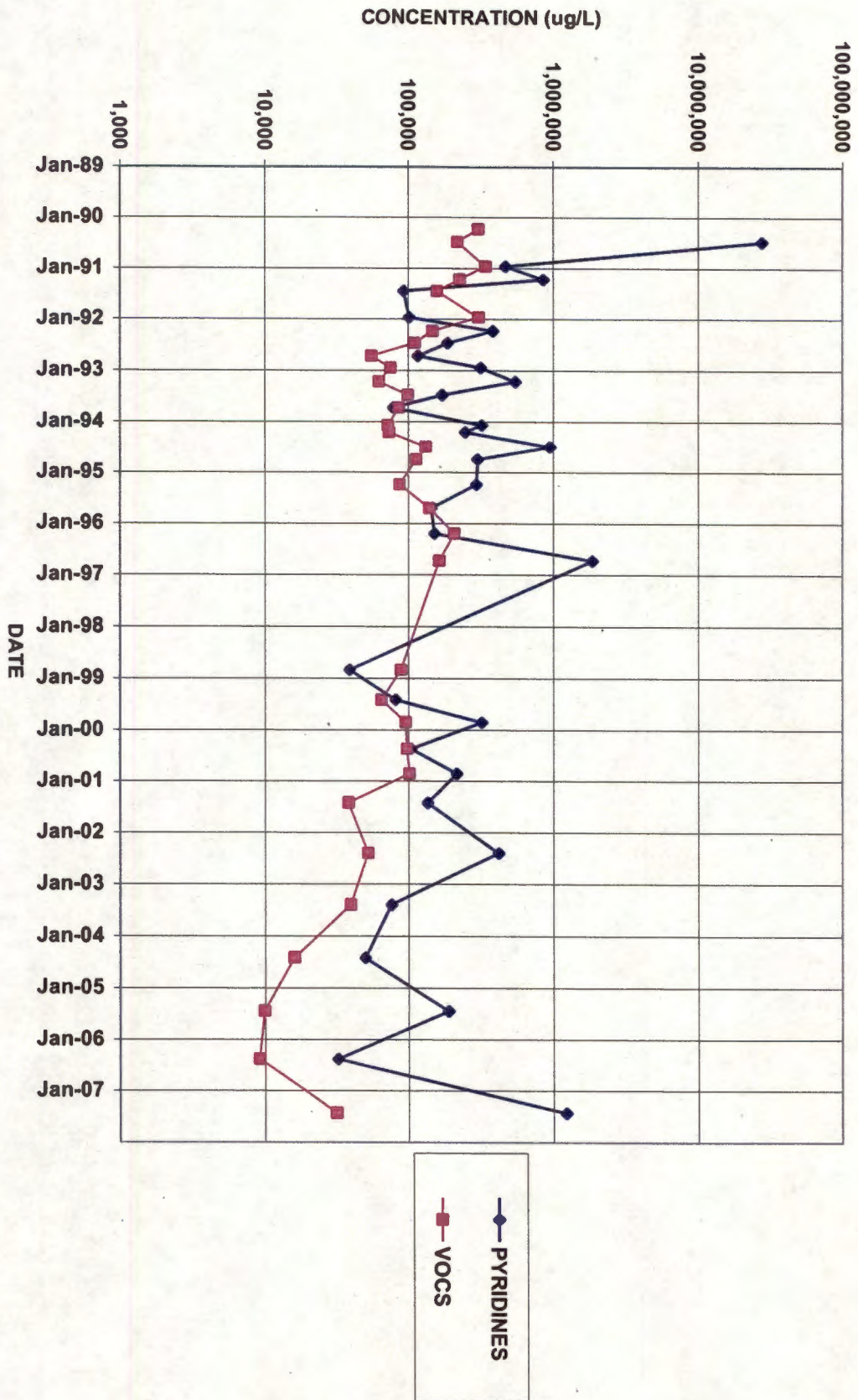
Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ By: \_\_\_\_\_ Company: \_\_\_\_\_



**Appendix B**

**Well Trend Data**

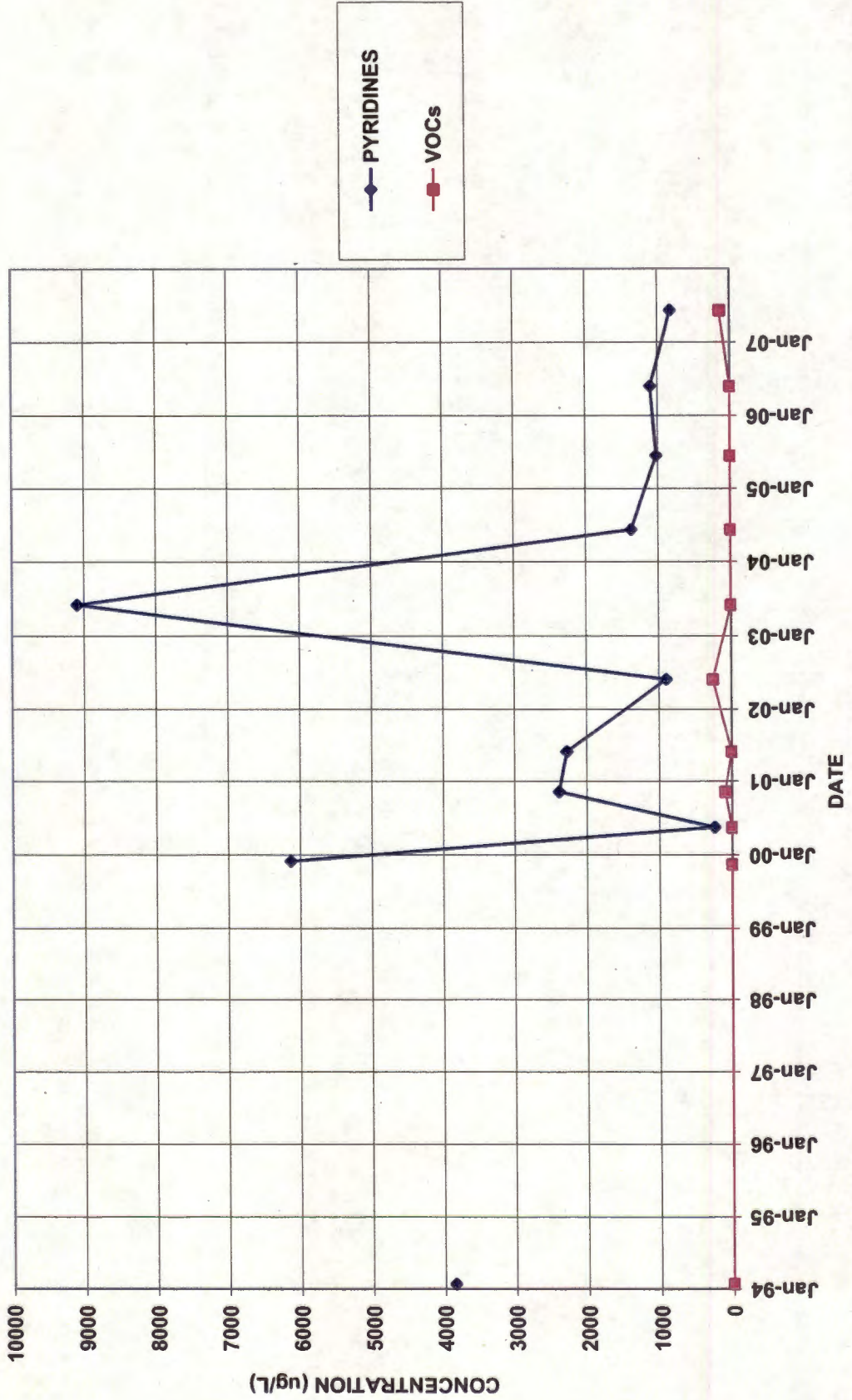




B-17

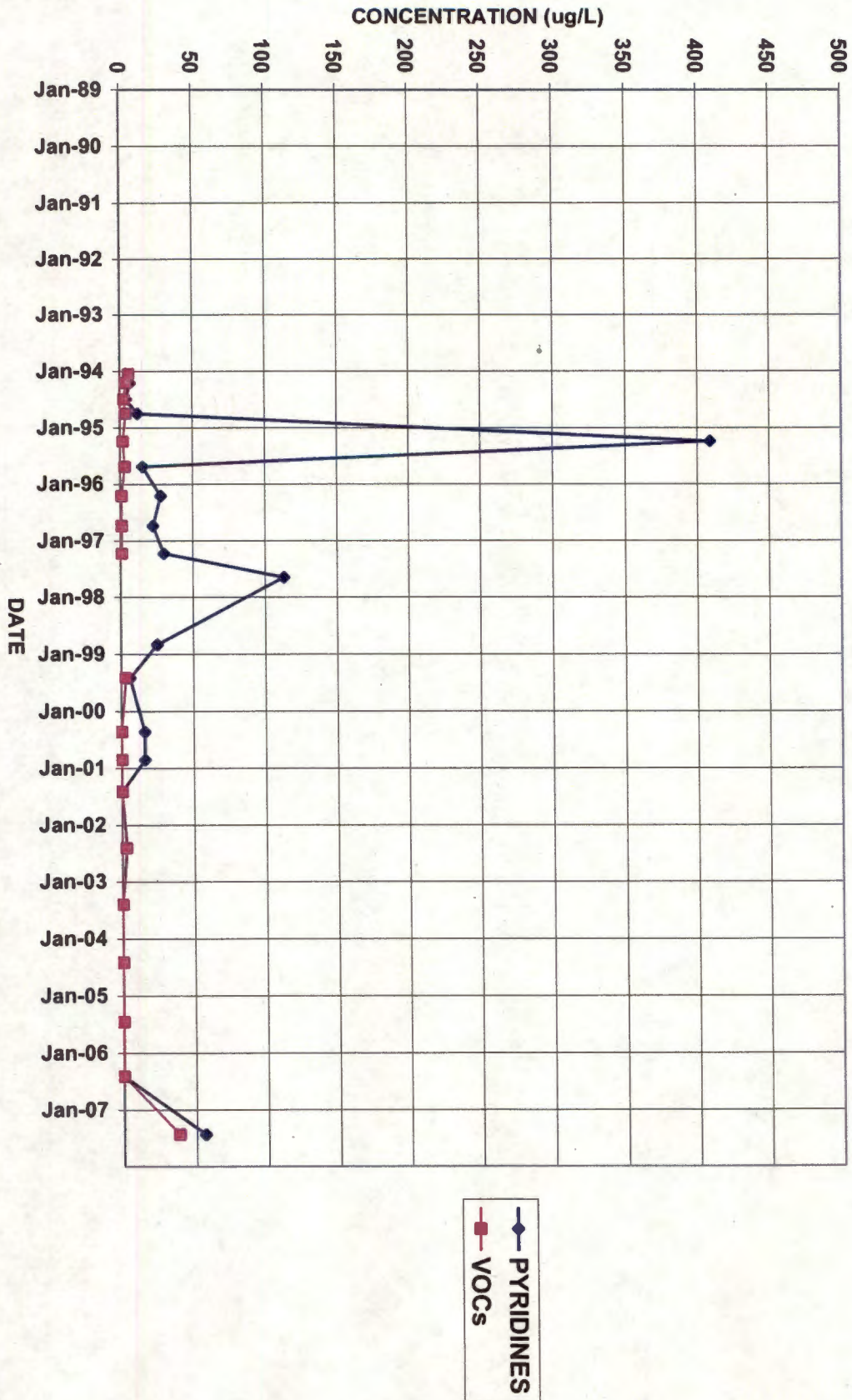


B-7



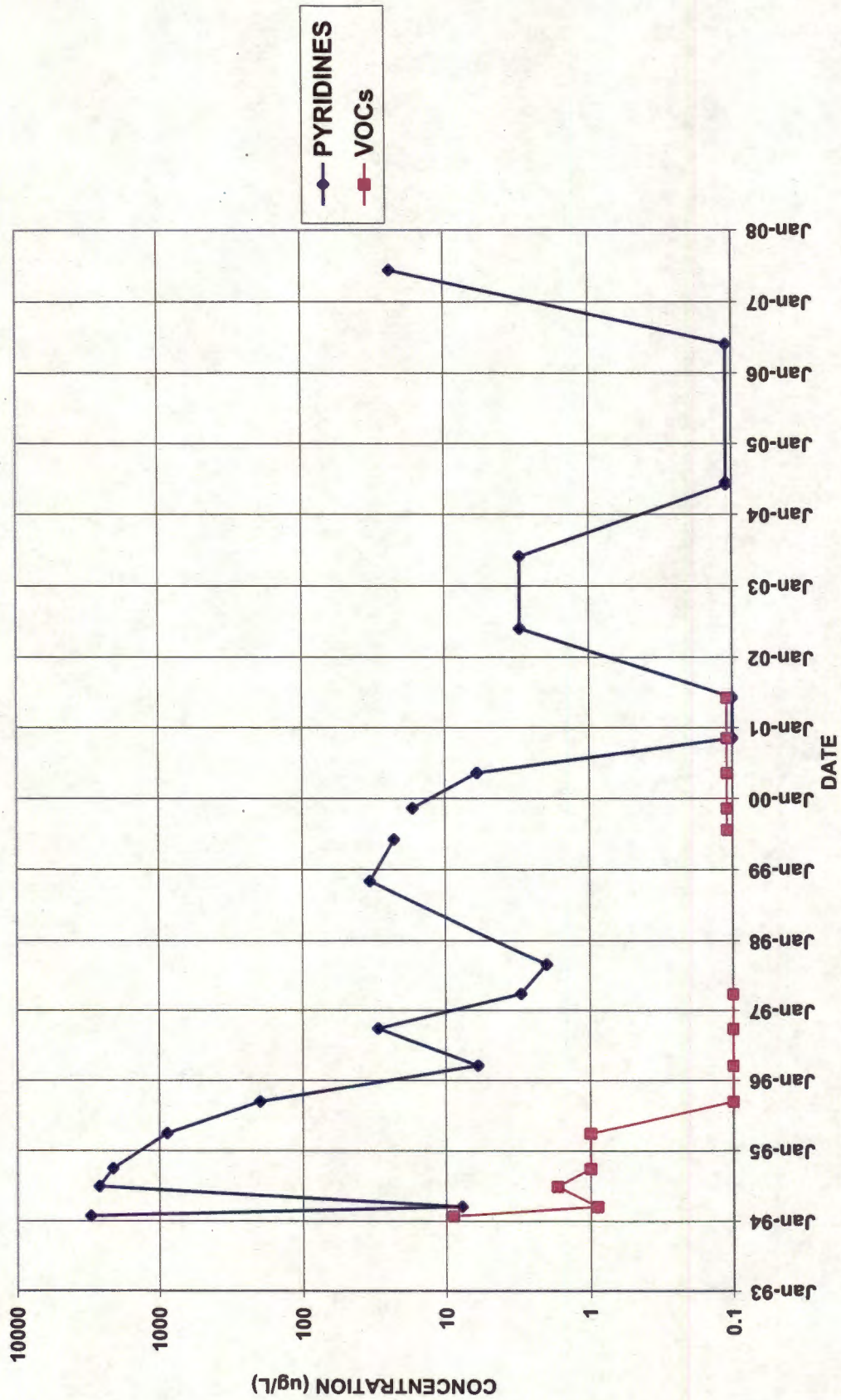


BR-103



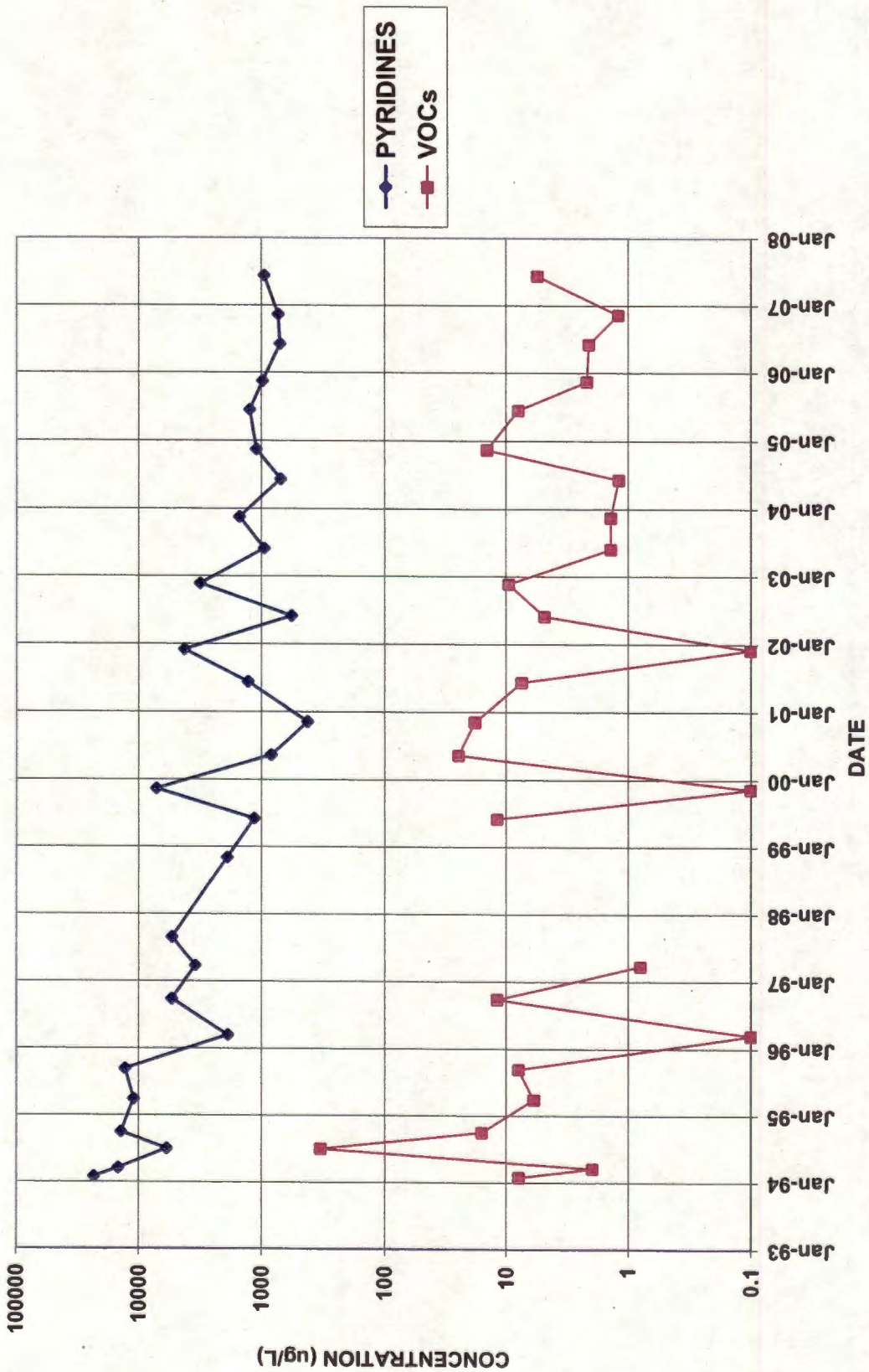


BR-104



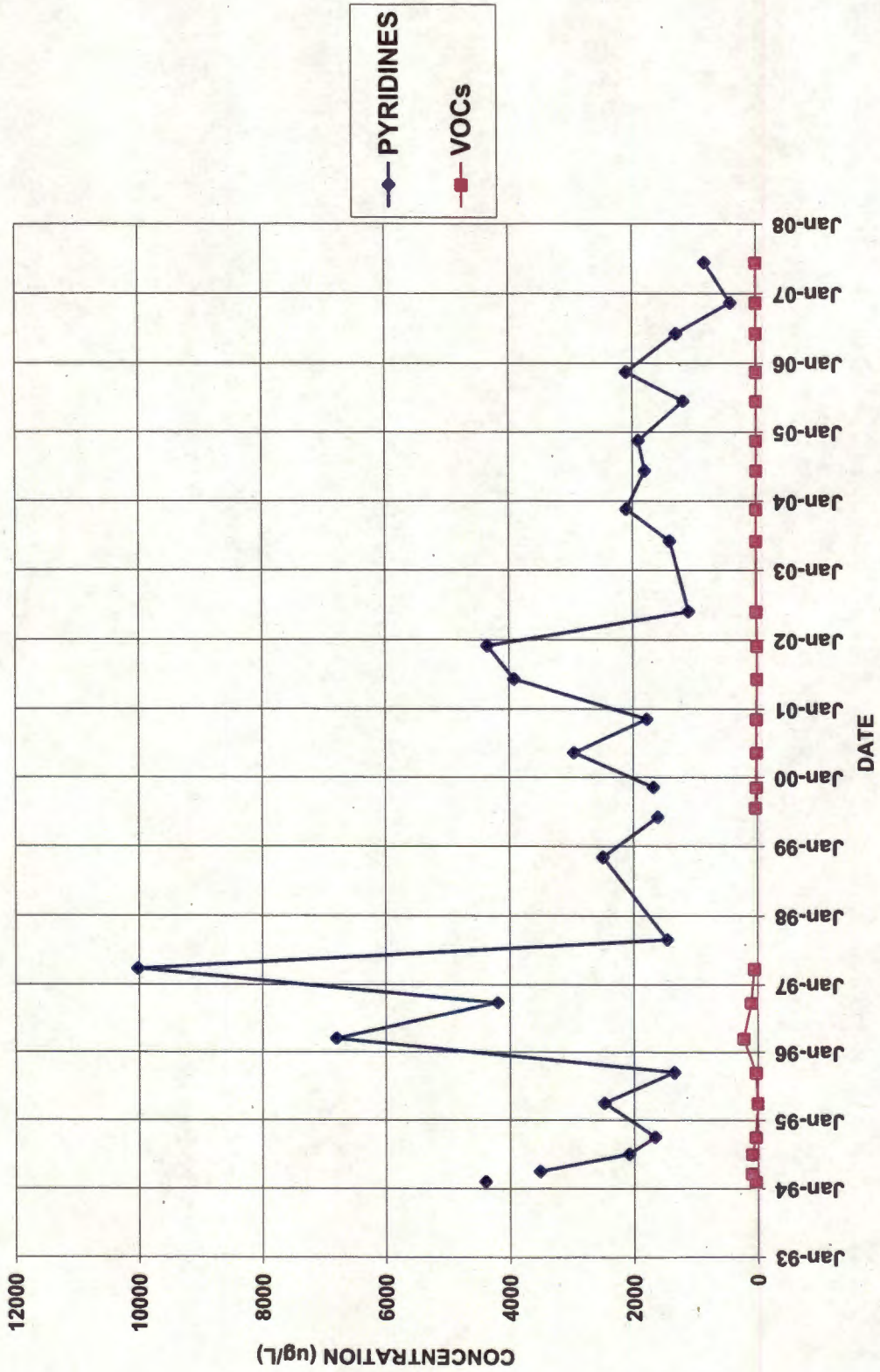


BR-105



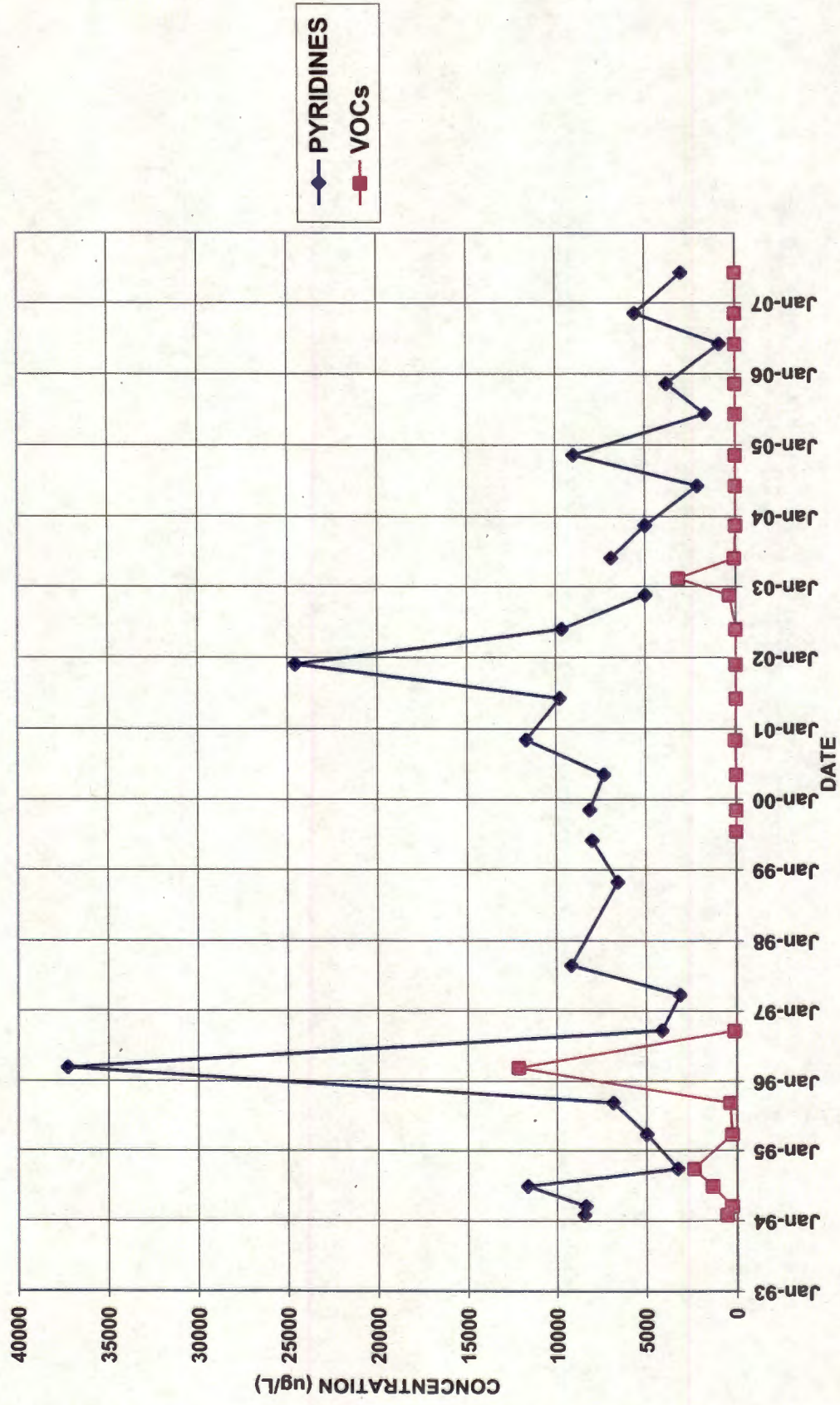


BR-105D

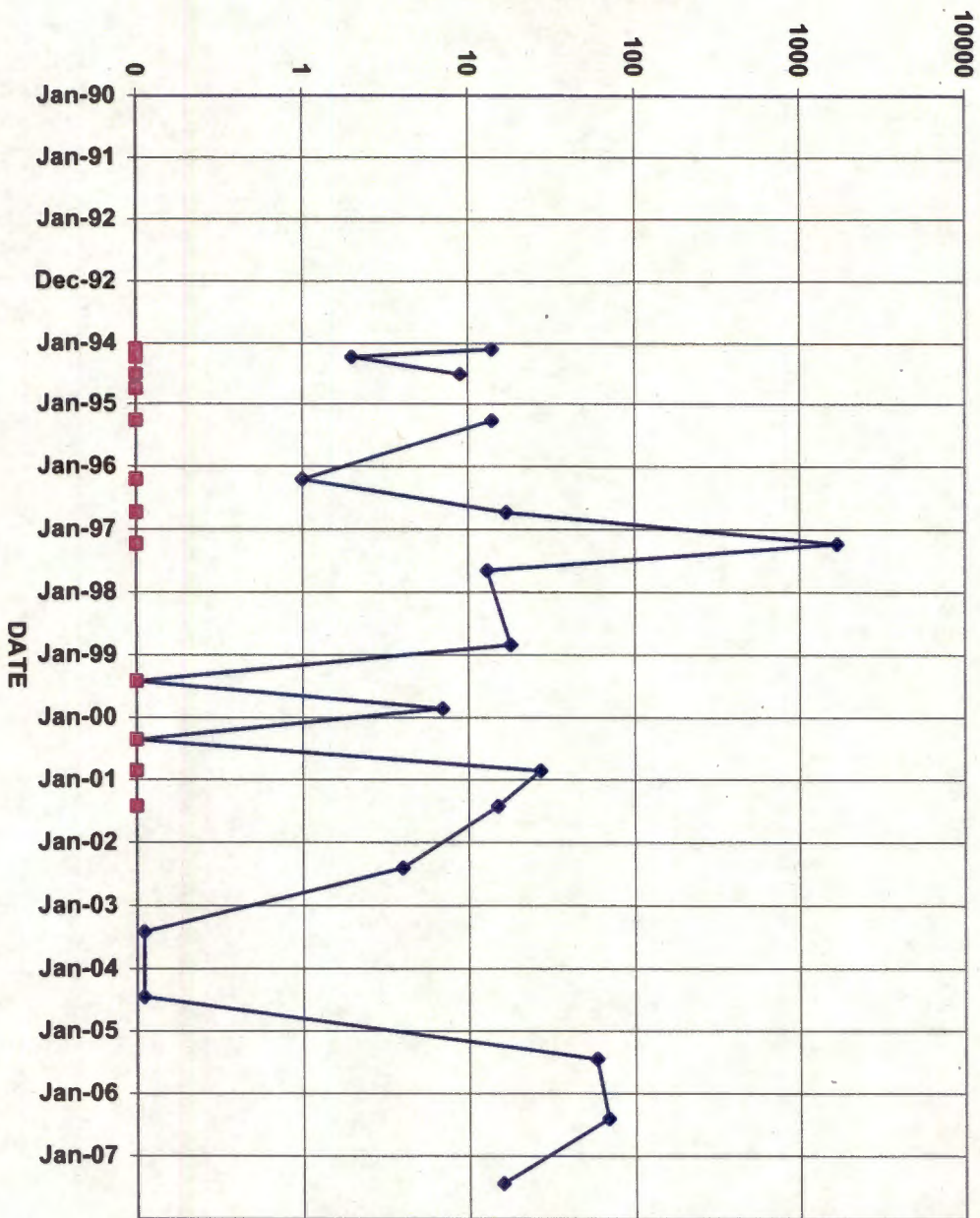




BR-106



CONCENTRATION (ug/L)

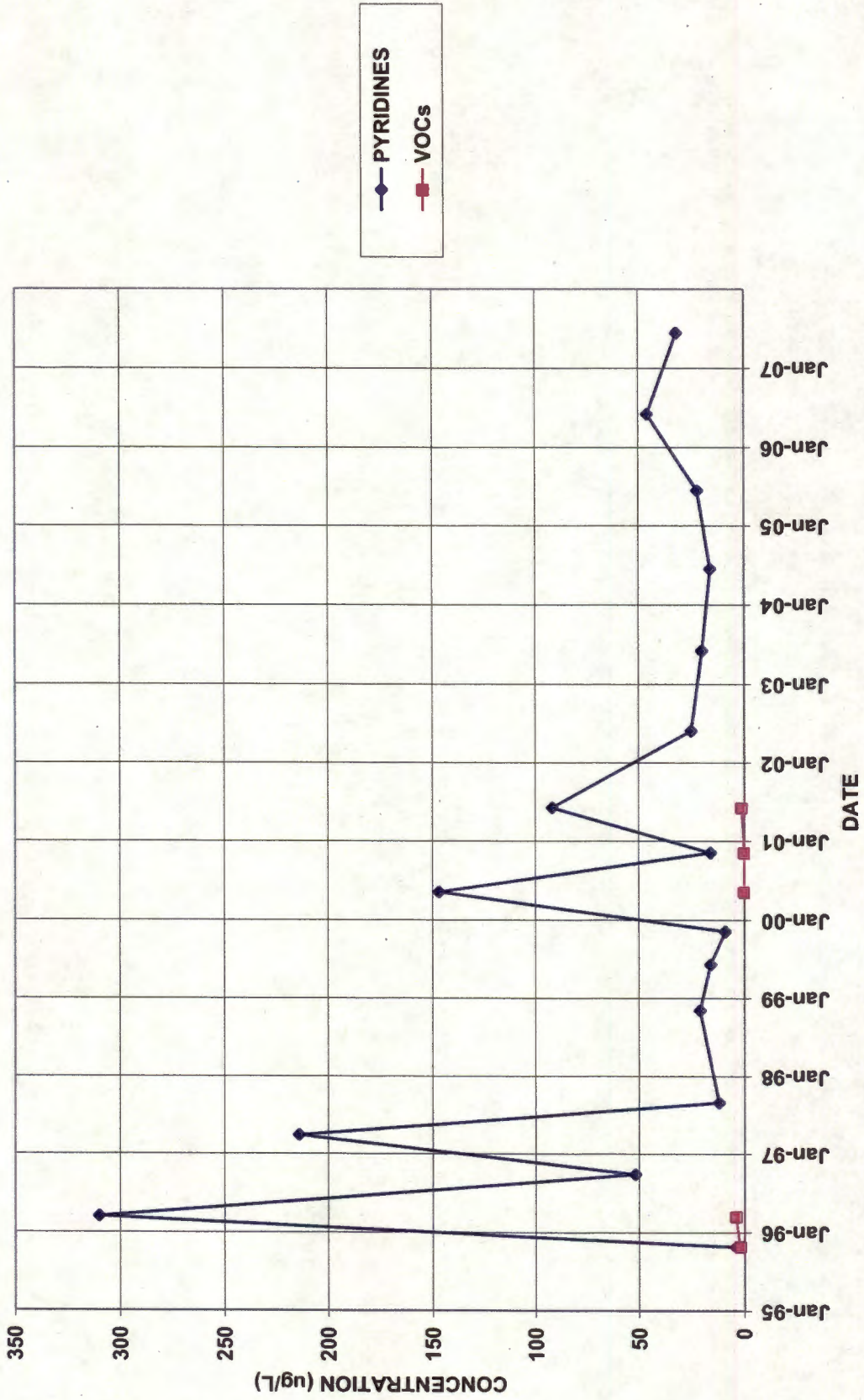


BR-108

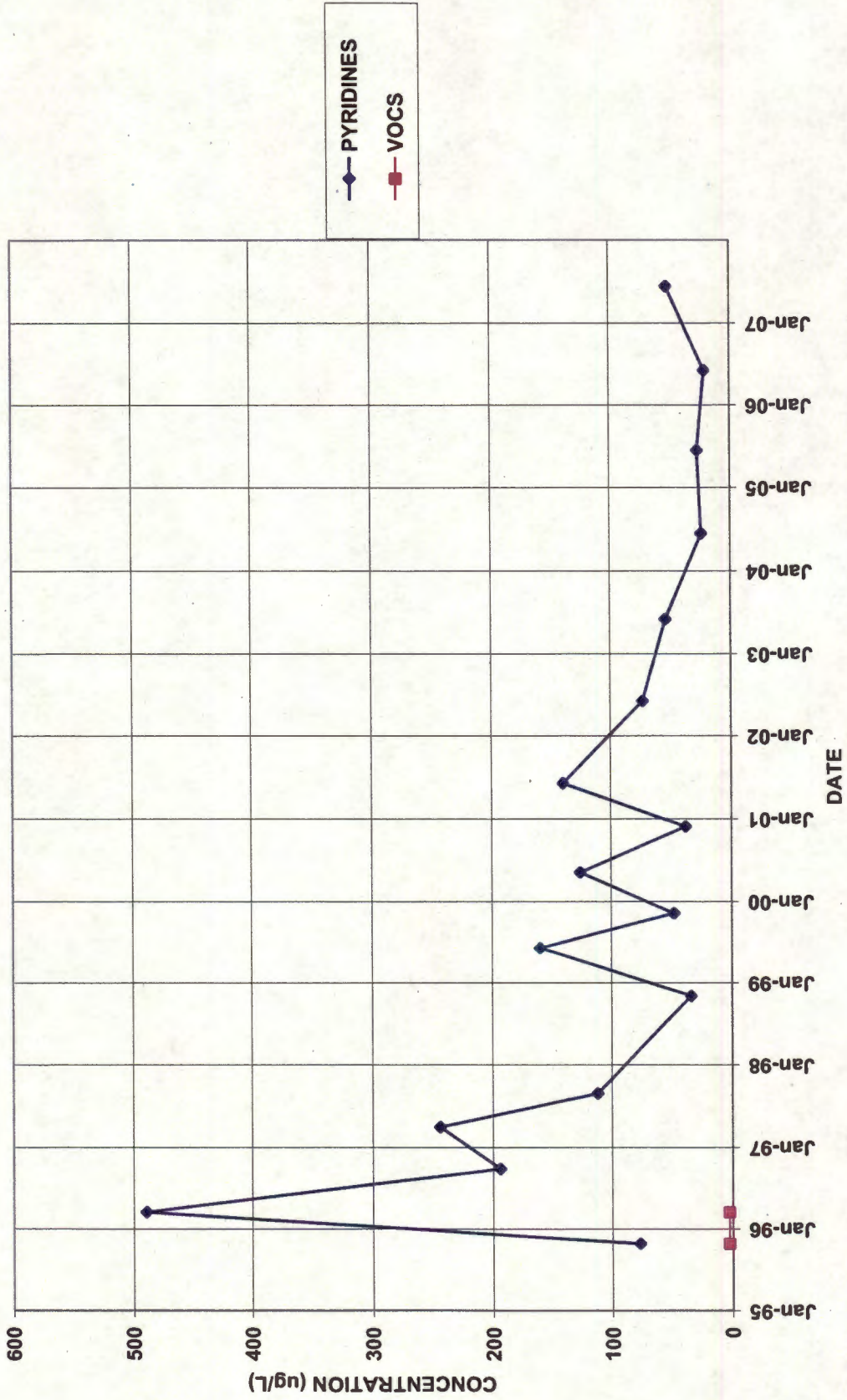
◆ PYRIDINES  
■ VOCs



BR-112D

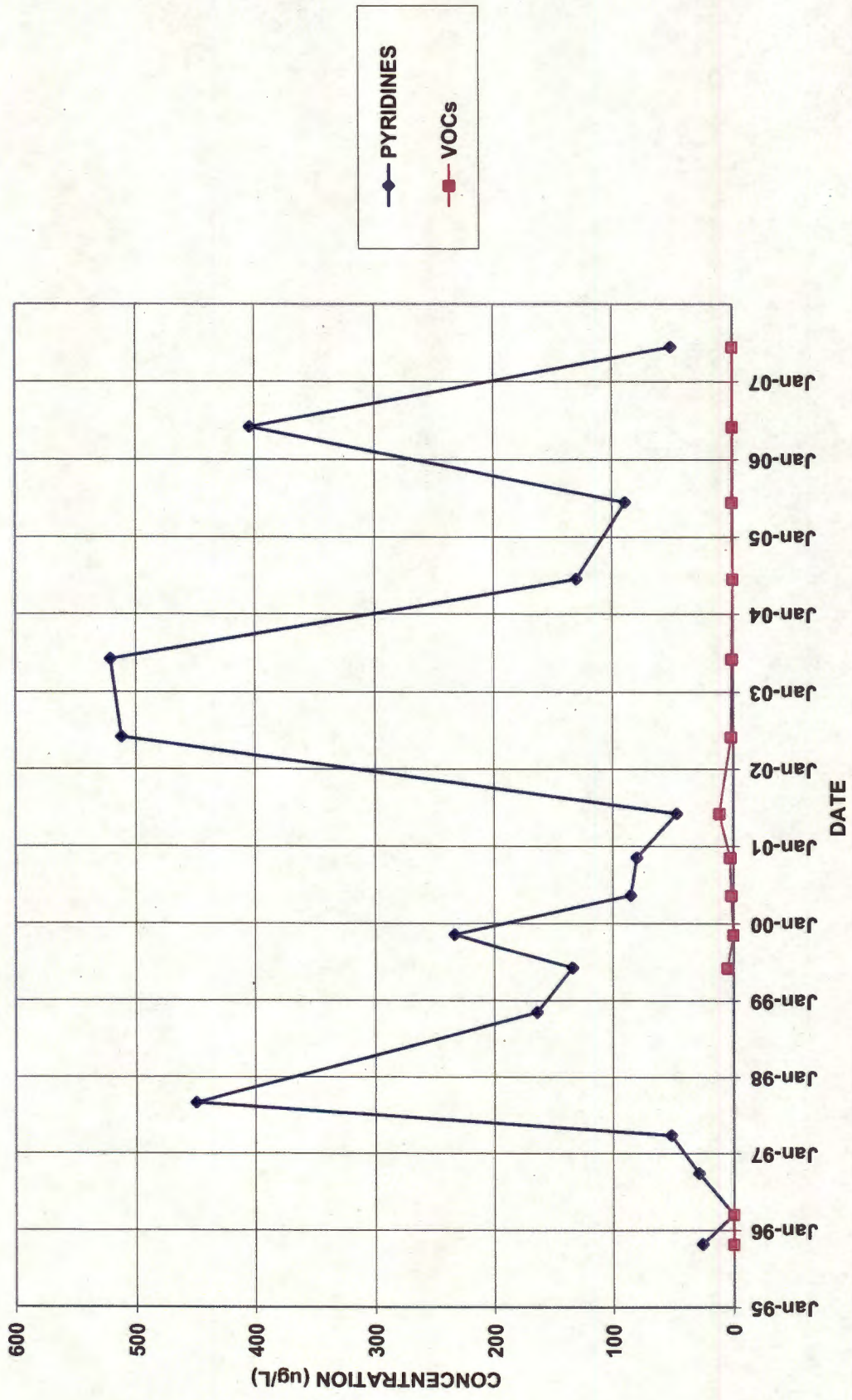


BR-113D



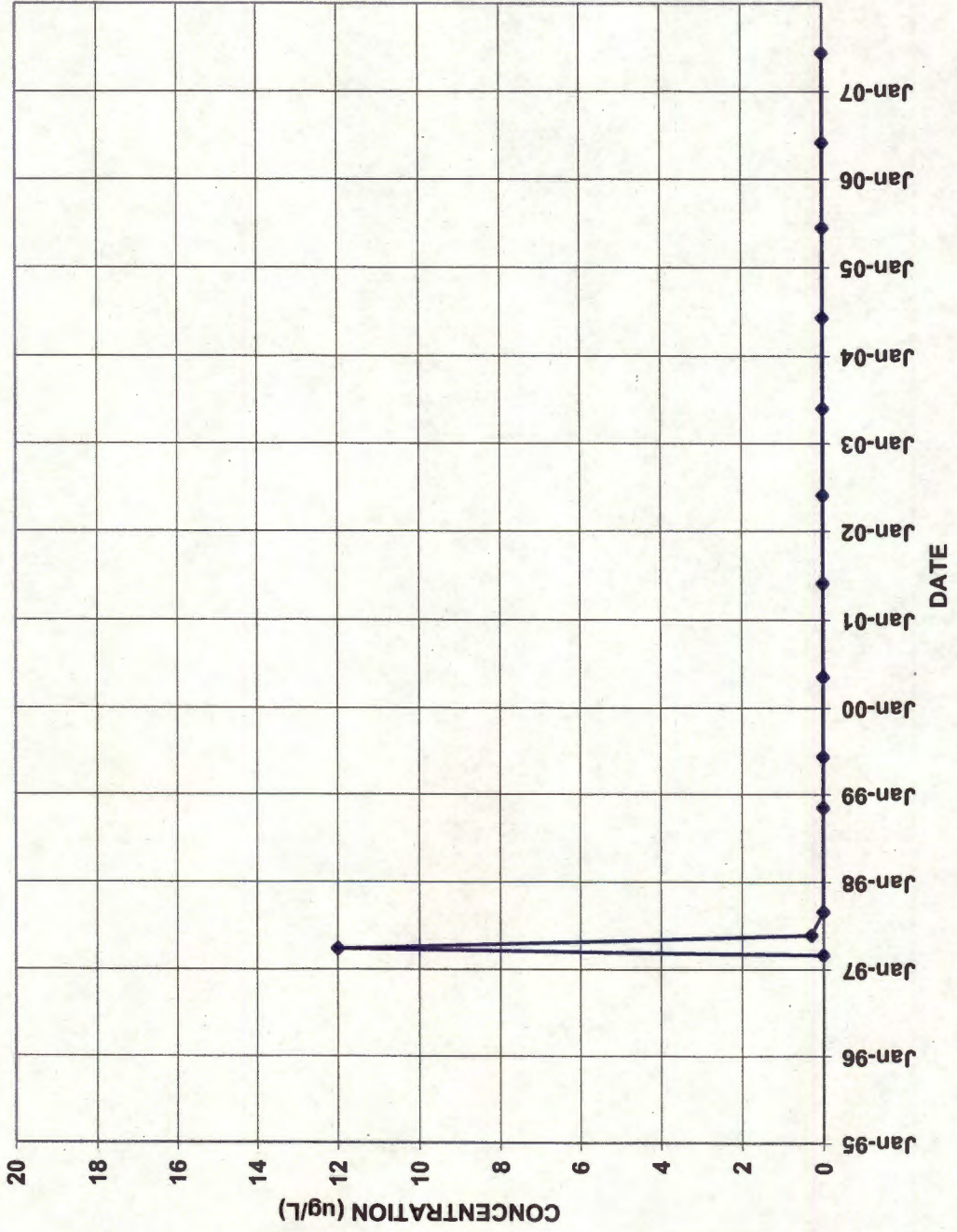


BR-114



Prepared by: nmb  
Reviewed by: jeb

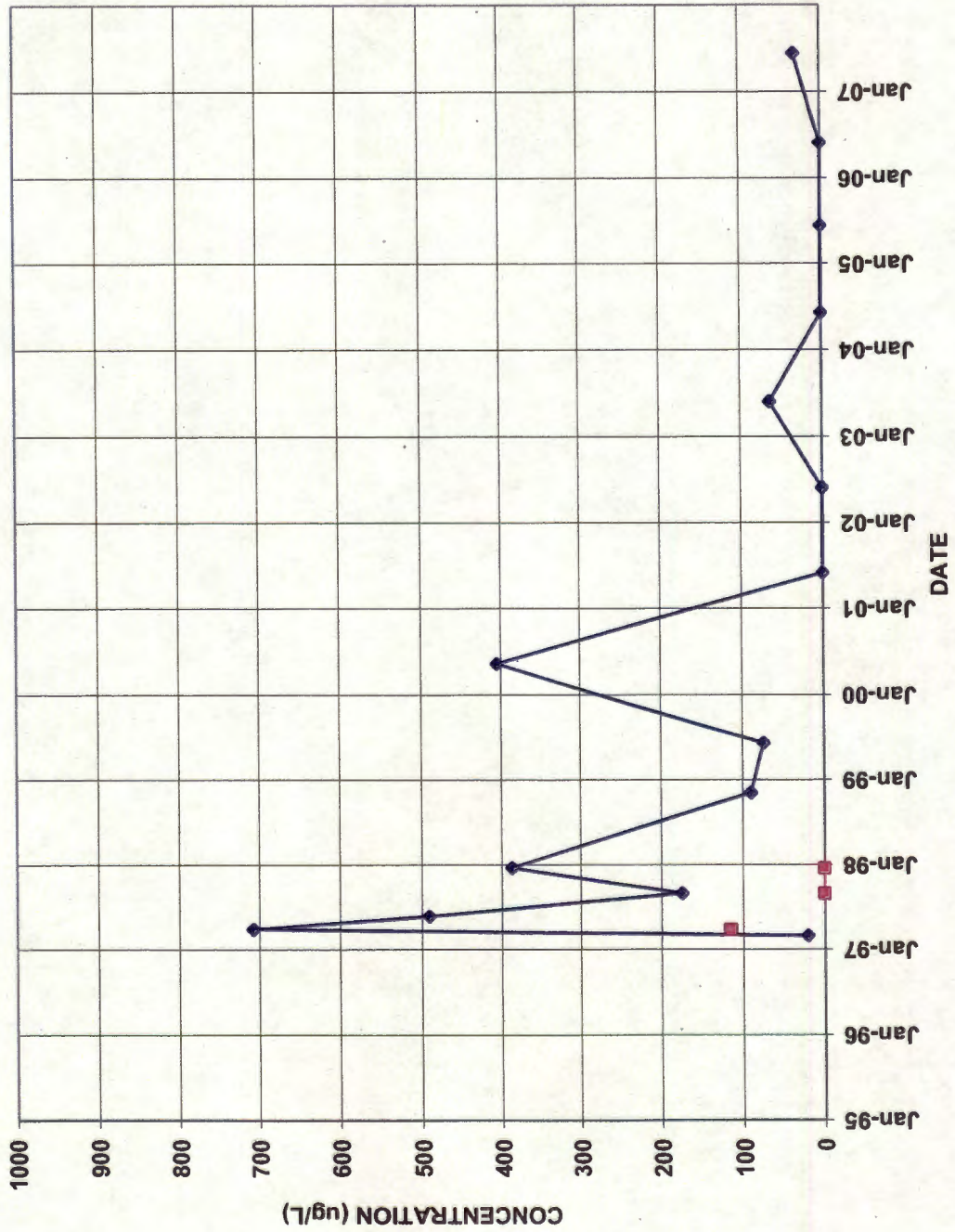
BR-116



—●— PYRIDINES

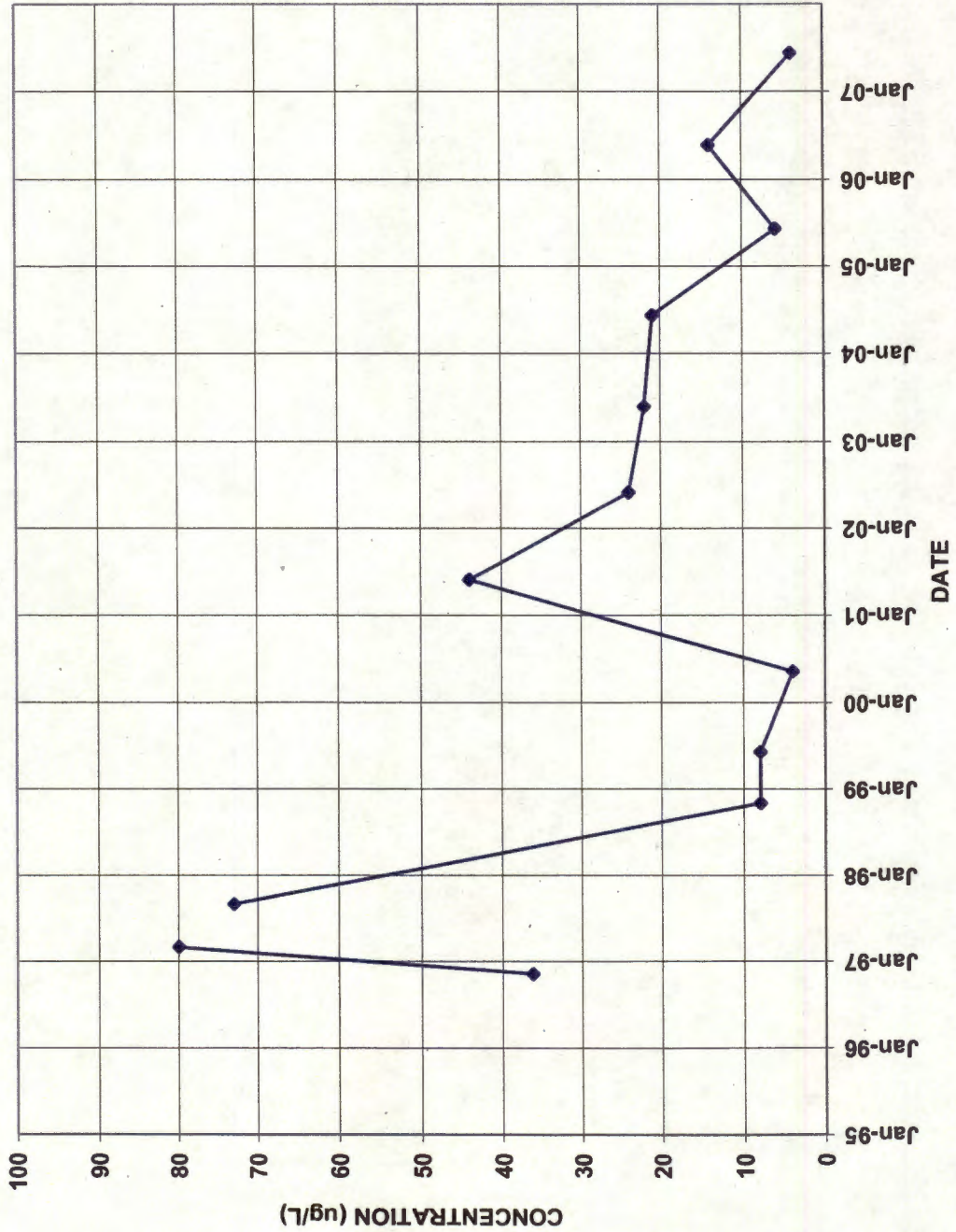


BR-116D



—◆— PYRIDINES  
—■— VOCs

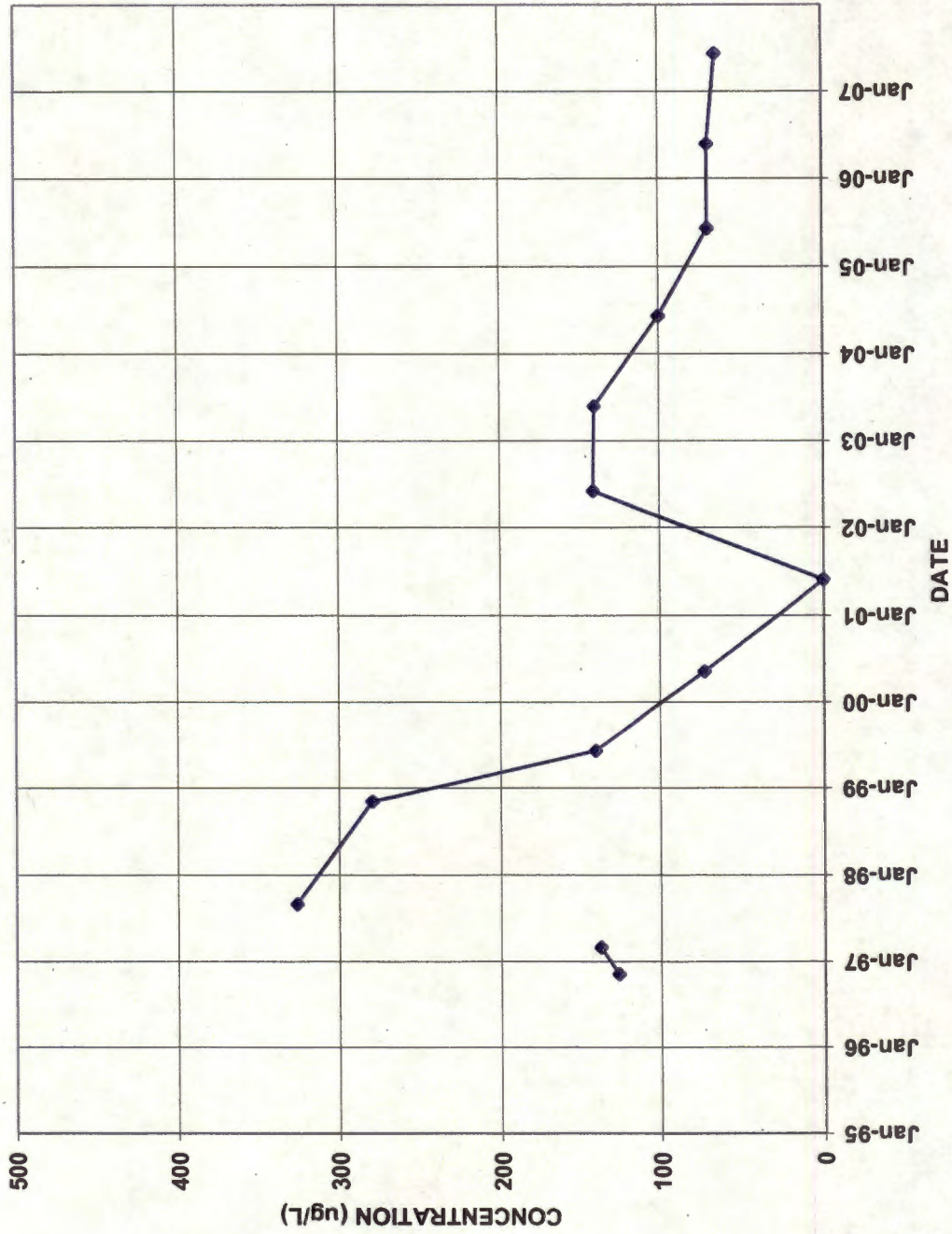
BR-117D



—◆— PYRIDINES

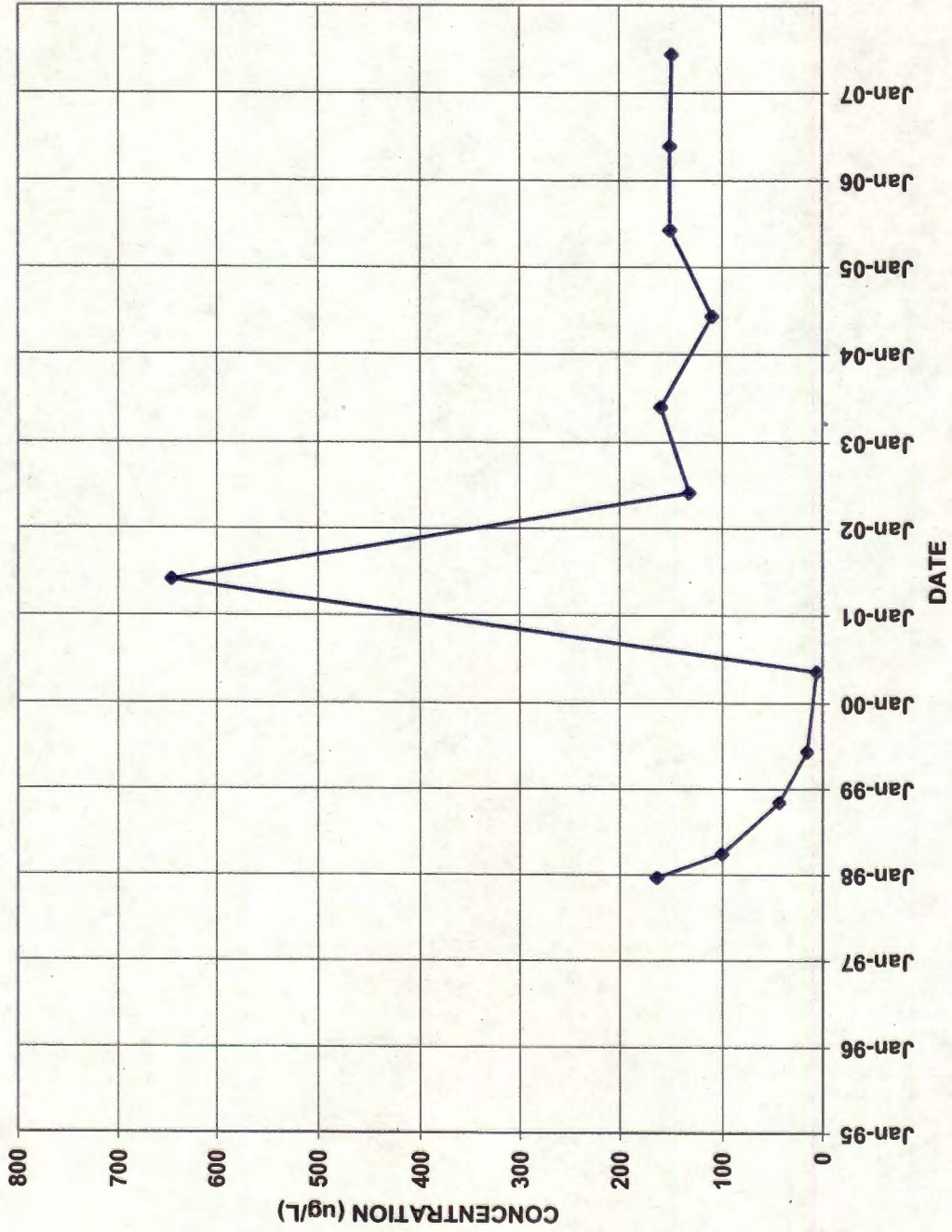


BR-118D



◆— PYRIDINES

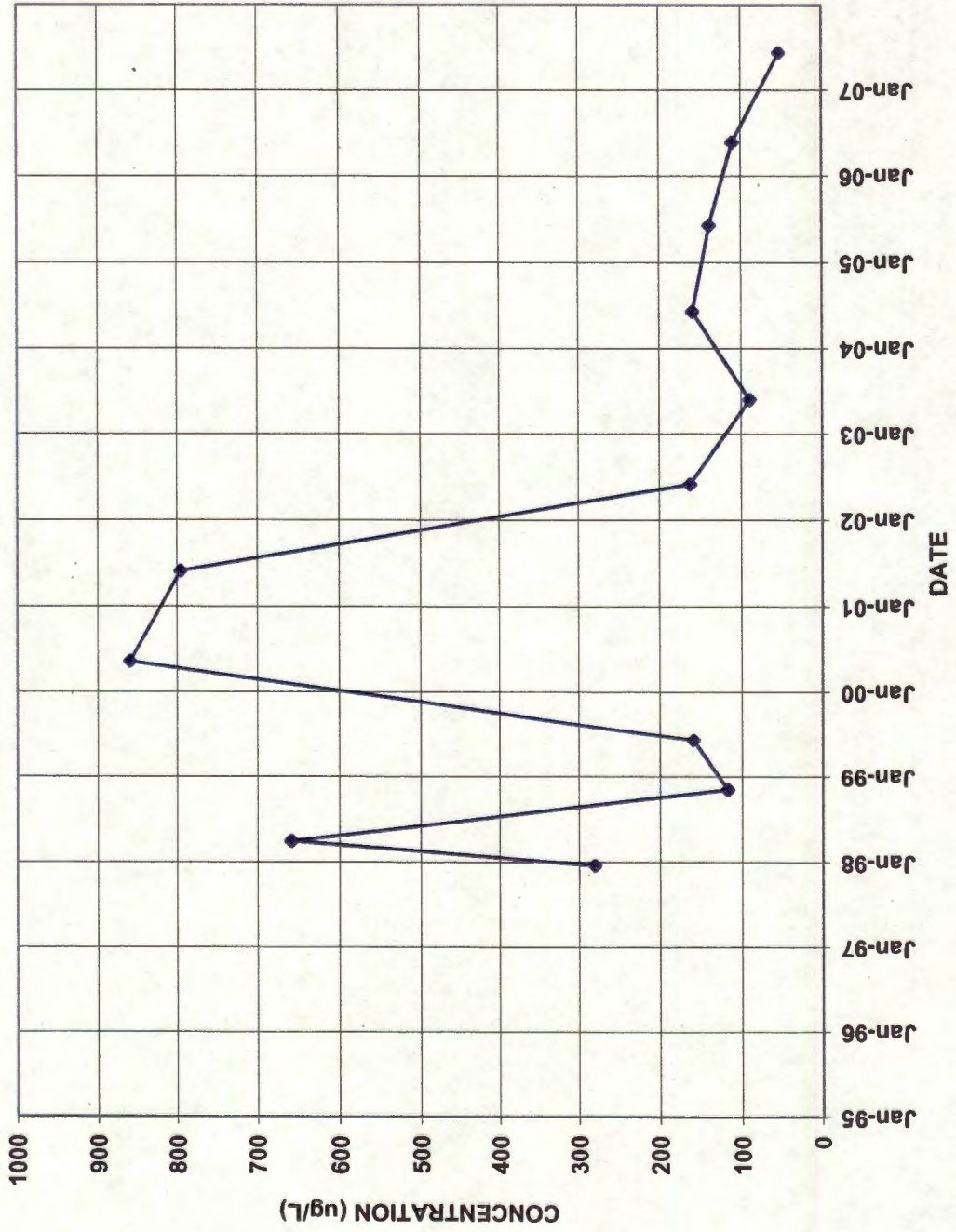
BR-122D



—◆— PYRIDINES

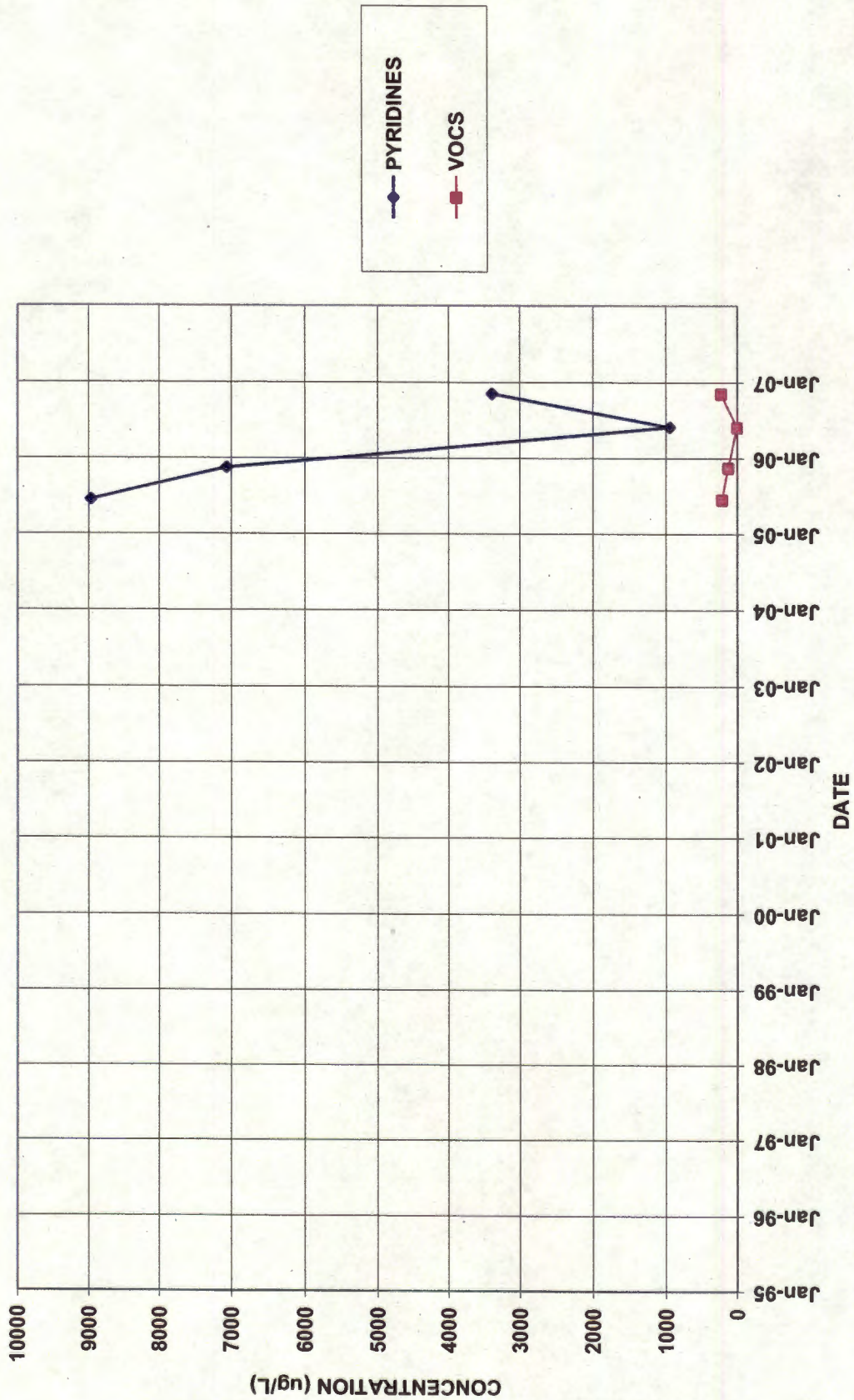


BR-123D



—◆— PYRIDINES

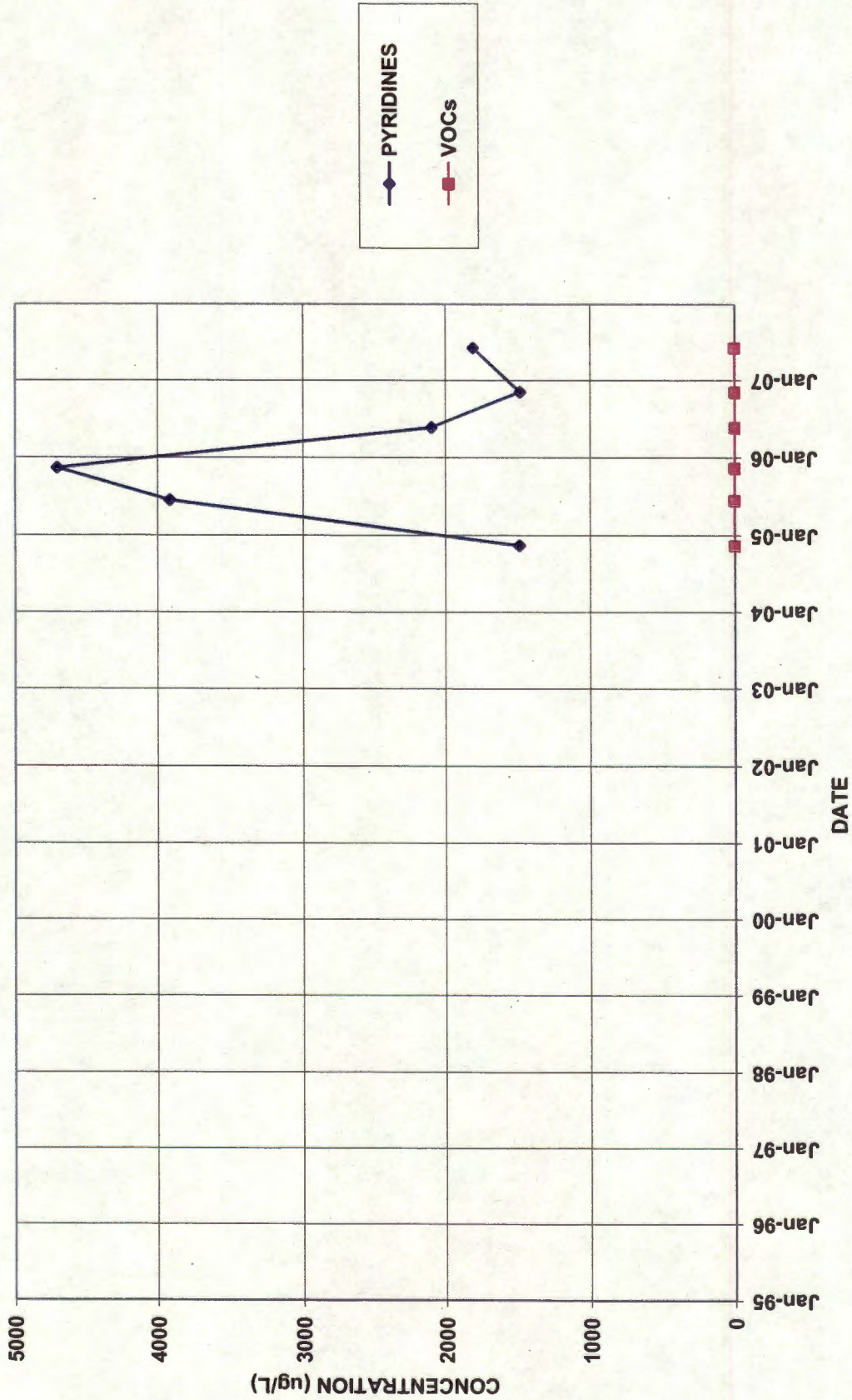
BR-126



Prepared by: nmb  
Reviewed by: jeb

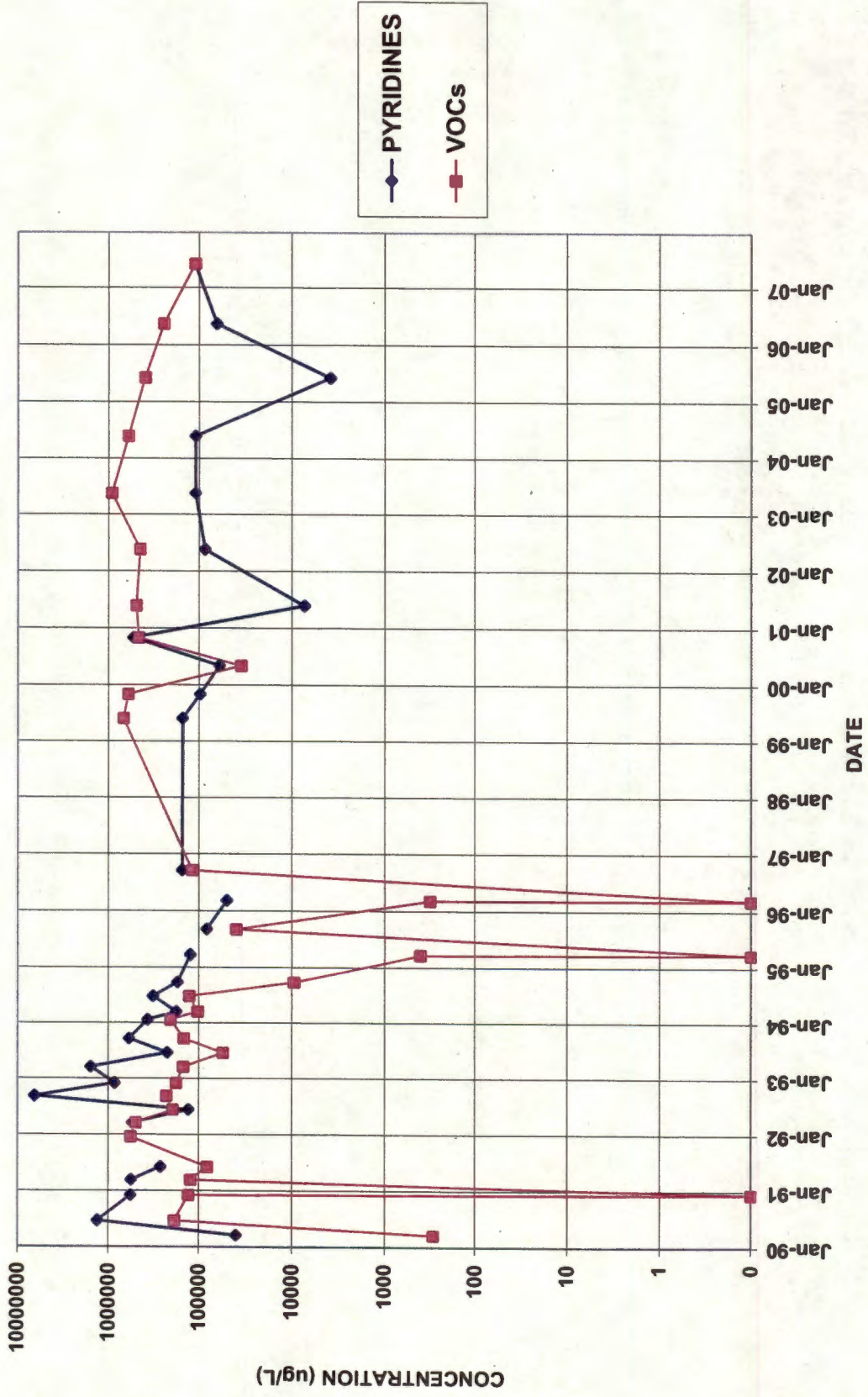


BR-127



Prepared by: nmb  
Reviewed by: jeb

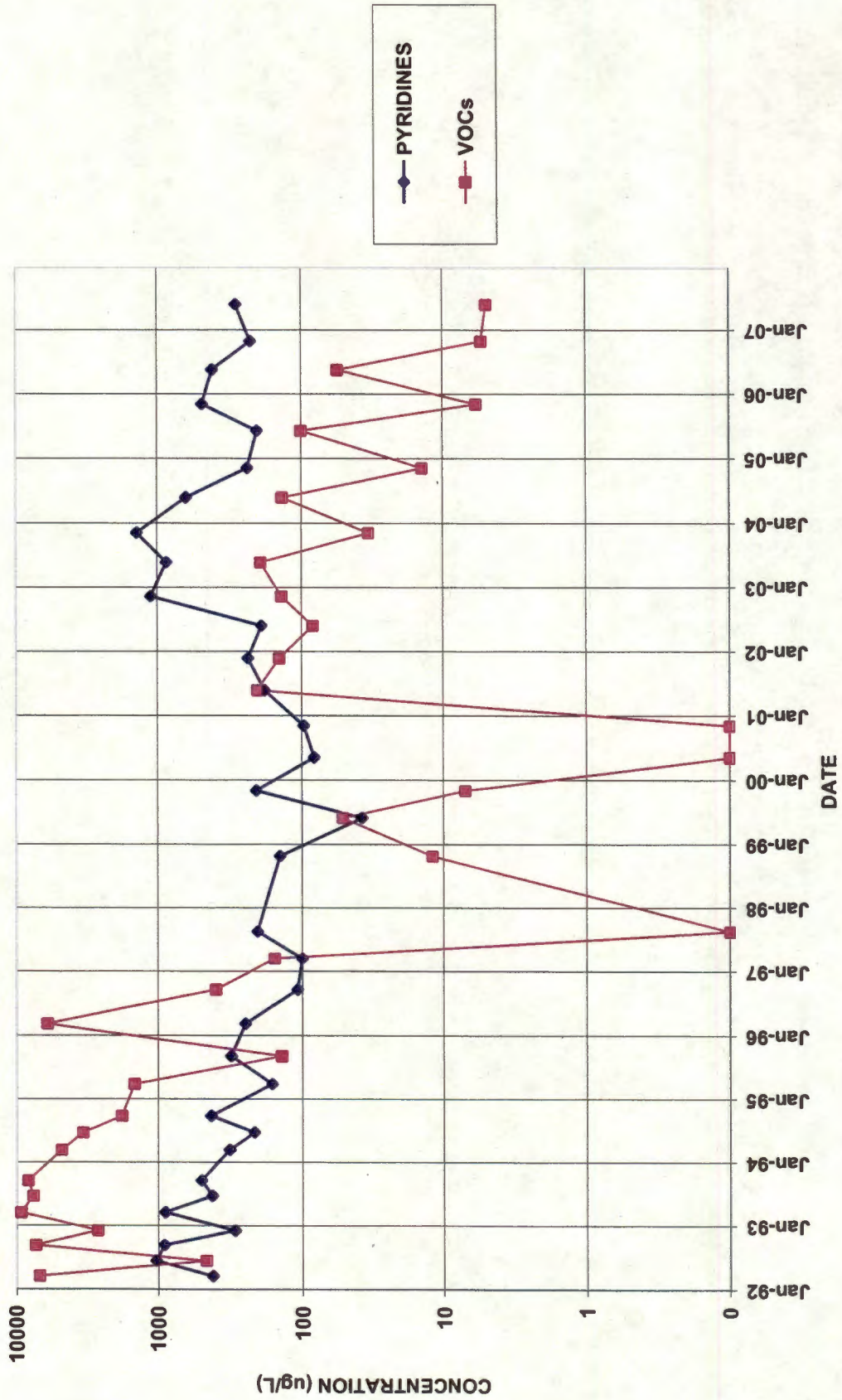
BR-3



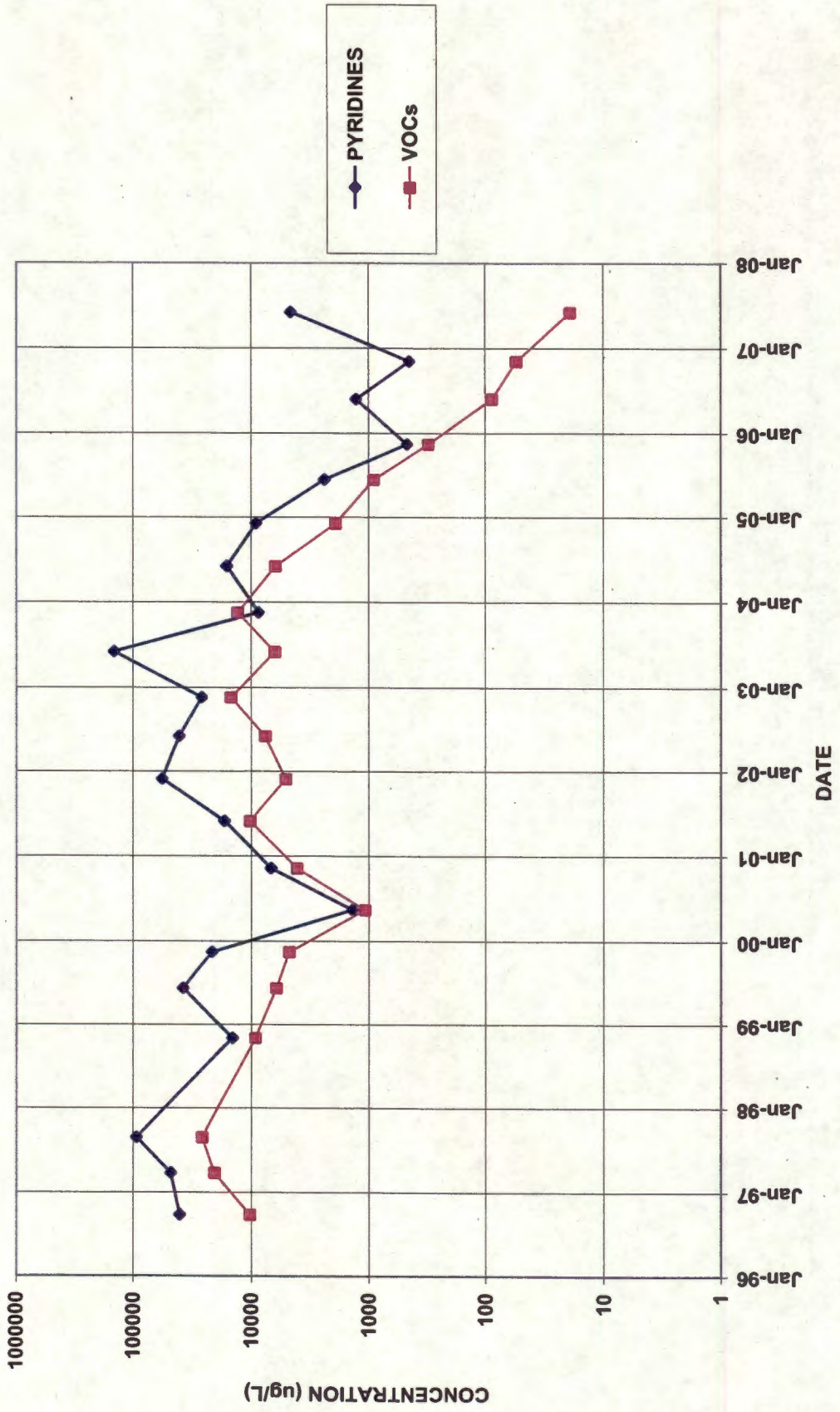
—◆— PYRIDINES  
—■— VOCs



BR-5A



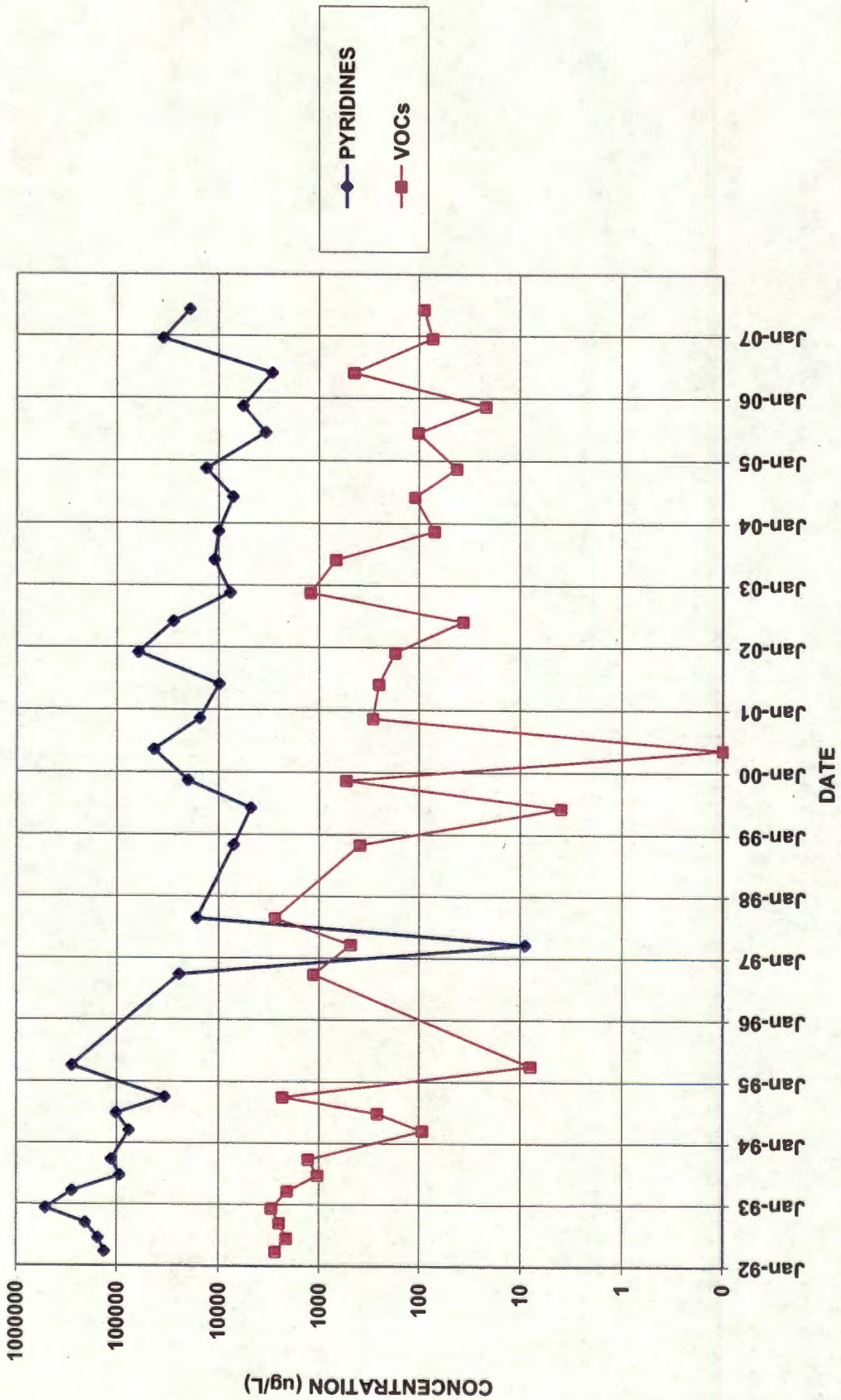
BR-6A



Prepared by: nmb  
Reviewed by: jeb

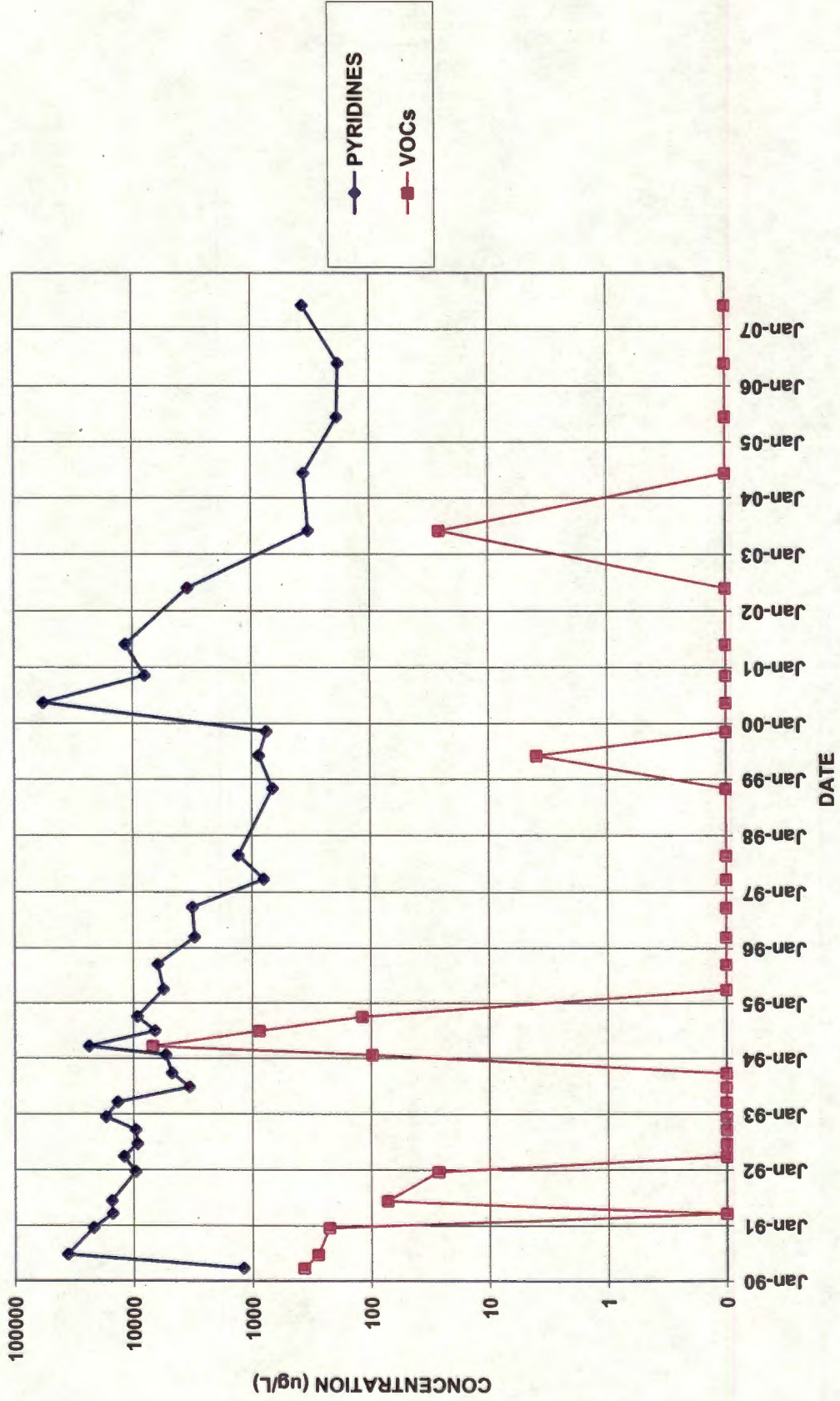


BR-7A



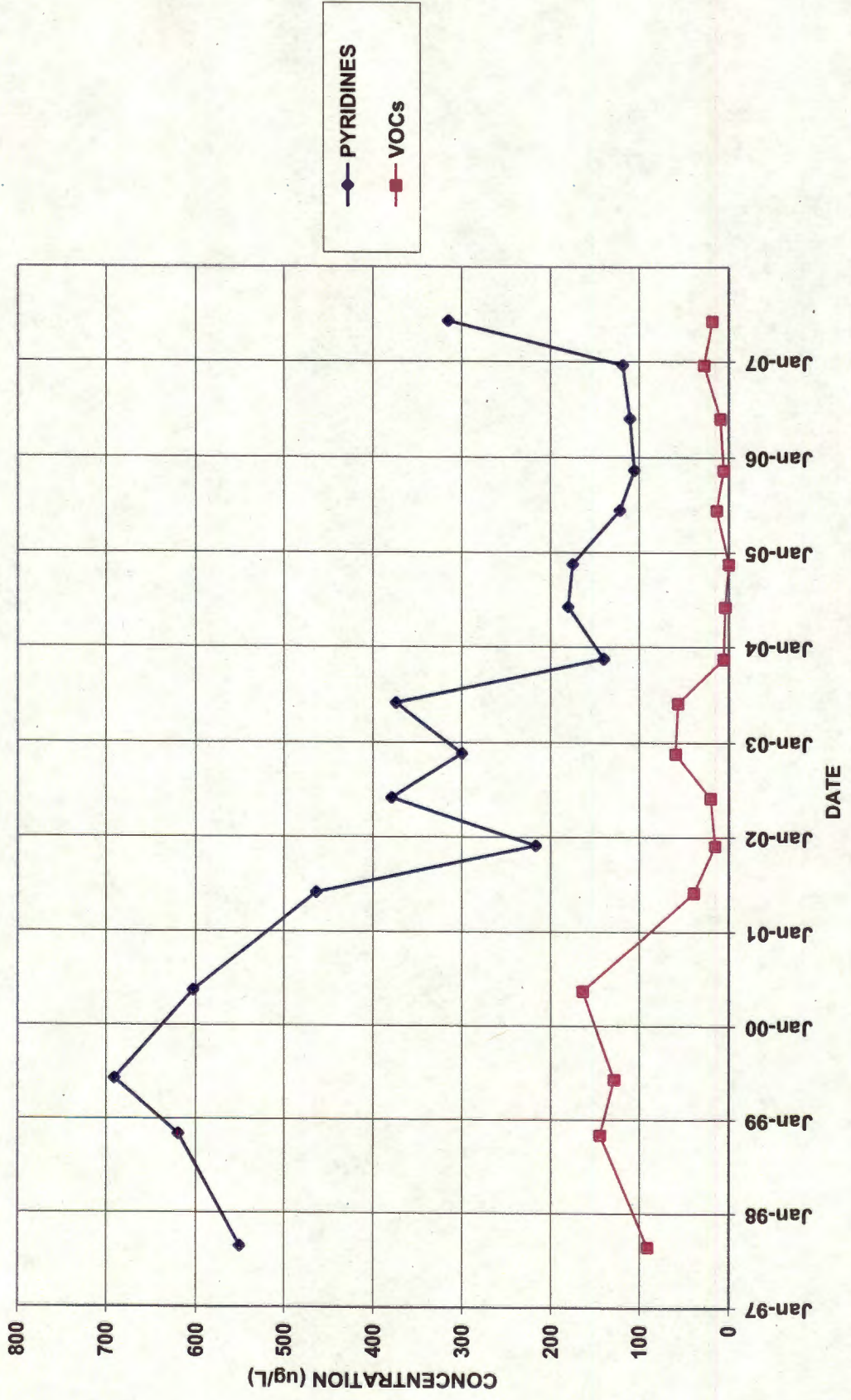
Prepared by: nmb  
Reviewed by: jeb

BR-8

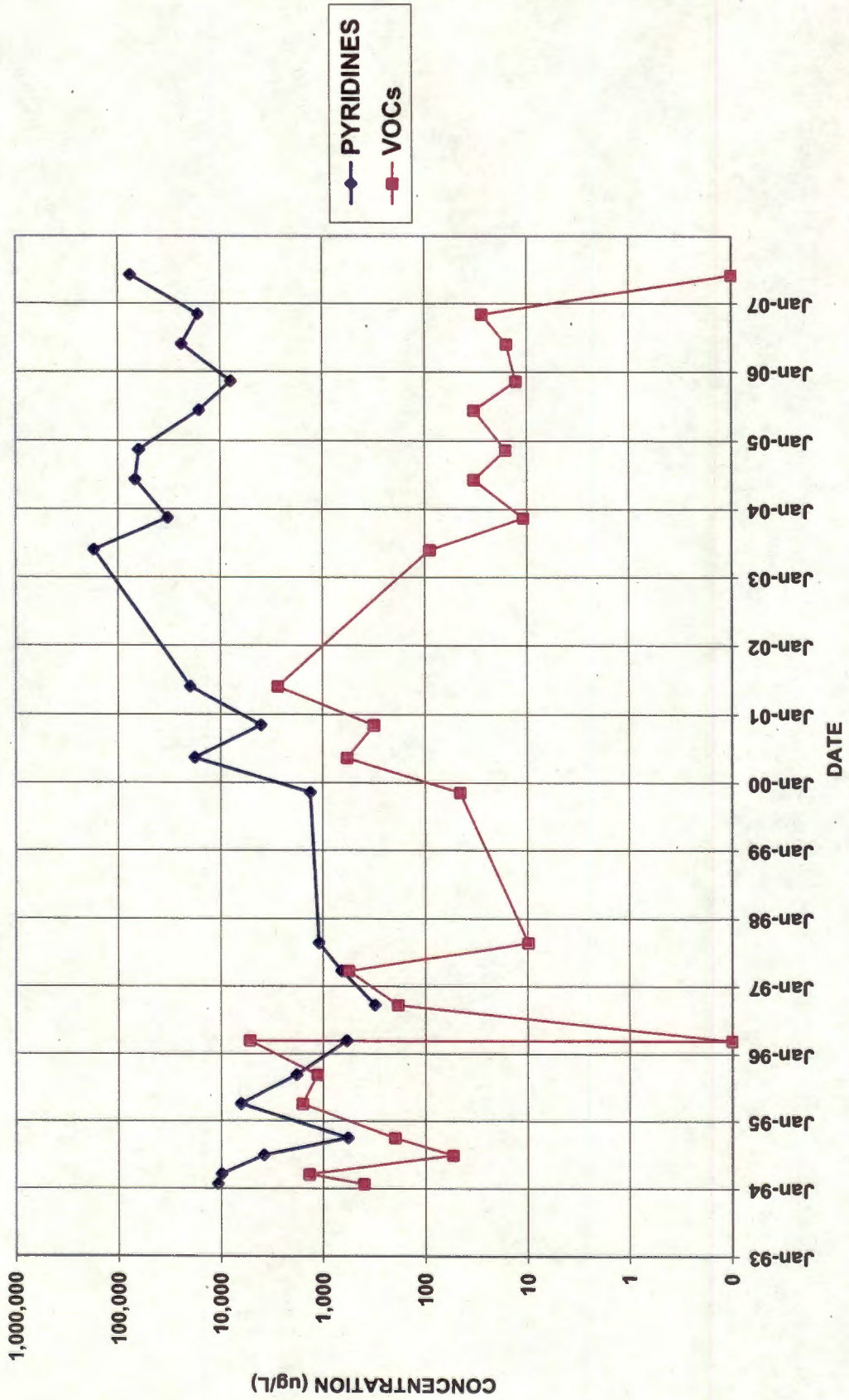




BR-9

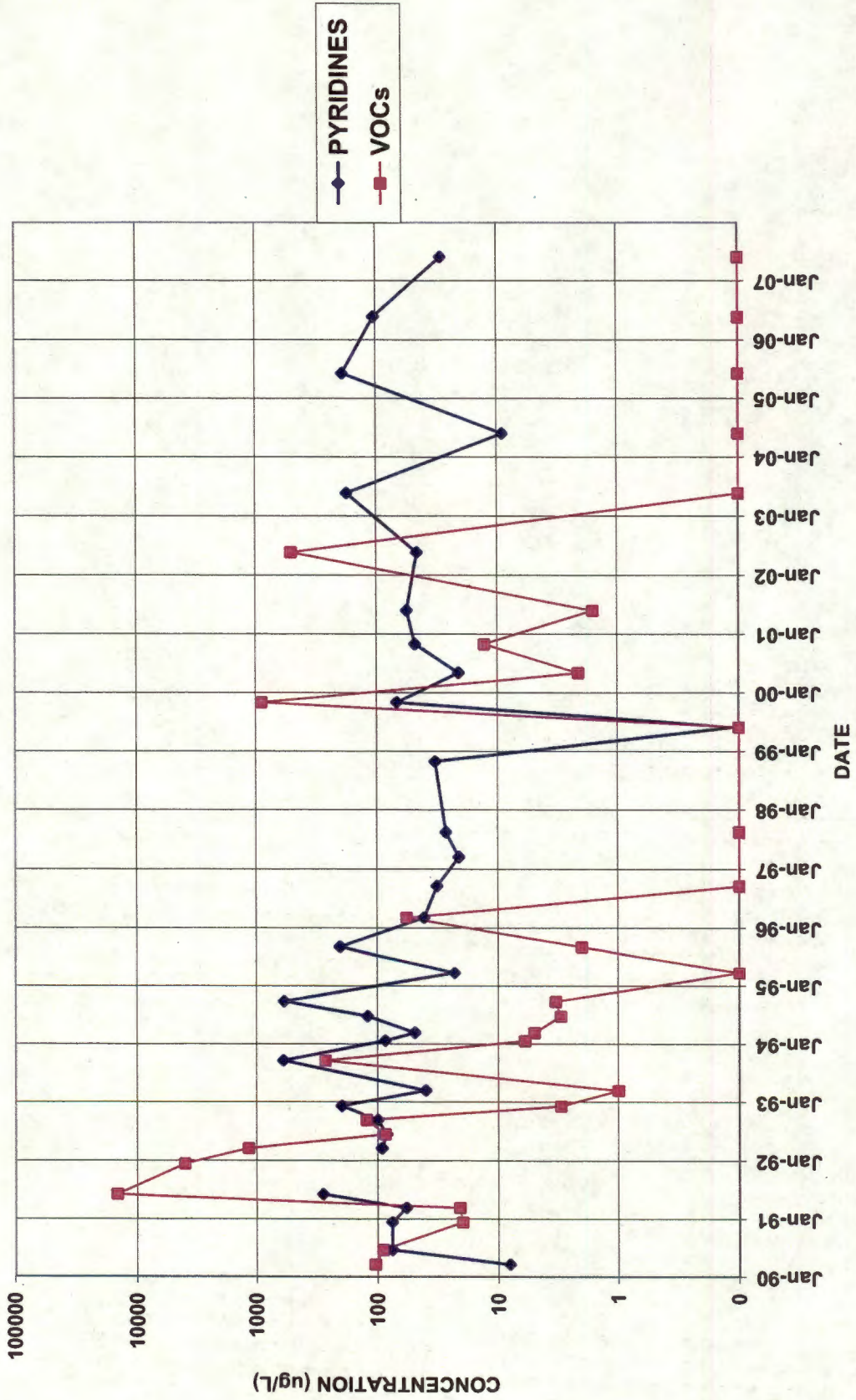


E-1

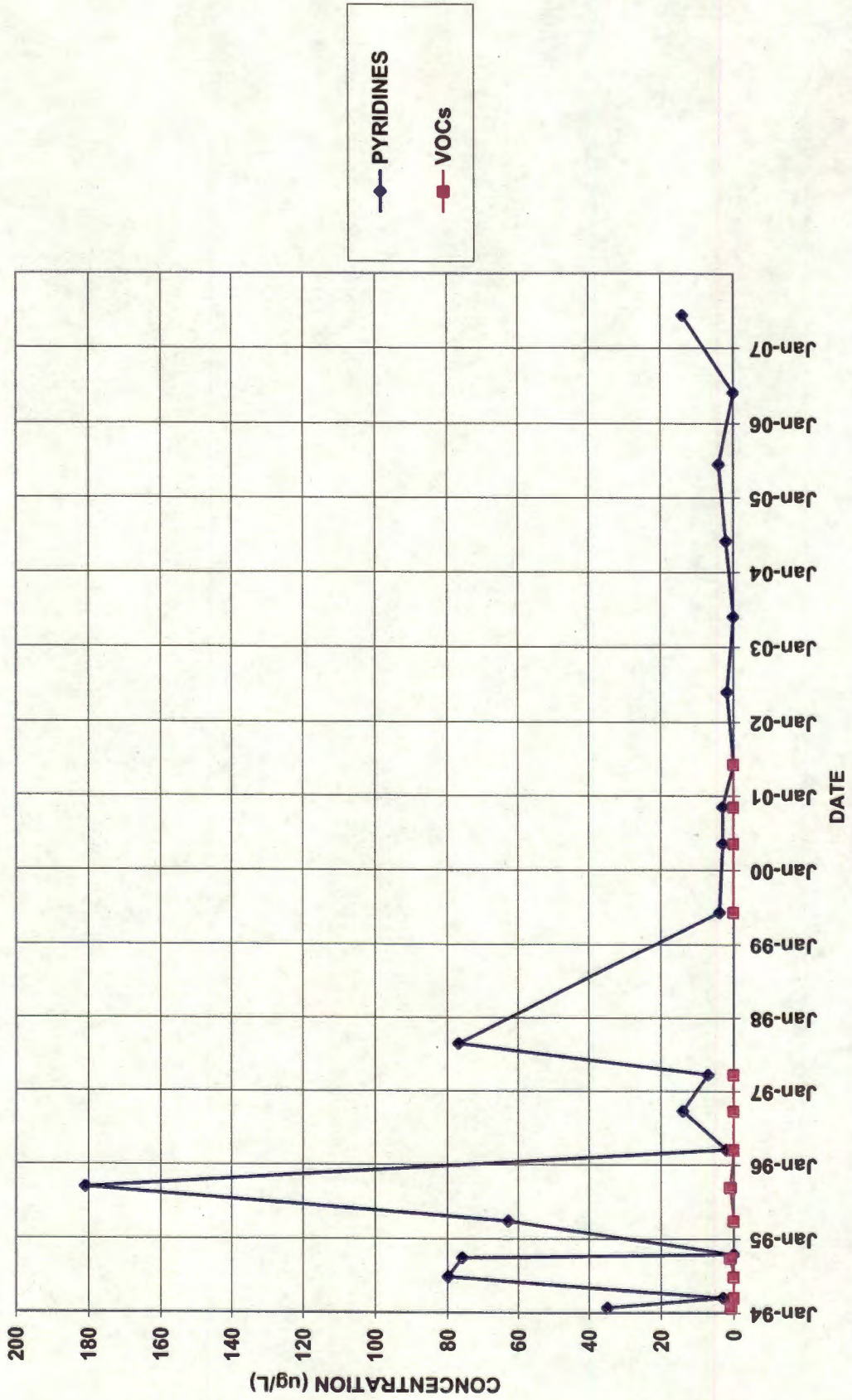




E-3

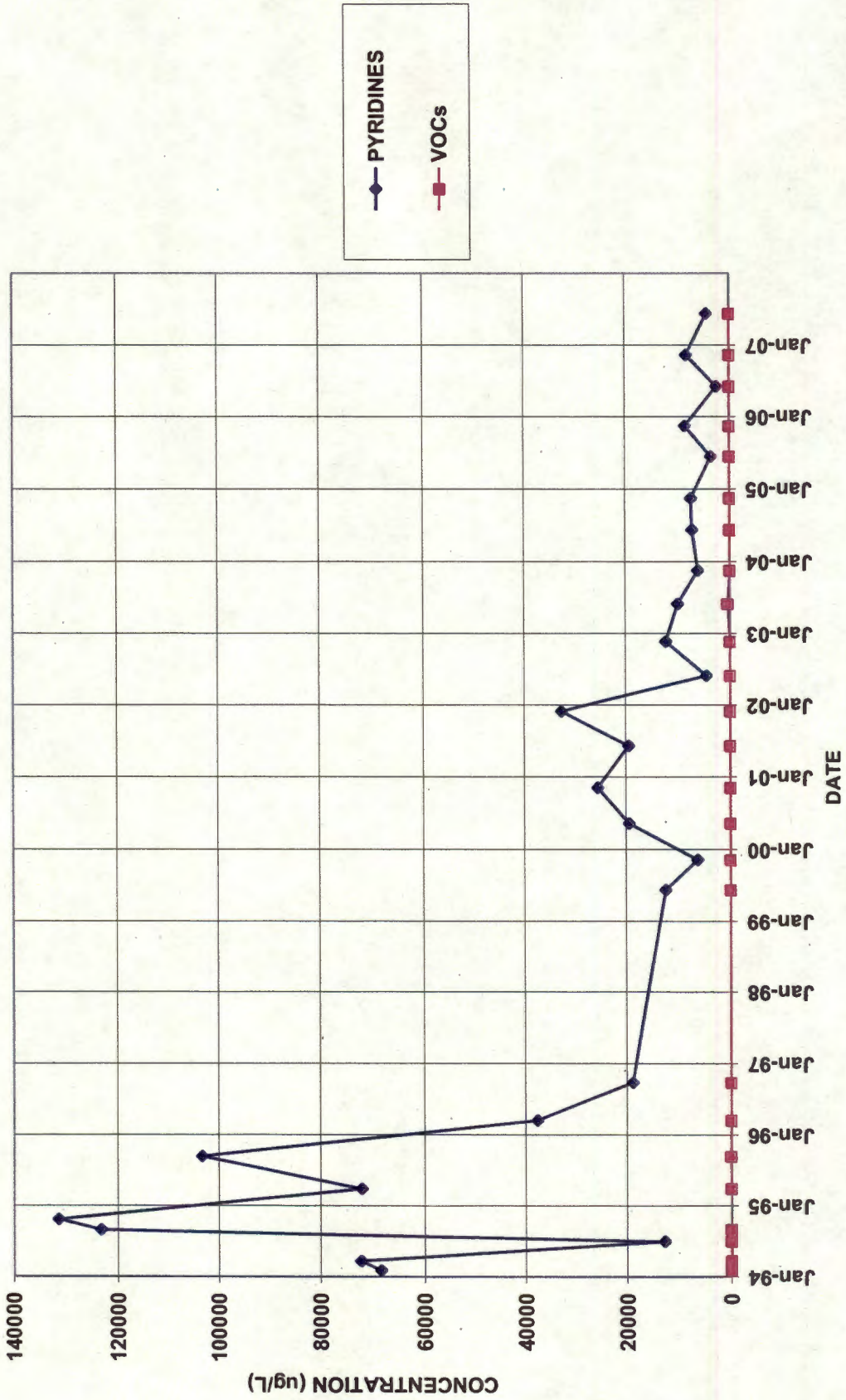


MW-104



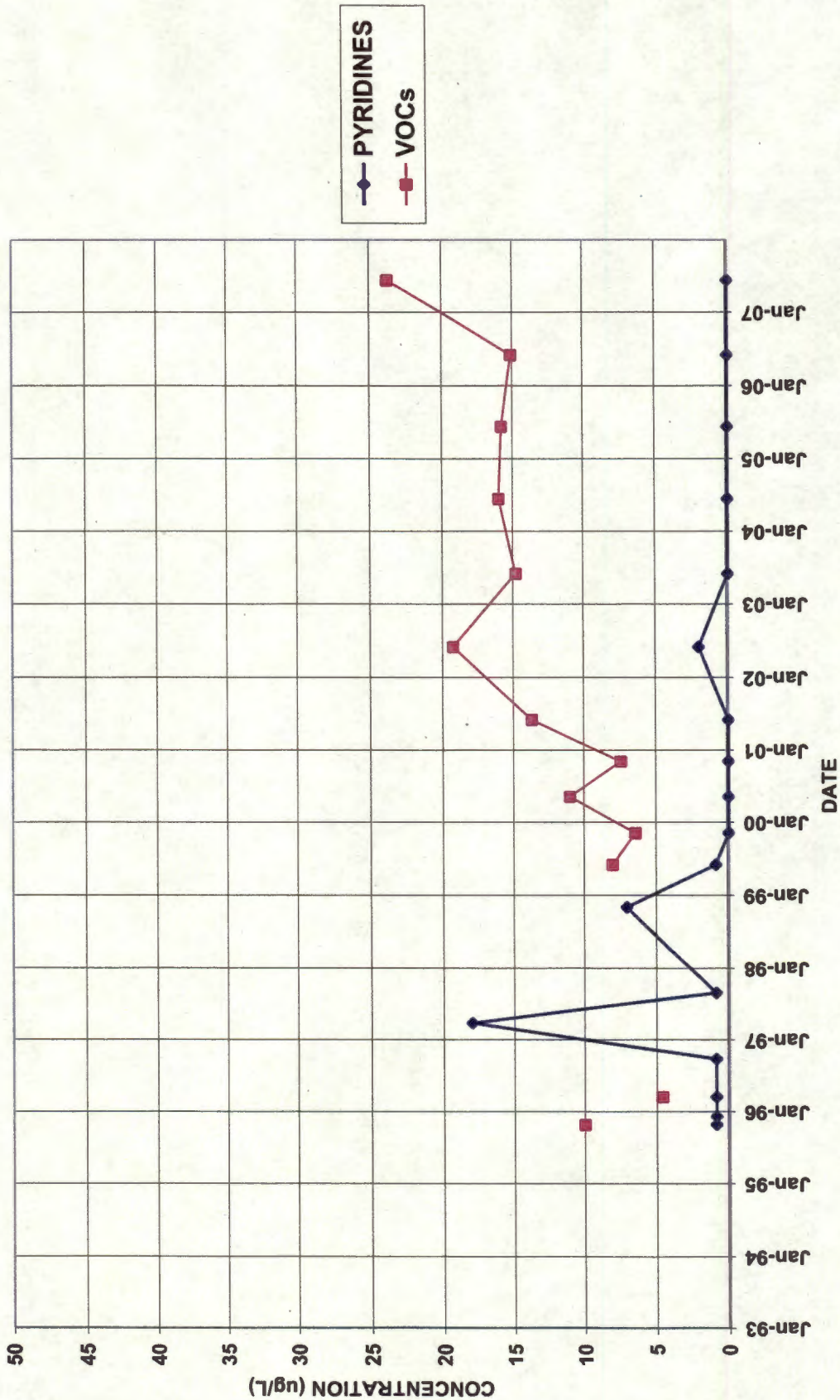


MW-106



Prepared by: nmb  
Reviewed by: jeb

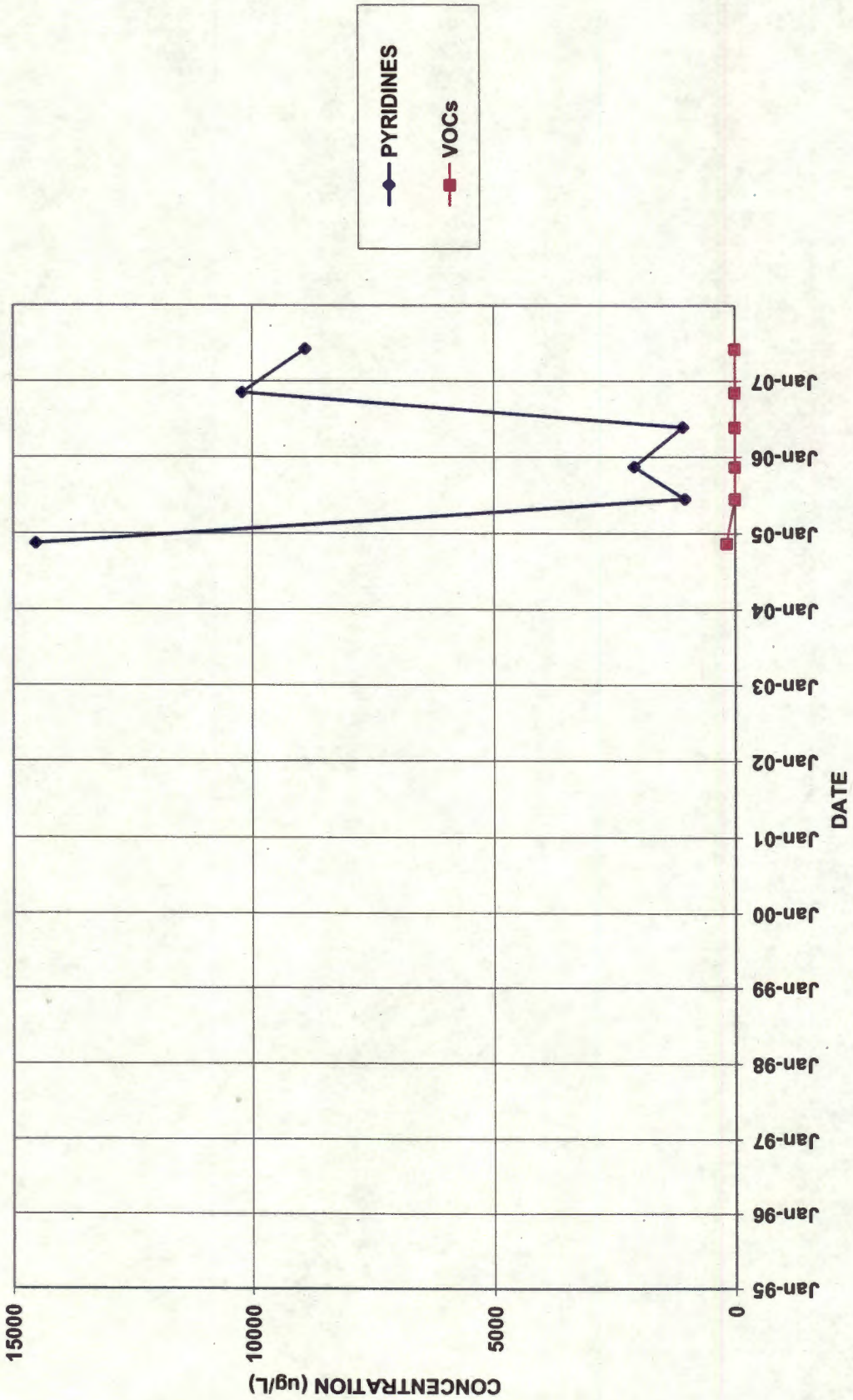
# MW-114



Prepared by: nmb  
Reviewed by: jeb

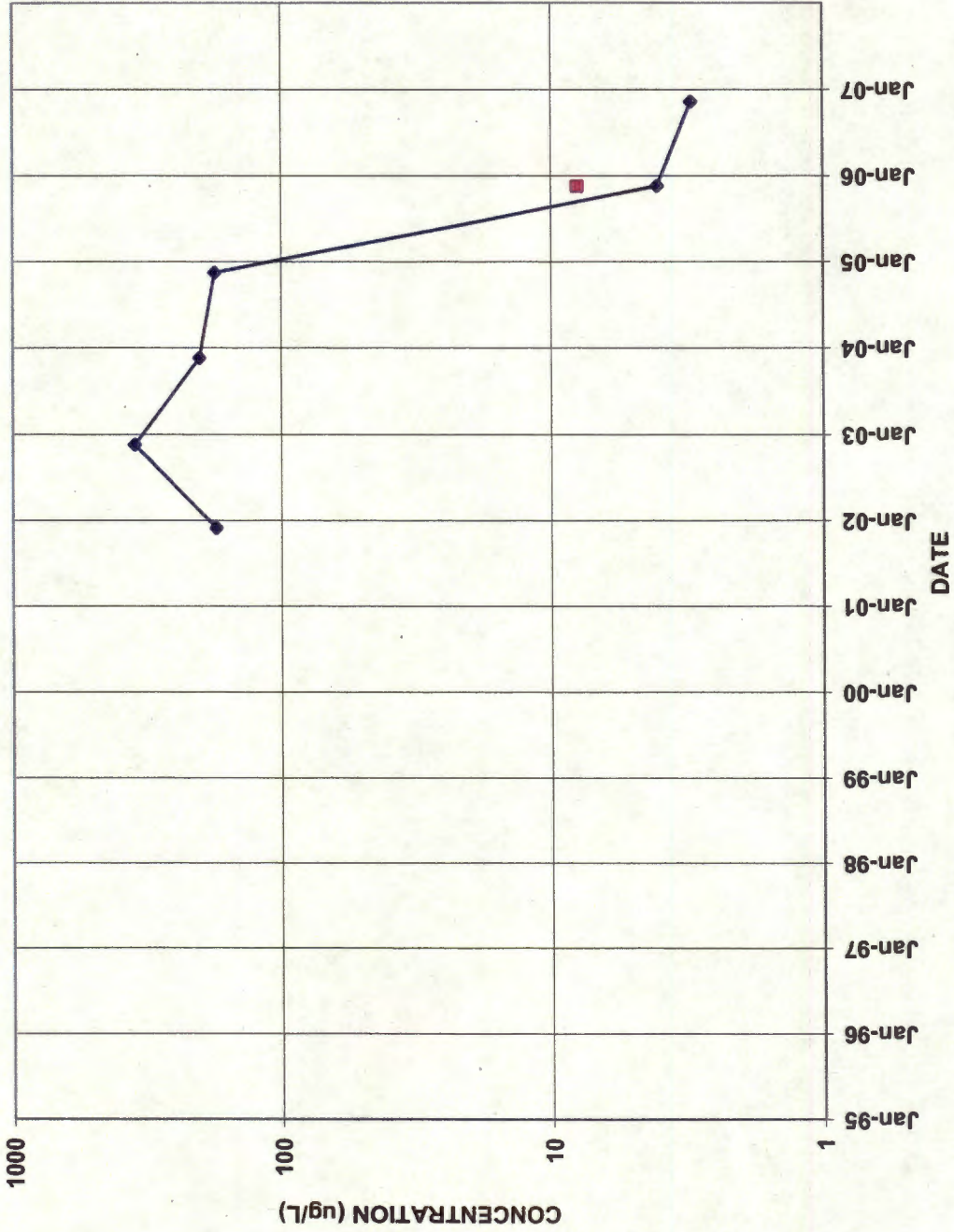


MW-127



—◆— PYRIDINES  
—■— VOCs

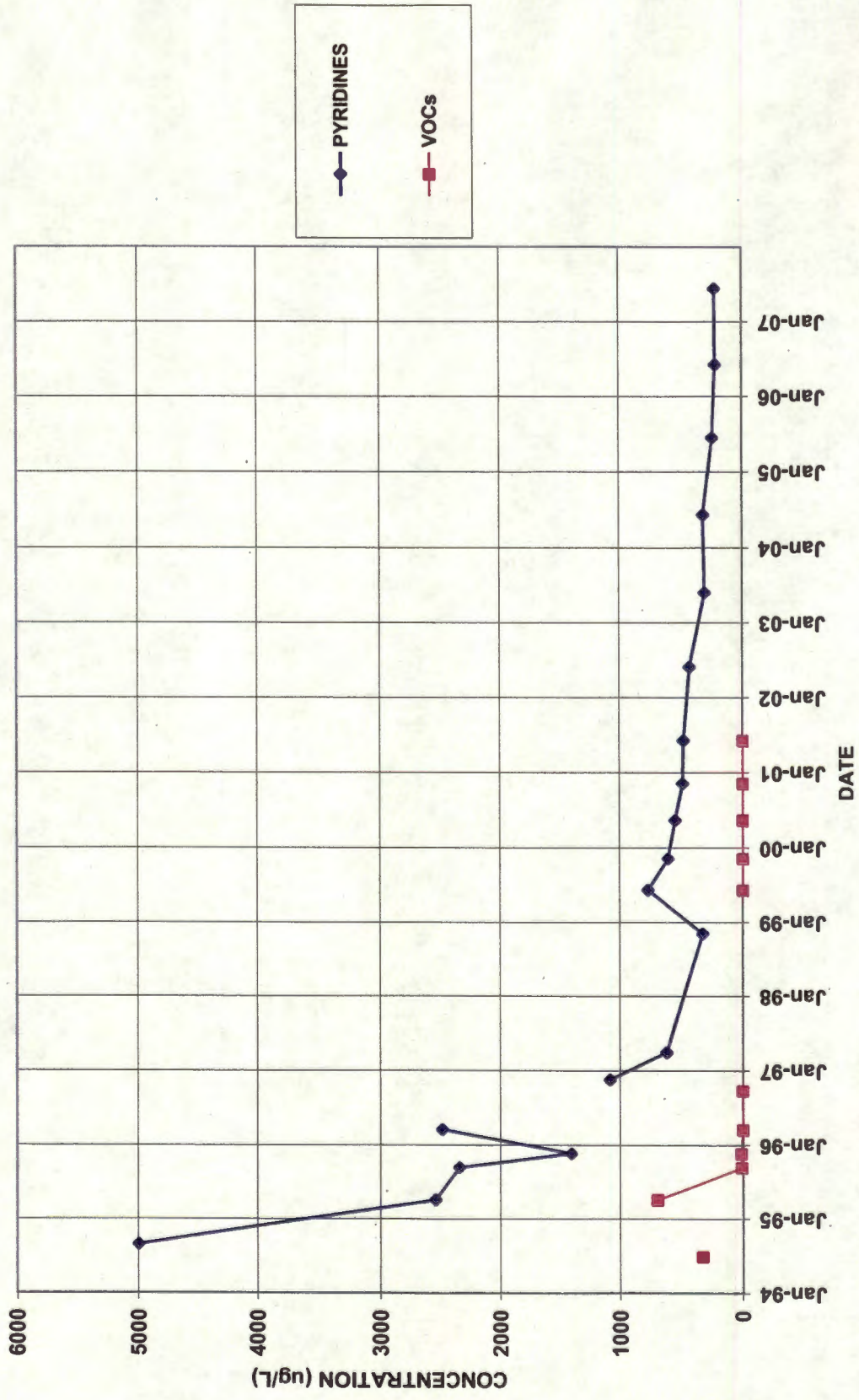
MW-16



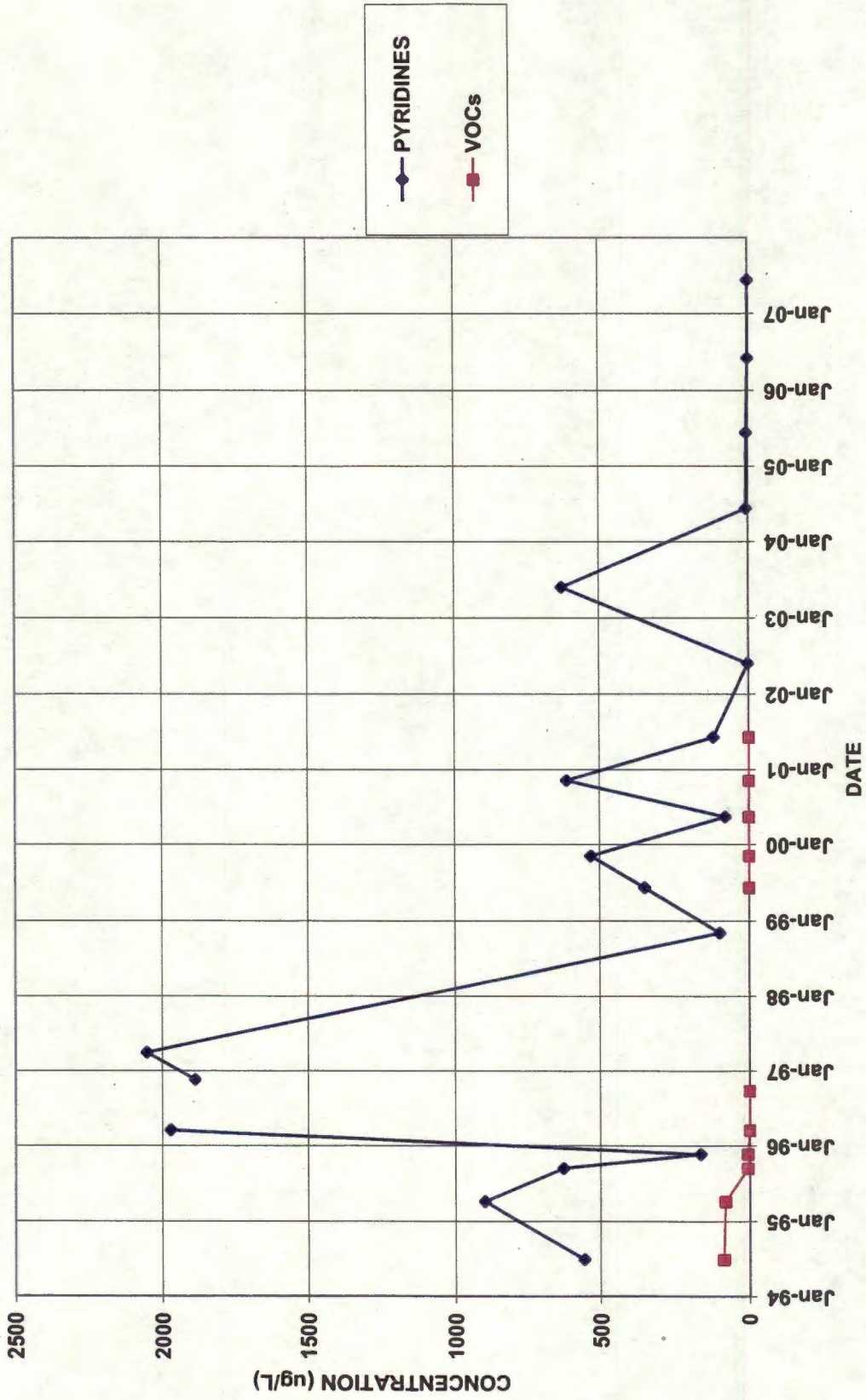
◆ PYRIDINES  
■ VOCs



NESS-E

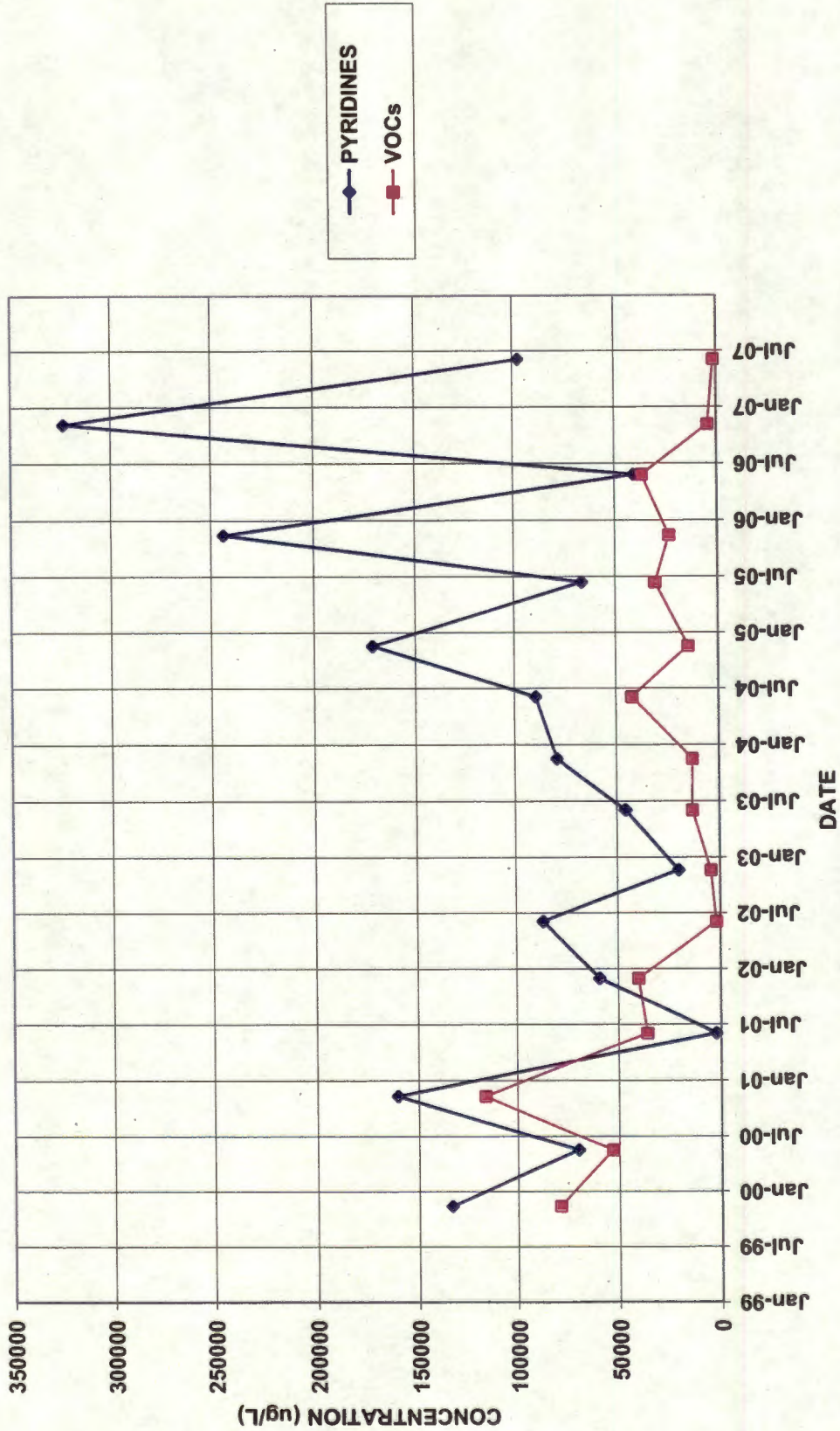


NESS-W



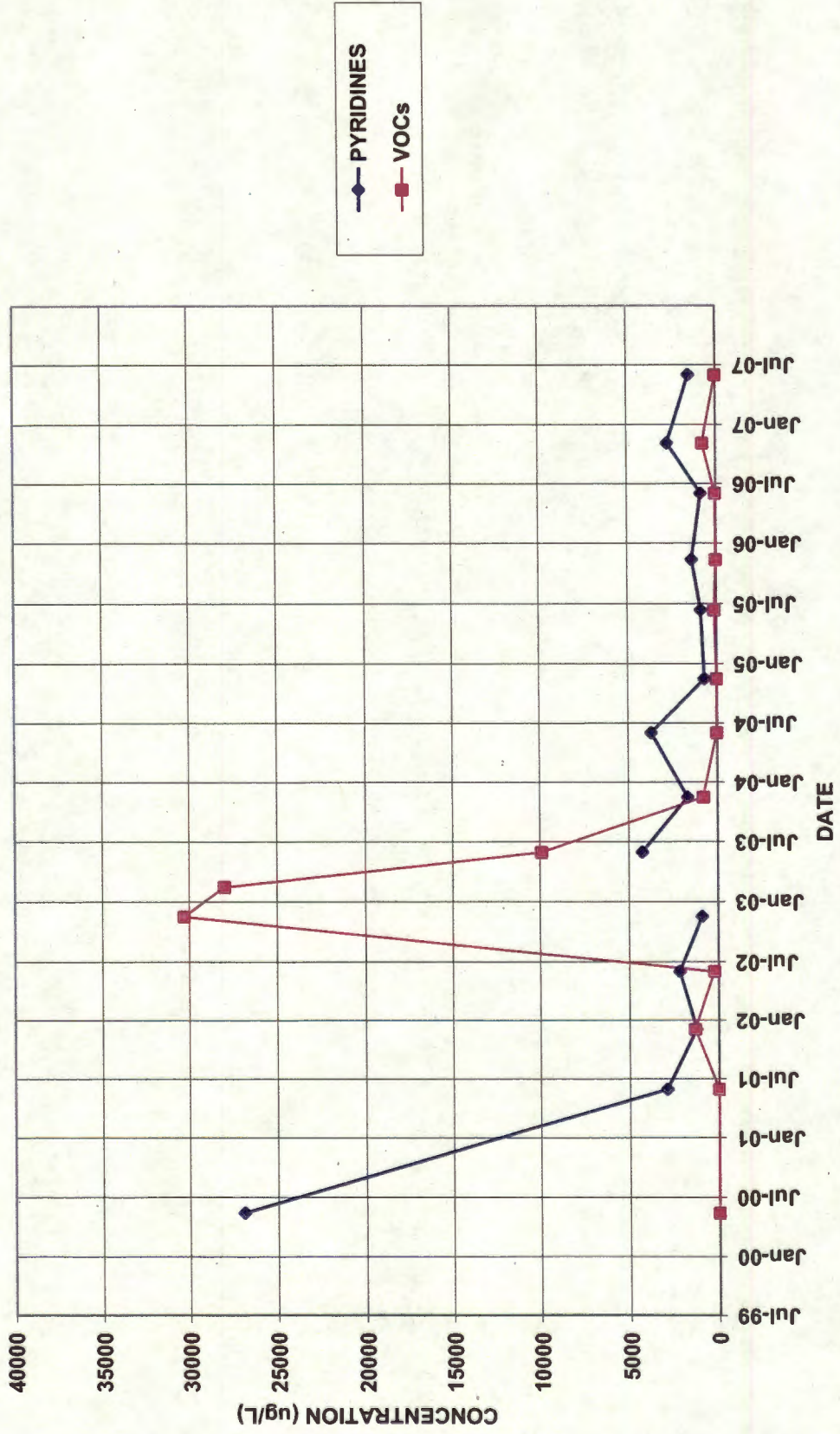


PW10



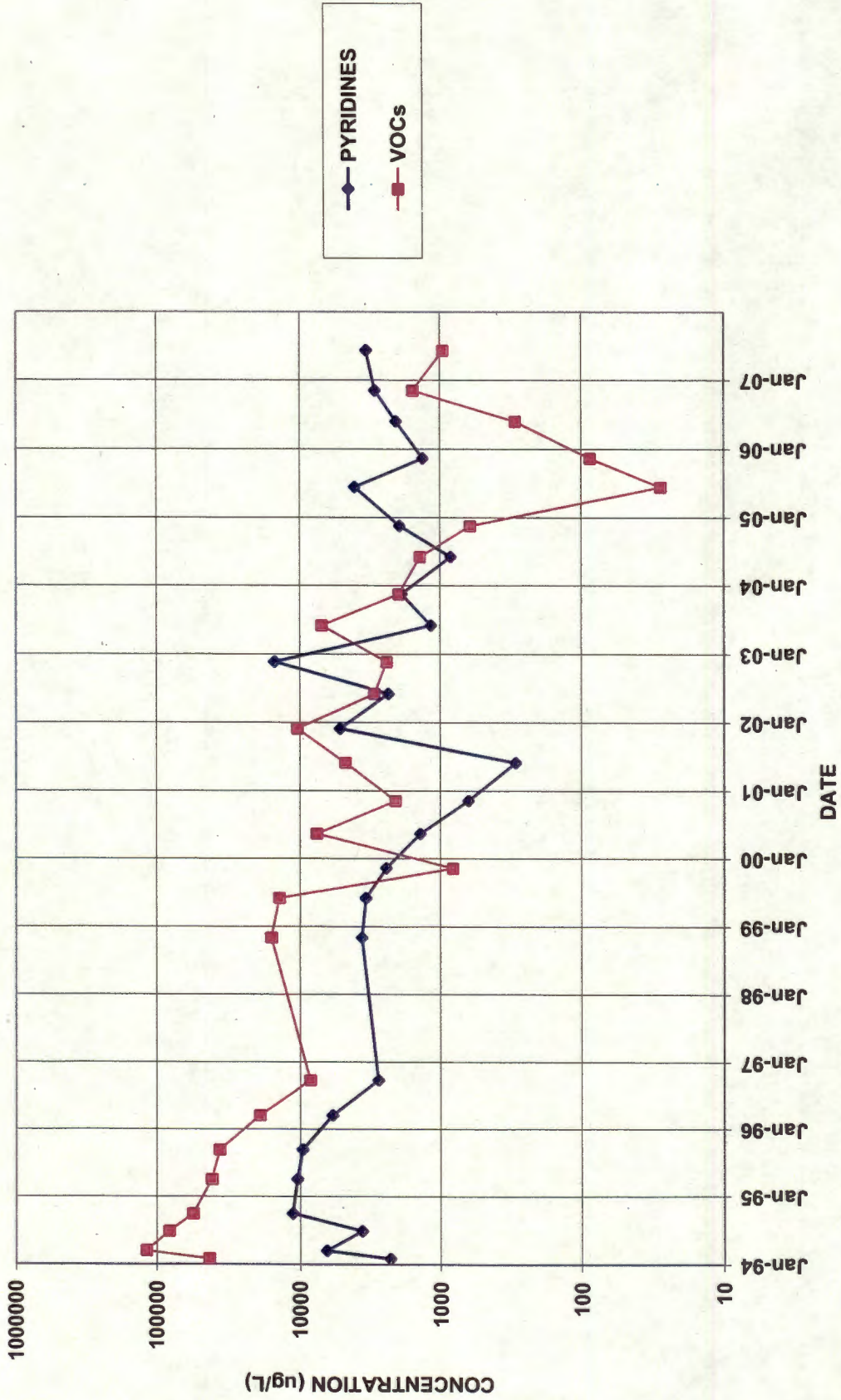
◆ PYRIDINES  
■ VOCs

PW11

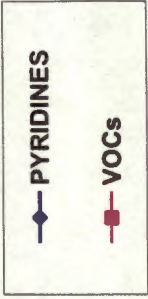
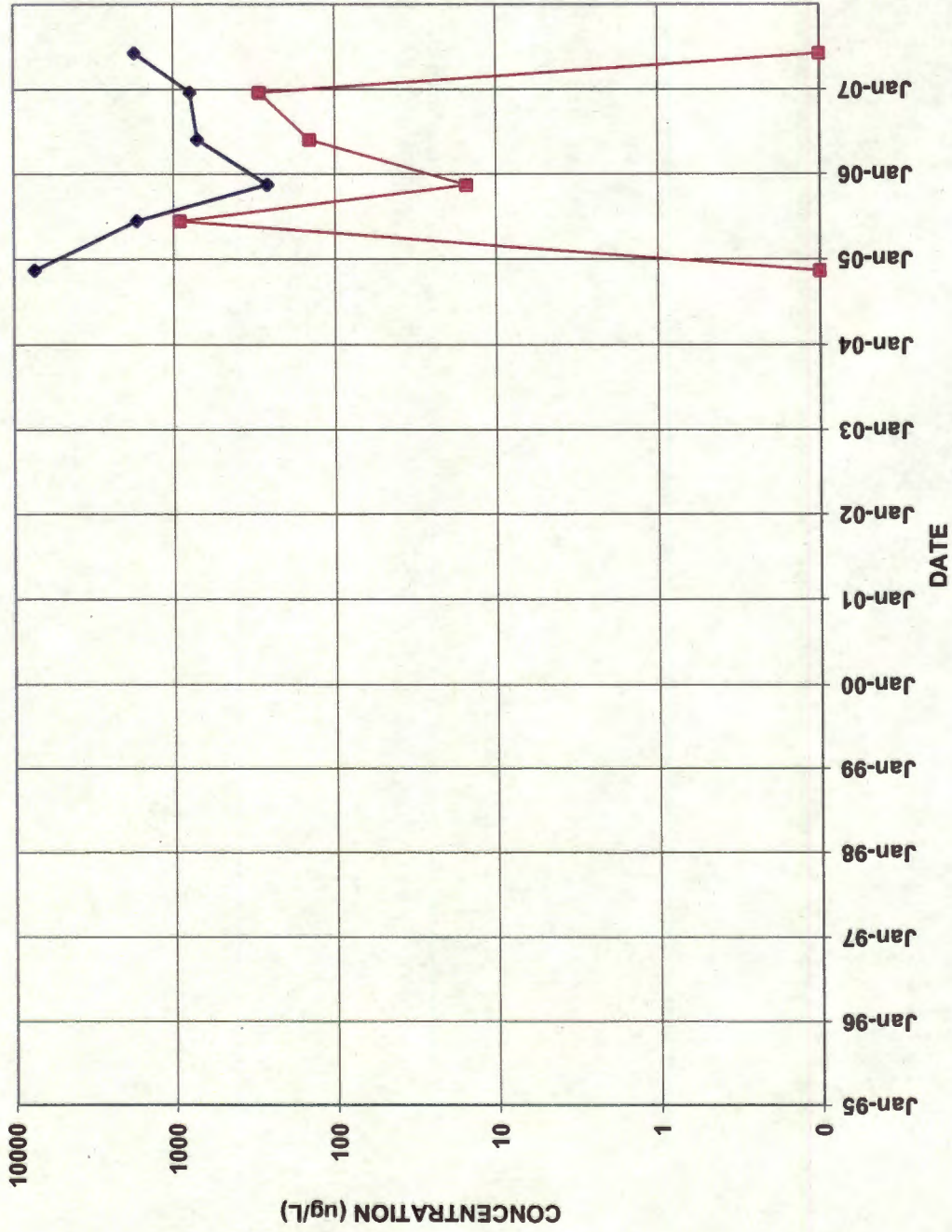




PW12 (Formerly BR-101)

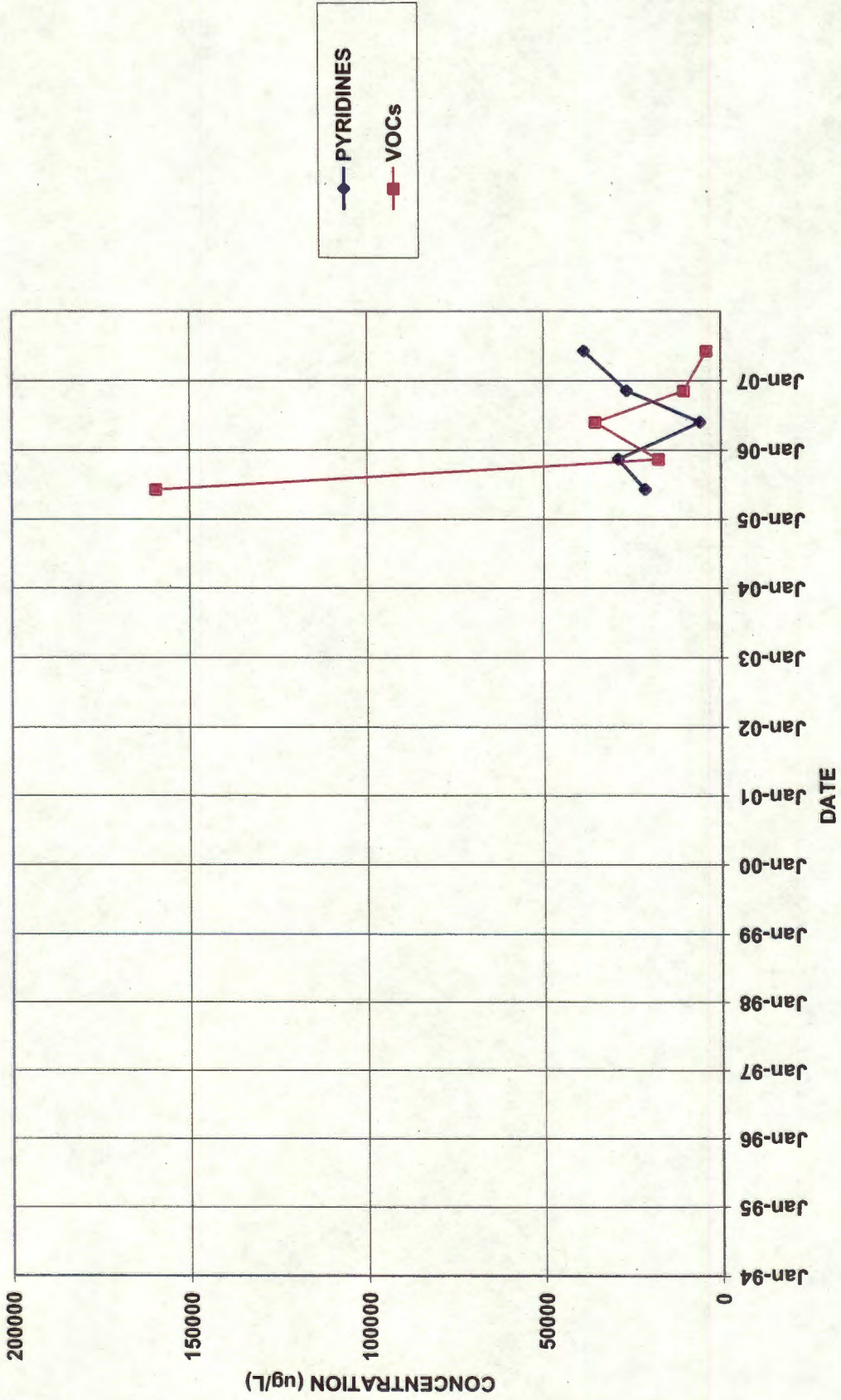


PW13

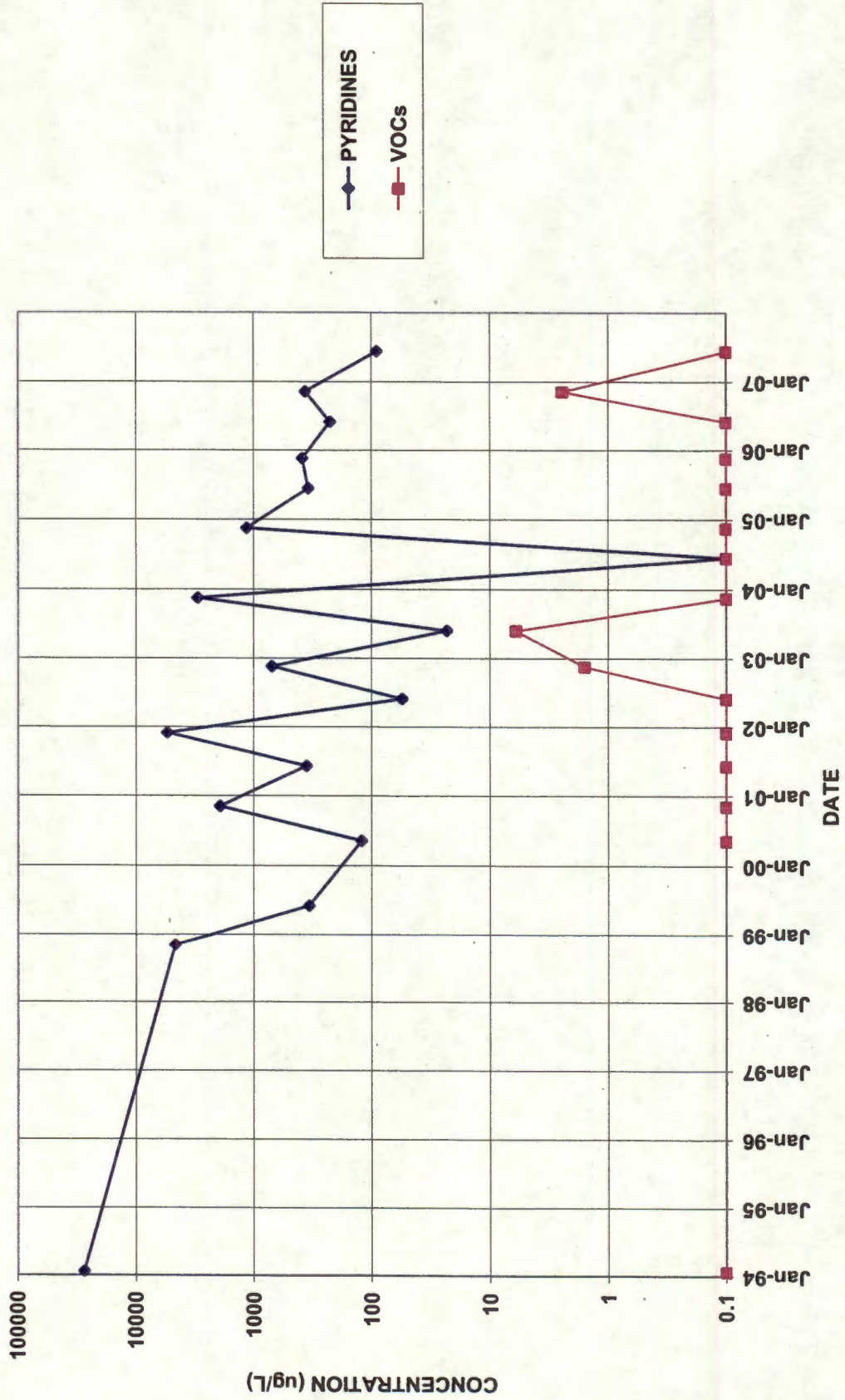




PW14



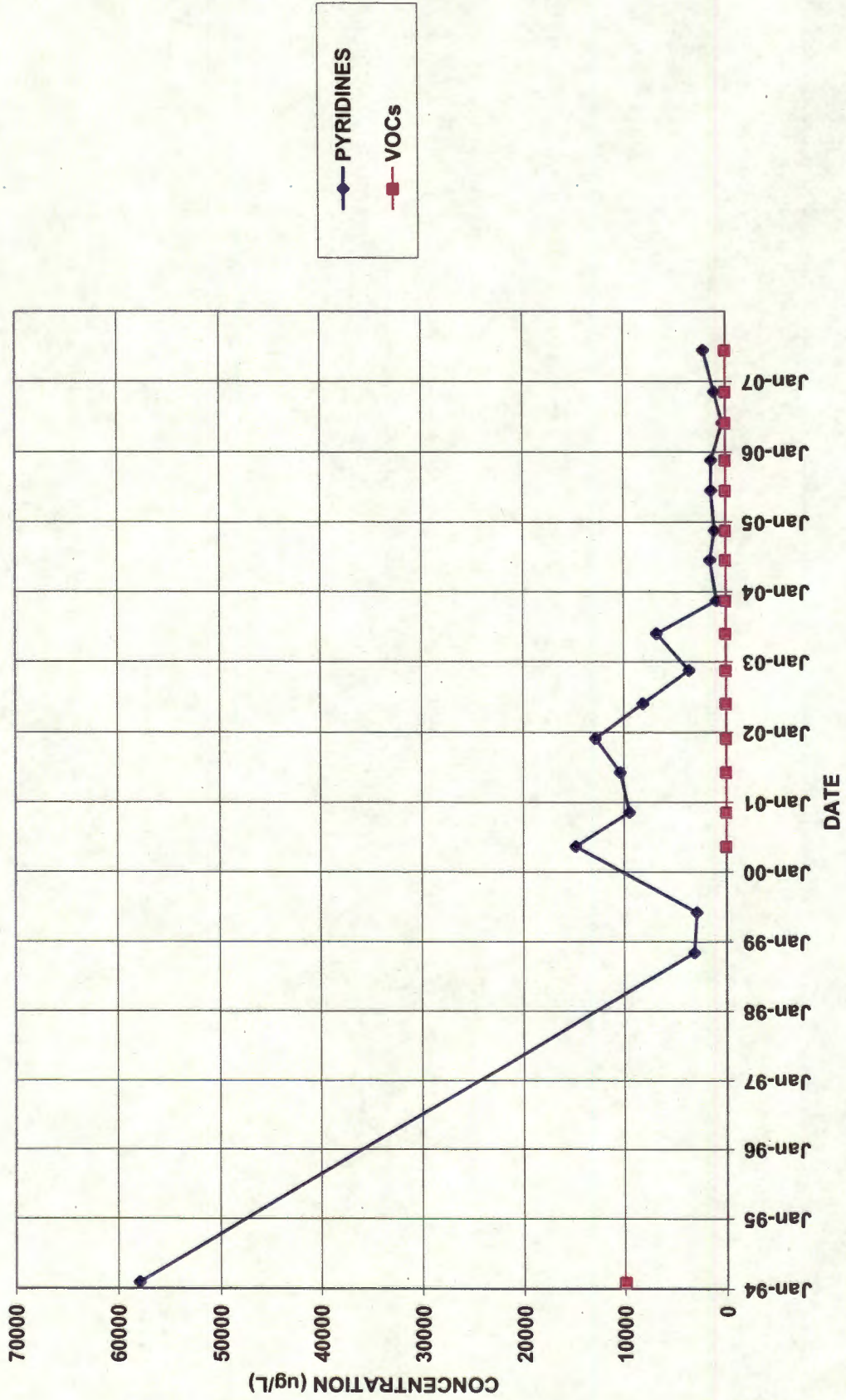
PZ-101



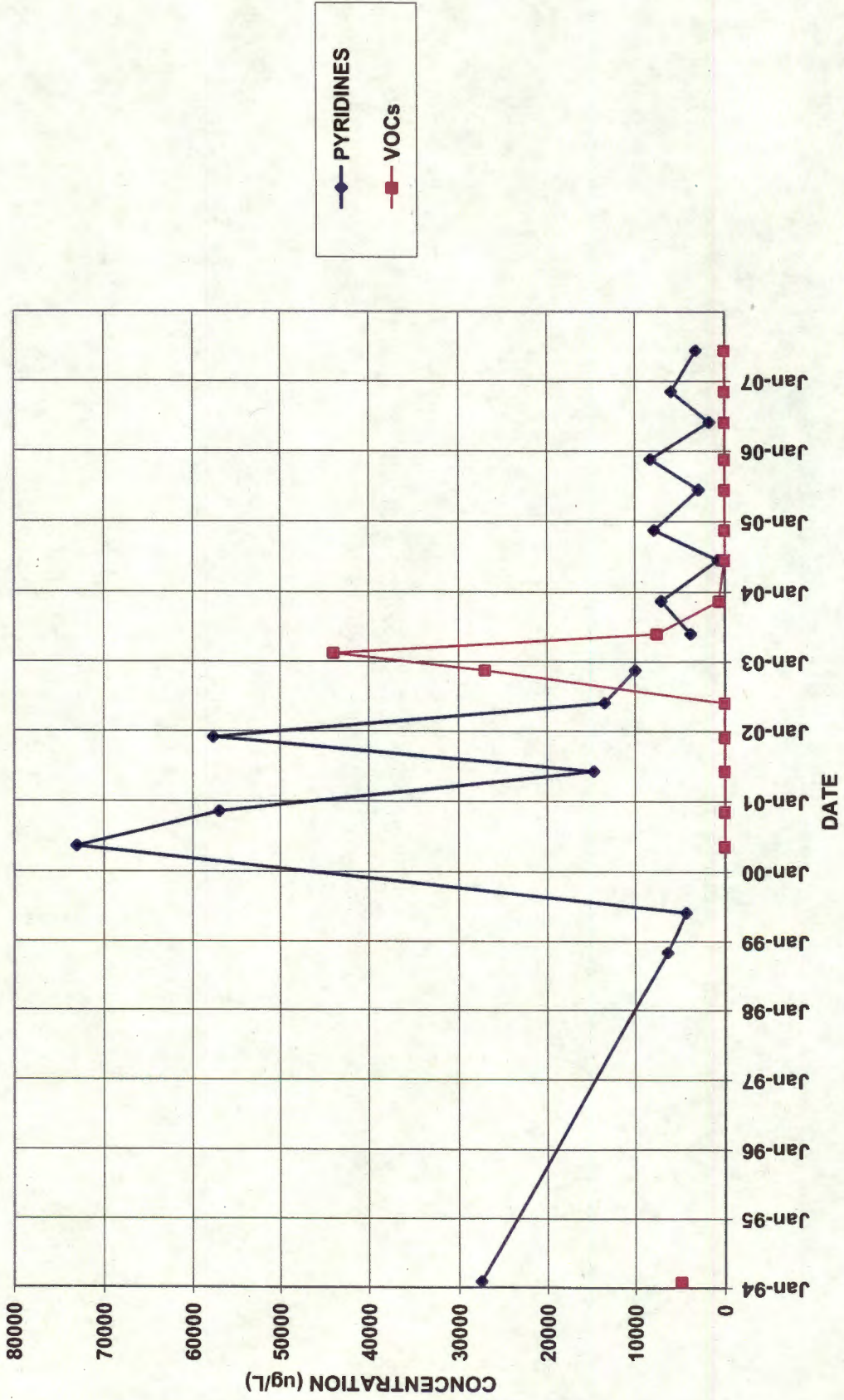
◆ PYRIDINES  
■ VOCs



PZ-102

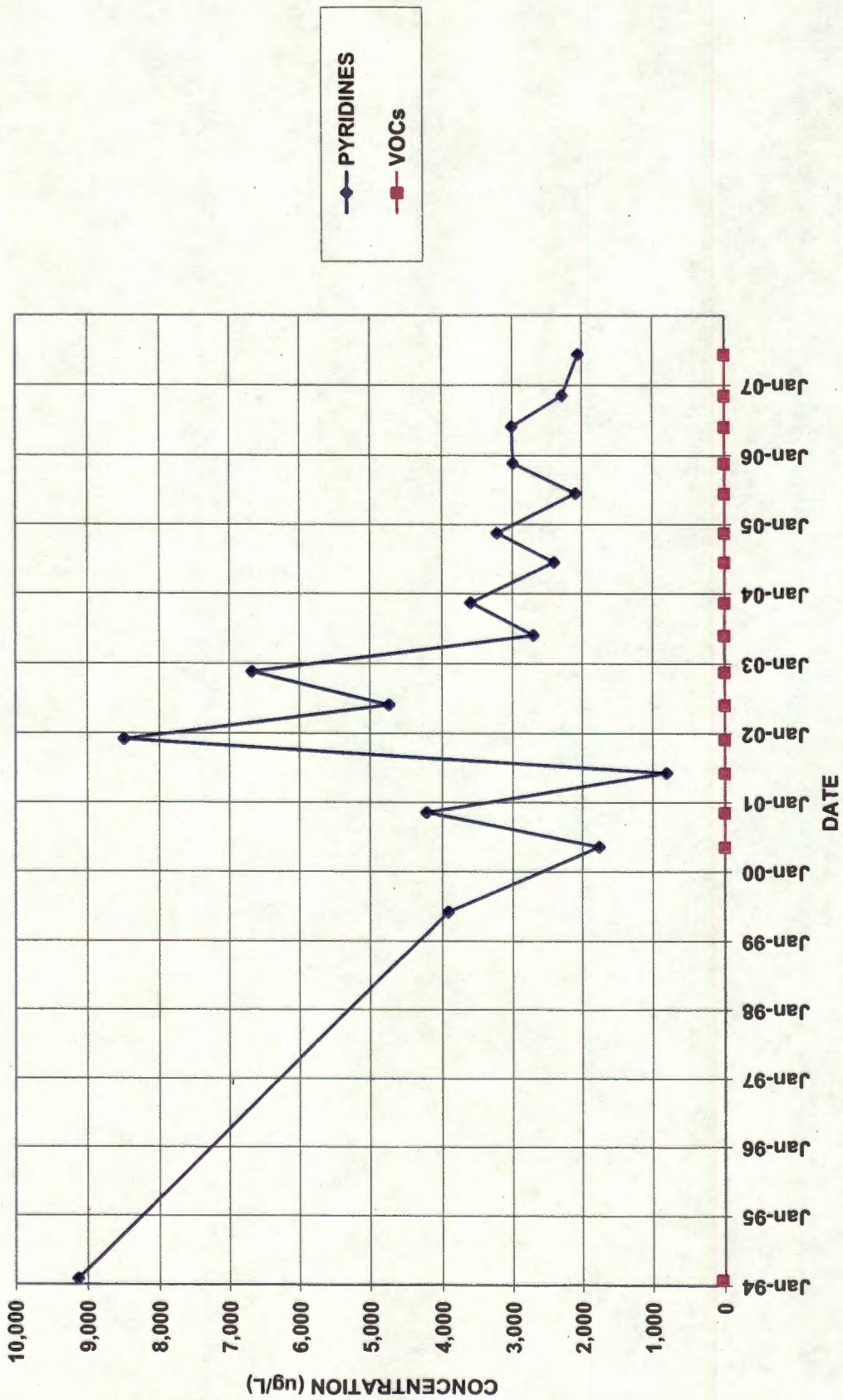


PZ-103

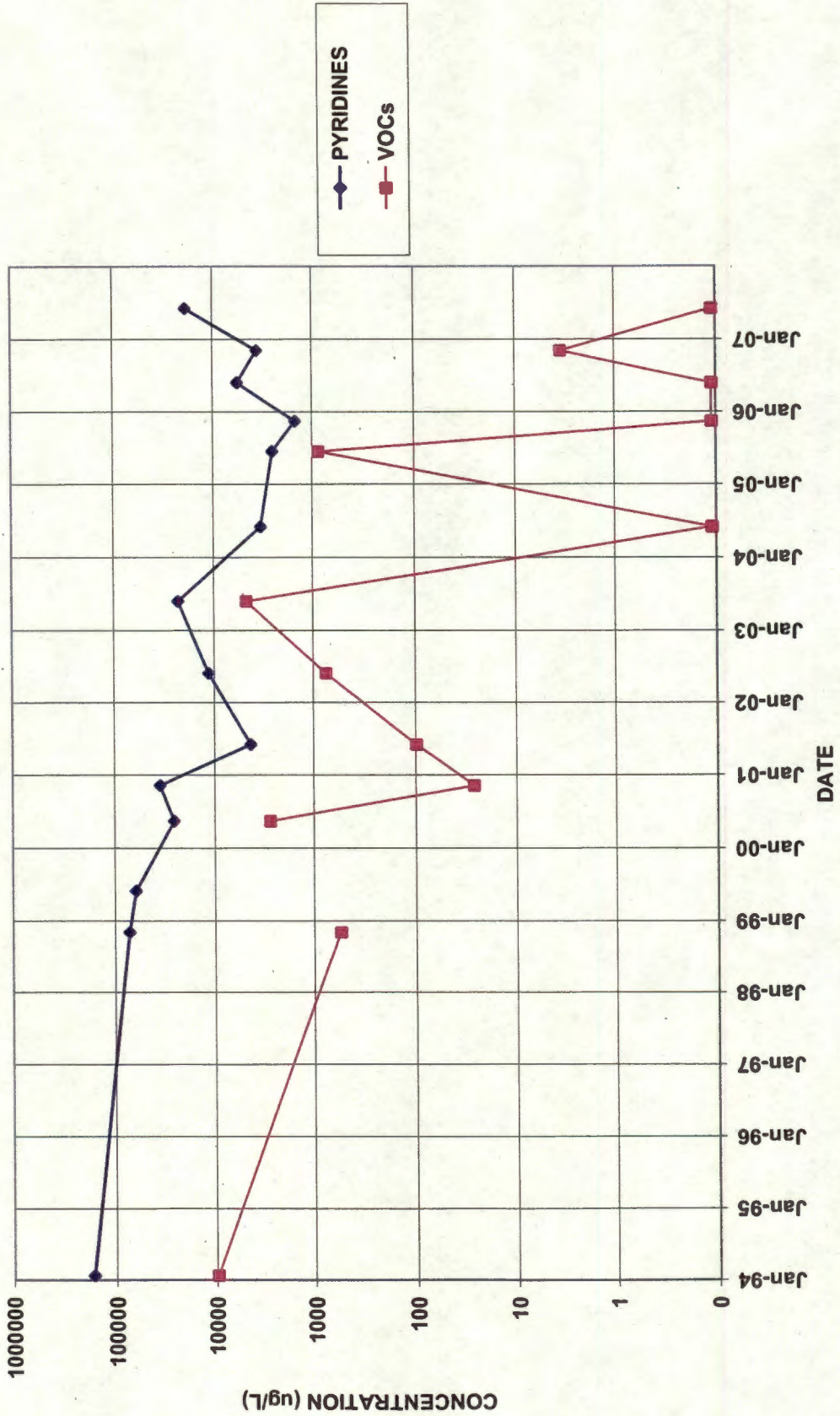




PZ-104

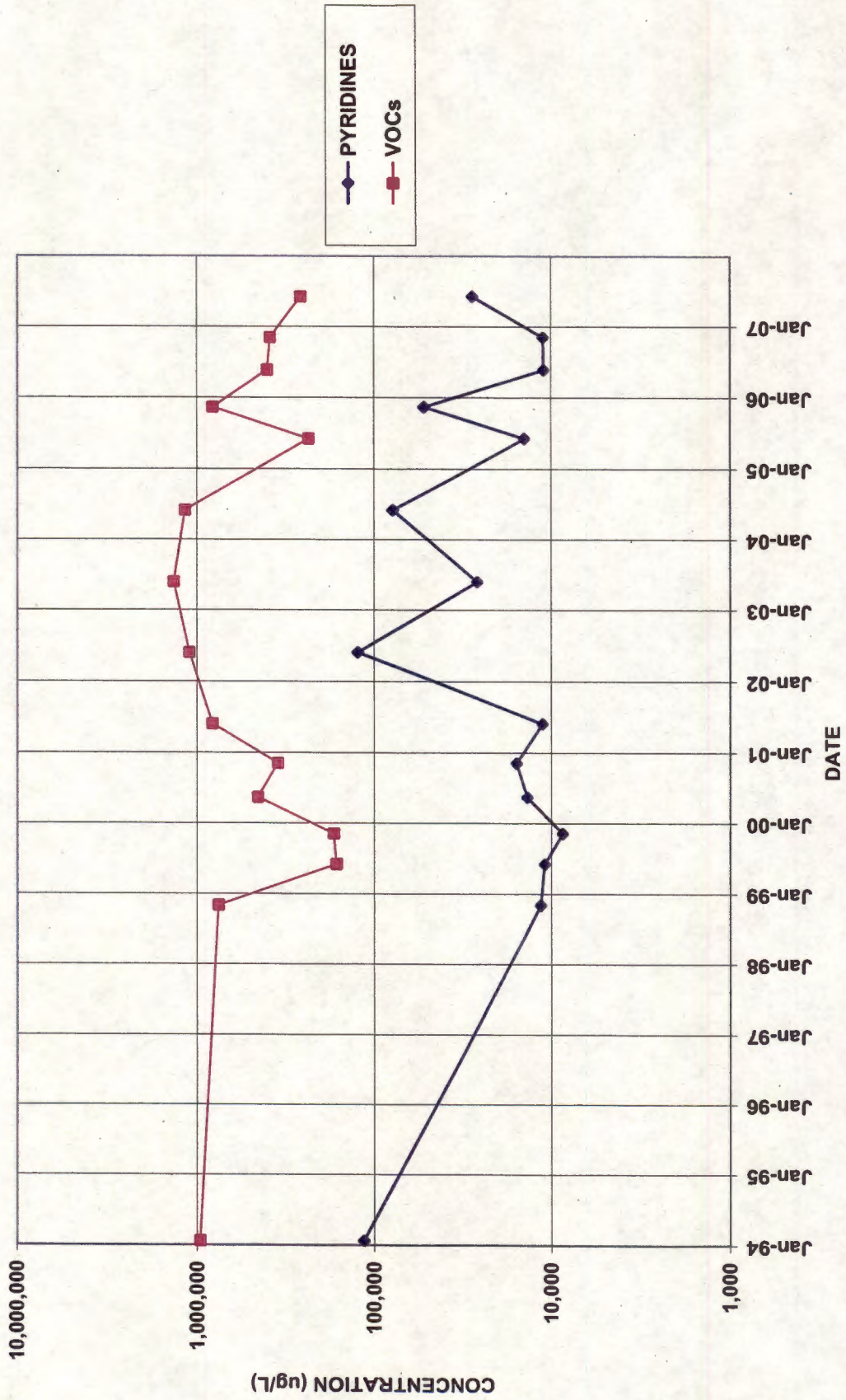


PZ-105

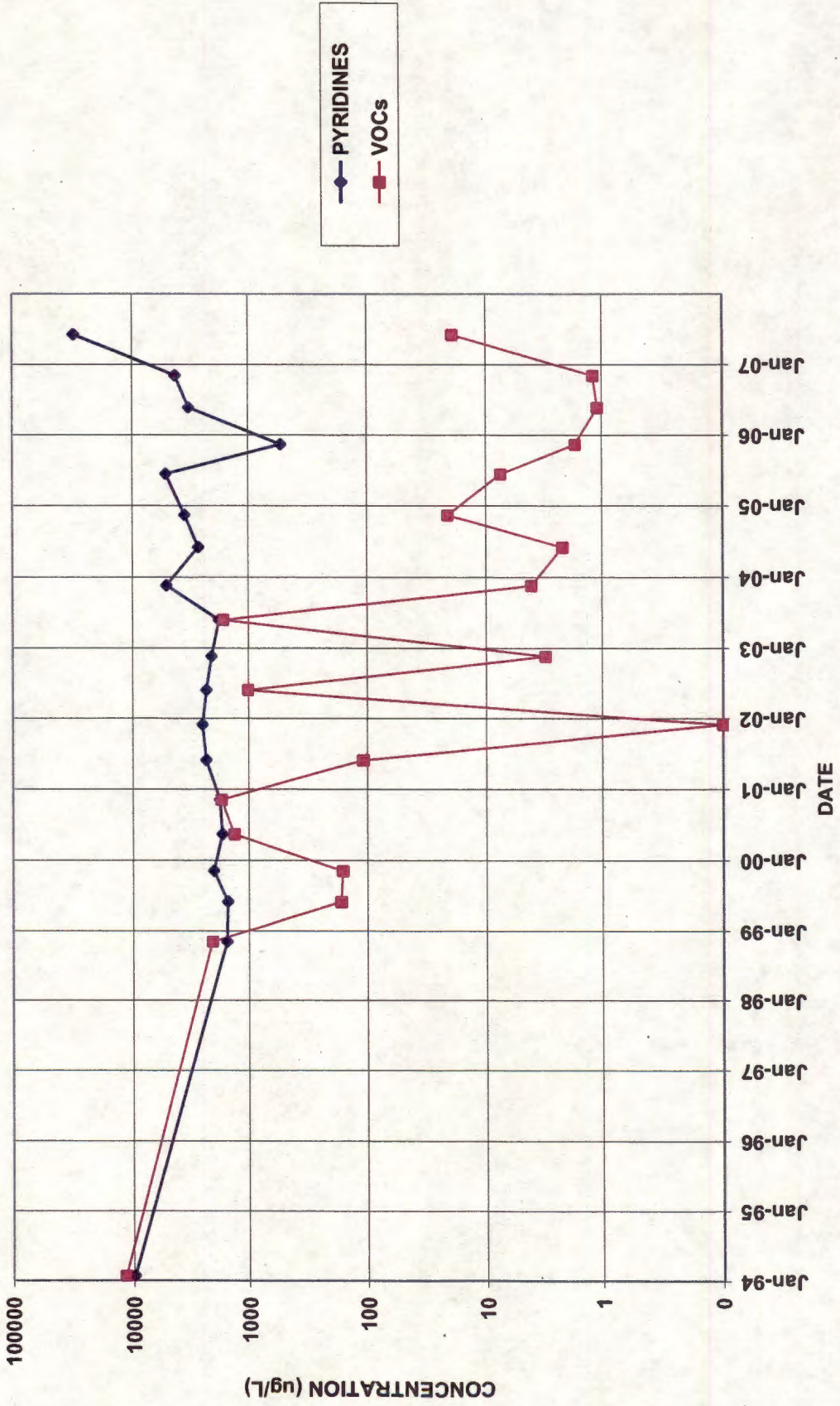




PZ-106

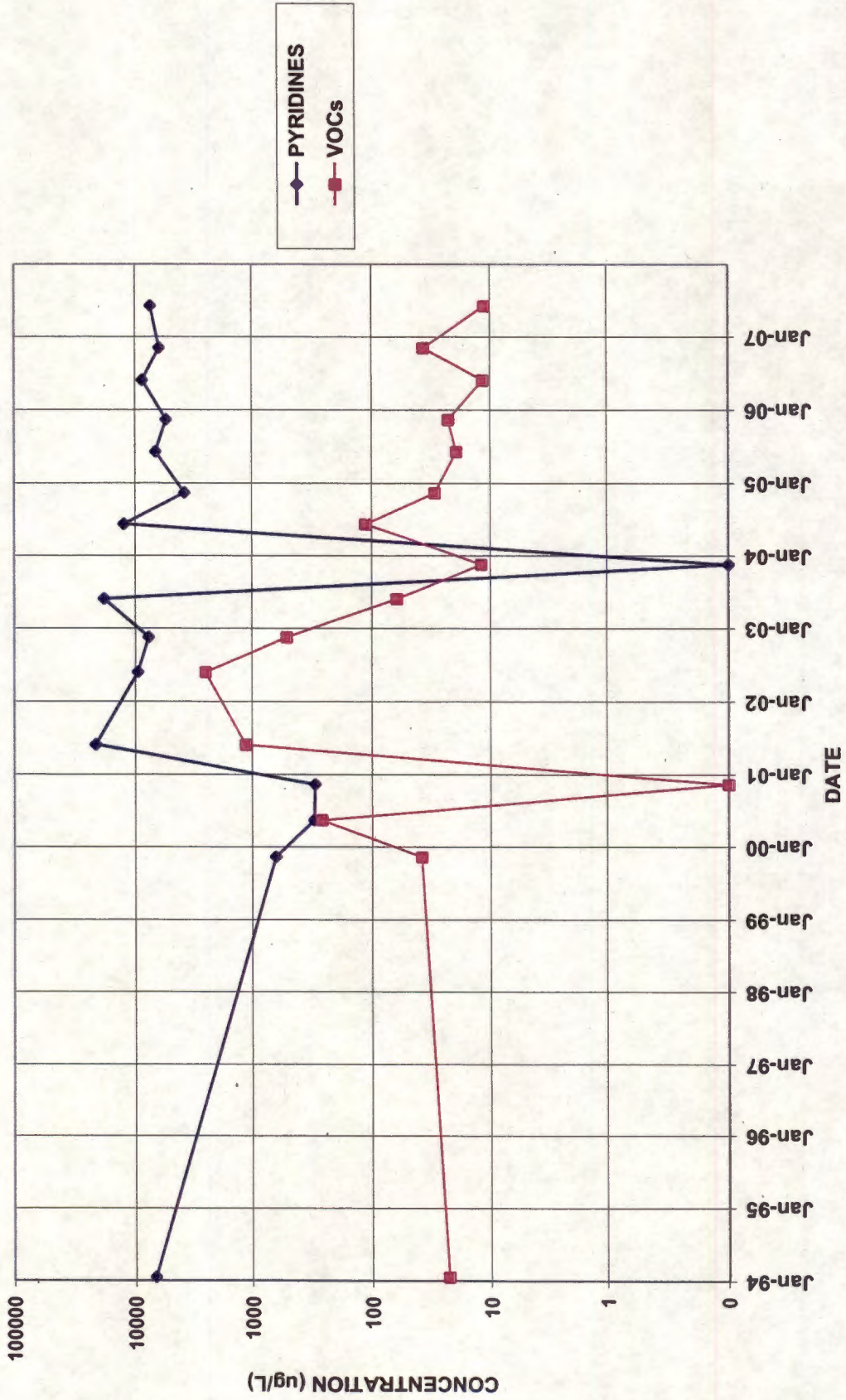


PZ-107

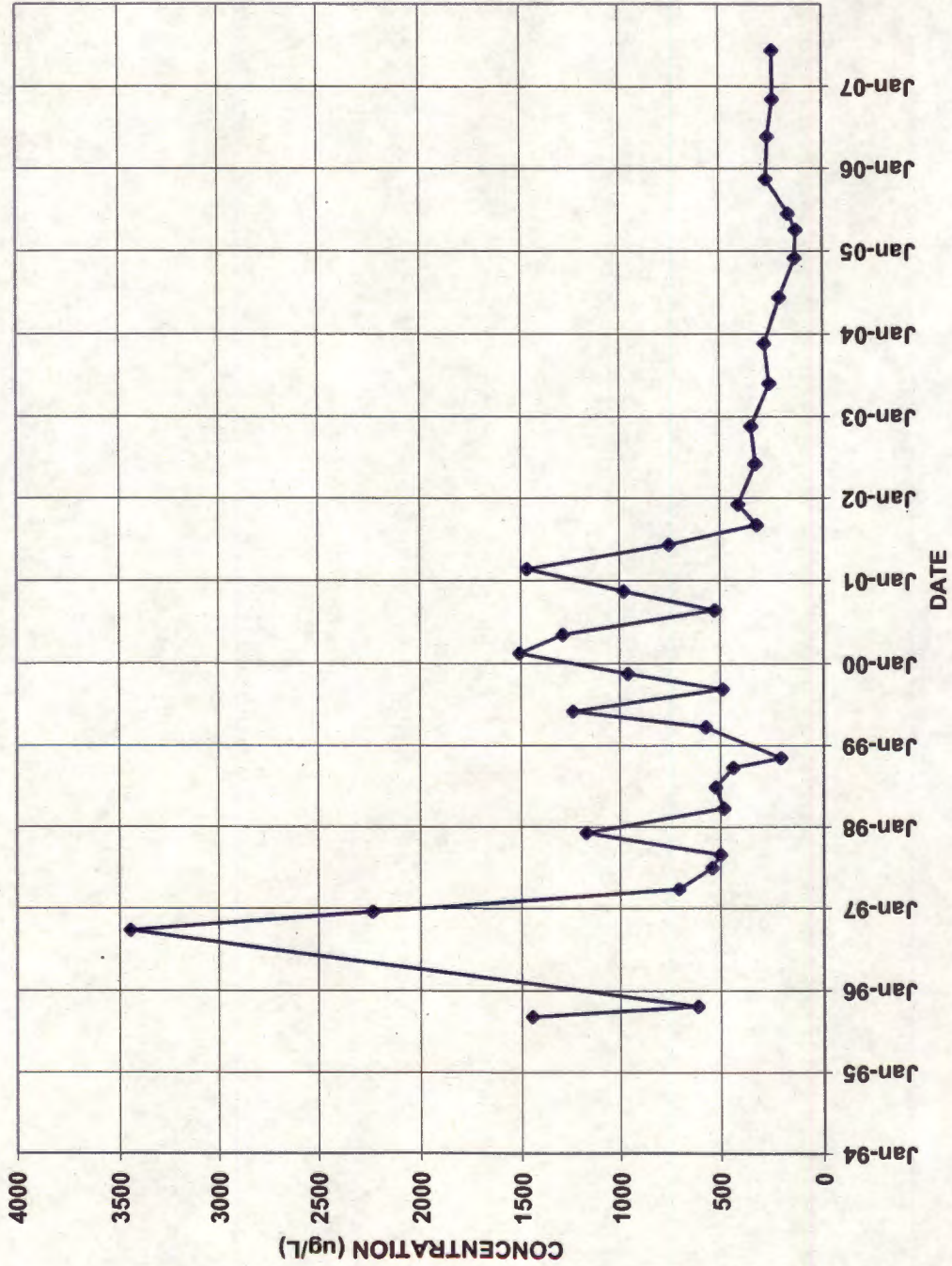




S-3



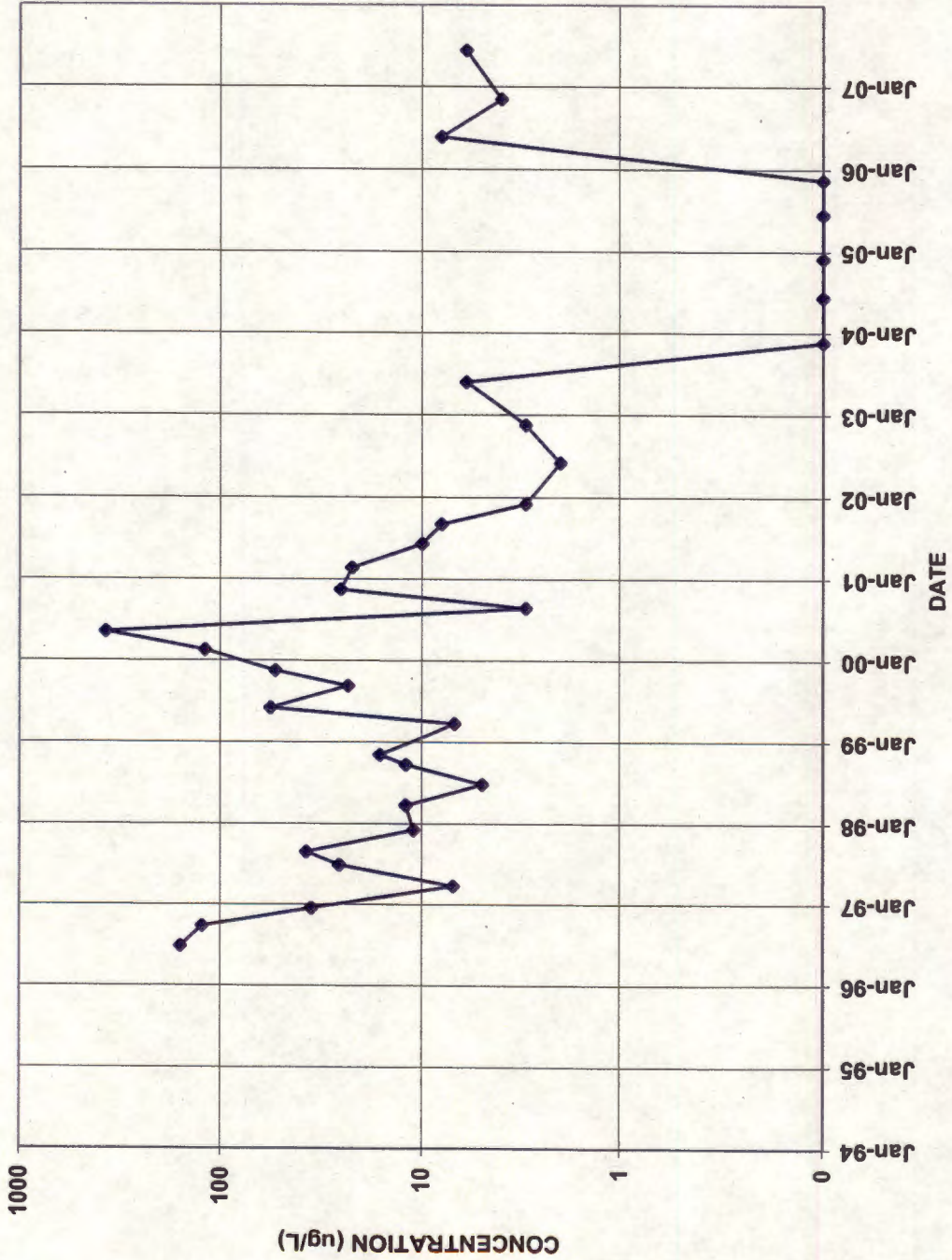
# QS-4 (QUARRY SEEP)



◆ PYRIDINES



QO-2 (QUARRY OUTFALL)



◆— PYRIDINES