

**Arch Chemicals, Inc.**  
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1200 Lower River Road  
Charleston, TN 37310  
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August 15, 2002

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

**Re: Arch Rochester RI/FS Quarterly Report No. 28  
Arch Chemicals (Site #628018a) 100 McKee Rd., Rochester, NY**

Dear Mr. Craft:

The attached report constitutes the twenty-eighth quarterly report on the progress of the Arch-Rochester RI/FS. Results in this report include surface and groundwater samples collected from May 30, 2002 through June 4, 2002.

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

Sincerely,

A handwritten signature in black ink that reads "Gayle M. Taylor".  
Gayle M. Taylor  
Manager, Environmental Issues  
Arch Chemicals, Inc.

Cc: Todd Caffoe, NYDEC  
R. Gahagan, Arch Chemicals, Inc.  
J.E. Brandow, Harding ESE, Inc.

**SURFACE WATER AND GROUNDWATER MONITORING PROGRAM  
SPRING 2002 MONITORING REPORT**

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

**RECEIVED**

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

**August 2002**

**SURFACE WATER AND GROUNDWATER MONITORING PROGRAM  
SPRING 2002 MONITORING REPORT**

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

*Prepared by*

**HARDING ESE, INC.  
Portland, Maine**

*for*

**ARCH CHEMICALS, INC.  
Charleston, Tennessee**

August 2002

*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 Harding ESE.*

*This document meets standards prescribed in project planning documents and has been properly reviewed by qualified professionals.*

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Nelson M. Breton, C.G.  
Project Geologist

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Jeffrey E. Brandow, P.E.  
Quality Control Reviewer

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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 from May 29, 2002 through June 4, 2002.

During this monitoring event, samples from a total of 45 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. At the request of the New York State of Department of Environmental Conservation (NYSDEC), this included a one-time sampling of monitoring well W-5. Also included in this monitoring event was a comprehensive chemical analysis of the quarry seep sample, QS-4. Data from this expanded analysis will be used to support discussions with the NYSDEC Division of Water in the near future regarding an application for a State Pollutant Discharge Elimination System permit for the discharge from a proposed off-site extraction well.

As in previous reports, groundwater monitoring results were compared with previous average concentrations for the on-site and off-site monitoring wells. Several of the on-site wells had contaminant concentrations exceeding their respective 5-year prior averages. Analytical results from off-site wells, however, are generally consistent with past observations. Several off-site wells near the western plant property boundary, which had shown noticeable increases in contaminant levels in the previous (Fall 2001) monitoring event, have returned to levels that are at or below their Spring 2001 values.

Samples from the quarry seep and outfall are below historical averages. The sample collected from the Erie Barge Canal was non-detect for chloropyridines and volatile organic compounds.

The on-site groundwater extraction system continues to function well. During the prior six-month period of operation, approximately 6.5 million gallons of groundwater was pumped to the on-site treatment system, containing an estimated 1,100 pounds of chloropyridines and 120 pounds of volatile organic compounds.

## **1.0 INTRODUCTION**

In accordance with the Order on Consent executed between Olin Corporation and the New York State Department of Environmental Conservation (NYSDEC), effective August 23, 1993 and transferred to Arch Chemicals, Inc. (Arch) on February 15, 1999, Arch has completed a Remedial Investigation and Feasibility Study at its facility on McKee Road in Rochester, New York. As part of this program, Arch conducts regular monitoring events consisting of sampling and chemical analysis of groundwater and surface water in the vicinity of the Rochester facility.

In October 2001, Arch and NYSDEC agreed to a revised monitoring schedule for the Fall 2001 and calendar year 2002 sampling events. Subsequently, NYSDEC requested that several additional wells be included in the Spring 2002 sampling. For this sampling event, Arch agreed to collect and analyze a total of forty-eight groundwater, surface water, and seep samples from off-site and on-site locations. Samples were collected from May 29, 2002 through June 4, 2002 for analysis of selected chloropyridines and volatile organic compounds (VOCs). In addition, the seep sample from the Dolomite Products quarry (QS-4) was analyzed for the full Target Compound List (TCL) for organics, full Target Analyte List (TAL) for inorganics, and selected wet chemistry parameters. These additional data for QS-4 are intended to support an application for a surface water discharge permit, which will be required as part of the implementation of the selected remedy for off-site groundwater.

This report presents the full results of the Spring 2002 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. The off-site and on-site locations of these sampling points are shown in Figures 1 and 2, respectively. Table 1 lists the wells that were sampled and the requested analyses. 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 pumping wells (BR-5A, BR-6A, BR-9, PW10, PW11, and PW12) were collected from the discharge lines. Well W-5, which was sampled at the request of NYSDEC, was partially obstructed. Although a sample was collected from this well, the sampling crew was unable to follow the full low flow sampling protocols, so the analytical results for this sample should be treated as approximate values.

Groundwater piezometric elevations were measured on May 28, 2002. Piezometric contour maps were constructed for each water-bearing zone (overburden, bedrock, and deep bedrock) and are presented in Figures 3, 4, and 5.

## 2.2 SURFACE WATER

Surface water and quarry 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, the quarry outfall, and the Barge Canal were collected by Severn Trent Laboratories on June 4, 2002. The quarry seep sample (QS-4) was analyzed for full TCL organics, TAL inorganics, and selected wet chemistry parameters. Samples from the outfall and canal were analyzed for selected chloropyridines and TCL VOCs. The three locations sampled during this event are listed below and are shown on Figure 7.

<u>Canal Sample</u>	<u>Quarry Samples</u>
QO-2S1 (100 ft south of QO-2)	QS-4 (Quarry Seep) QO-2 (Quarry Outfall)

## 2.3 ANALYTICAL PROCEDURES

The analytical procedures, data review findings, and validated data for the Spring 2002 groundwater monitoring event are discussed in the following paragraphs.

Groundwater 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 10 micrograms per liter ( $\mu\text{g/L}$ ) and 5 to 25  $\mu\text{g/L}$ , respectively, for undiluted samples.

In addition to the above analyses, surface water sample QS-4 was also analyzed for the full Target Compound List (TCL) for organics, full Target Analyte List (TAL) for inorganics, and selected wet chemistry parameters. TCL SVOCs were analyzed by USEPA SW-846 Method 8270C. Priority pollutant pesticides were analyzed by USEPA Method CRF136 608. TAL metals were analyzed by USEPA Methods CRF136 200.7 and 245.1 (mercury). Selected wet chemistry parameters were analyzed by USEPA Methods CRF136 350.1 (ammonia), 300.0 (chloride and sulfate), 335.2 and 335.4 (cyanide), 353.2 (nitrate and nitrite), 310.2 (alkalinity), and 130.2 (hardness).

## 2.4 QUALITY CONTROL

All laboratory analytical results were reviewed and qualified following USEPA Region II modifications to "Laboratory Data Validation Functional Guidelines for Validating Organic Analyses" (USEPA, 9/1994). The following summarizes the chemistry review findings in accordance with these guidelines.

Sample results were reviewed for holding time compliance, surrogate standard recoveries, blank contamination, matrix spike blank/matrix spike blank duplicate (MSB/MSBD), and matrix spike/matrix spike duplicate (MS/MSD) accuracy and precision.

Based on the information provided by the laboratory, the overall data quality appears to be good and all results are deemed usable with the exception of SVOC benzoic acid in sample QS-4 (see discussion below). Results reported for selected chloropyridines and TCL VOCs analyses are a compilation of results from several analytical runs to best represent the most usable data for a given compound.

Analytical holding times were met for all samples with the exception of samples BR-6A and PW-10. Surrogate percent recoveries were within QC limits for all undiluted analyses with the exception of samples PW-12 and QS-4. Sample QS-4 and PW-10 were associated with LCS/LCSDs and MS/MSDs with percent recoveries and relative percent differences (RPDs) outside QC limits. Blank contamination was observed in several of the method and trip blanks. Sample W-5 was analyzed at a 1000 fold dilution for chloropyridines. No lesser dilution was analyzed for this sample even though all chloropyridines were reported as non-detect. Chemist review findings and qualifying statements are described below:

- Holding times were exceeded for aromatic VOCs in samples BR-6A and PW-10. All aromatic VOC results for these samples were qualified as estimated (J/UJ).
- VOC surrogate recovery for p-bromofluorobenzene was above the QC limits in sample PW-12. All positive detections for VOCs in sample PW-12 were qualified as estimated (J).
- Pesticide surrogate decachlorobiphenyl was above the QC limits in sample QS-4. All positive detections for pesticides in sample QS-4 were qualified as estimated (J).
- LCS/LCSD SVOC analyses were performed using sample QS-4. The percent recovery for benzoic acid was less than ten percent. The reported benzoic acid result of non-detect was rejected (R). The RPDs for spiking compounds benzo(b)fluoranthene and fluorene were outside the QC limits. Results for benzo(b)fluoranthene and fluorene were qualified as estimated (J).
- MS/MSD chloropyridine analyses were performed on sample PW-10. The percent recoveries and RPDs were outside the QC limits. No qualifications were necessary due to the following reasons: the sample concentration was four times the spiking amount and the original sample concentration exceeded the calibration range.
- VOC blank contamination was observed for methylene chloride, acetone, and toluene. Action levels were established for these compounds and associated samples were qualified accordingly.
- SVOC blank contamination was observed for pyridine. Action levels were established and no qualifications were necessary.

## 3.0 ANALYTICAL RESULTS

### 3.1 GROUNDWATER

The validated results from the Spring 2002 groundwater monitoring event are provided in Tables 2 and 3. Table 4 provides a comparison of the Spring 2002 analytical results for selected chloropyridines and VOCs in representative wells to mean concentrations since 1997 (March 1997 through November 2001). 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.** Of the twenty on-site wells sampled, chloropyridines were detected above sample quantitation limits in all but one well (monitoring well W-5). Concentrations of chloropyridines ranged from 46 micrograms per liter ( $\mu\text{g}/\text{L}$ ) to 420,000  $\mu\text{g}/\text{L}$  (sum of all chloropyridine isomer concentrations). Pumping wells BR-5A, BR-6A, and BR-7A, along with monitoring wells PZ-106, PZ-107, B-17, E-1, E-3, and S-3 show selected chloropyridines concentrations above the mean from monitoring events over the previous five years.

**Off-Site.** One or more of the chloropyridine isomers were detected above sample quantitation limits in 23 of the 25 off-site wells that were sampled. Concentrations of total selected chloropyridines ranged from not detected to approximately 13,000  $\mu\text{g}/\text{L}$  (PZ-103). Three of these wells (BR-114, MW-103, and PZ-104) contained total chloropyridines concentrations in exceedance of their previous 5-year mean.

**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. As shown on Figure 8, total chloropyridine concentrations exceeding 10,000  $\mu\text{g}/\text{L}$  extend slightly west of the Site property boundary. In addition, based on previous detections of chloropyridines in MW-16 due east of the site, Figure 8 shows a distribution pattern in which chloropyridines are interpreted to have migrated eastward in bedrock groundwater.

Chloropyridine concentrations in off-site wells along the western boundary, which had briefly increased in the Fall 2001 monitoring event, have returned to levels that are at or below the Spring 2001 event.

#### 3.1.2 Selected VOCs.

**On-Site.** Concentrations of VOCs ranged from not detected to 1,100,000  $\mu\text{g}/\text{L}$  for the sum of several site-related contaminants (carbon tetrachloride, chloroform, methylene chloride, tetrachloroethene, and trichloroethene). Eight (B-7, B-9, BR-5A, E-3, PZ-106, PZ-107, S-3, and S-4) of the twenty on-site wells sampled in the Spring 2002 event show VOC concentrations greater than the 5-year mean for the prior monitoring events. In addition to the selected VOCs, other notable constituents detected in on-site wells include

chlorobenzene (in 16 out of 20 wells), carbon disulfide (15 of 20), bromoform (13 of 20), benzene (11 of 20), toluene (10 of 20), 1,2-dichloroethene (8 of 20), and vinyl chloride (7 of 20).

**Off-Site.** Selected VOCs were detected in seven of the 12 off-site wells sampled for VOCs in the Spring 2002 event. Total concentrations of selected VOCs ranged from an estimated 1.9 ug/L to approximately 750 ug/L (MW-103). Among the other VOCs, chlorobenzene was detected at the highest frequency (7 of 12) and concentration (up to 650 ug/L in PZ-103) in off site wells. Although chlorobenzene appears to be significant in wells on and near the Site, concentrations in wells located more than 200 feet from the site boundary have not exceeded 8 ug/L within the last 5 years.

**Concentration Contours.** Selected VOCs distribution in groundwater is shown as a set of concentration contours on Figure 9. These contours were developed using both overburden and bedrock groundwater data. Concentrations and the distribution of VOCs resemble those from recent prior sampling events.

### 3.2 SURFACE WATER

Results from the Spring 2002 canal and quarry monitoring event are presented in Table 5.

#### 3.2.1 Quarry

For samples collected from the Dolomite products quarry seep (QS-4) and discharge outfall (QO-2) the following chloropyridines and VOCs were detected:

LOCATION	QO-2	QS-4
<b>PARAMETER<sup>1</sup></b>		
2,6-Dichloropyridine	ND	70
2-Chloropyridine	2 J	250
3-Chloropyridine	ND	0.9 J
p-Fluoroaniline	ND	6 J
Toluene	ND	1 J

Notes:

J = The positive result reported for this analyte is a quantitative estimate (below sample quantitation limit, but above method detection limit).

<sup>1</sup> = Concentrations reported in micrograms per liter ( $\mu\text{g}/\text{L}$ )

The total reported chloropyridine concentrations are below historical averages.

#### 3.2.2 Barge Canal

Neither chloropyridines nor VOCs were detected in QO-2S1, the only sample collected from the Erie Barge Canal.

## **4.0 EXTRATION SYSTEM PERFORMANCE AND MAINTENANCE**

Table 6 is a summary of the system flow measurements for the seven extraction wells from January through June 2002. The total volume pumped during the six-month period is approximately six and a half million gallons. Maintenance activities during the period included pump replacements in wells PW-12 and BR-5A, and meter replacements at wells BR-6A, BR-9, and PW-12.

Substantial contaminant mass removal was observed during the period. Table 7 provides a calculation of mass removal rates since the previous groundwater monitoring event (i.e., from December 2001 through May 2002). Arch estimates that approximately 120 pounds of target VOCs and 1,100 pounds of pyridine 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**

At NYSDEC's request, Arch has added overburden monitoring wells S-3, S-4, and E-1 back into the monitoring program. These wells fall along the alignment of the proposed overburden groundwater collection trench, and will eventually be replaced by the trench. Arch will monitor S-3, S-4, and E-1 semi-annually for pyridines and VOCs until the trench is installed.

During the Spring 2002 monitoring event, Arch agreed to attempt to sample monitoring well W-5 along the western facility property boundary. Although a sample was retrieved and analyzed, the analytical results are substantially lower than would be predicted by measurements in nearby wells. Arch concludes that this well is no longer a viable monitoring well, and does not currently plan to sample it again for chemical analysis.

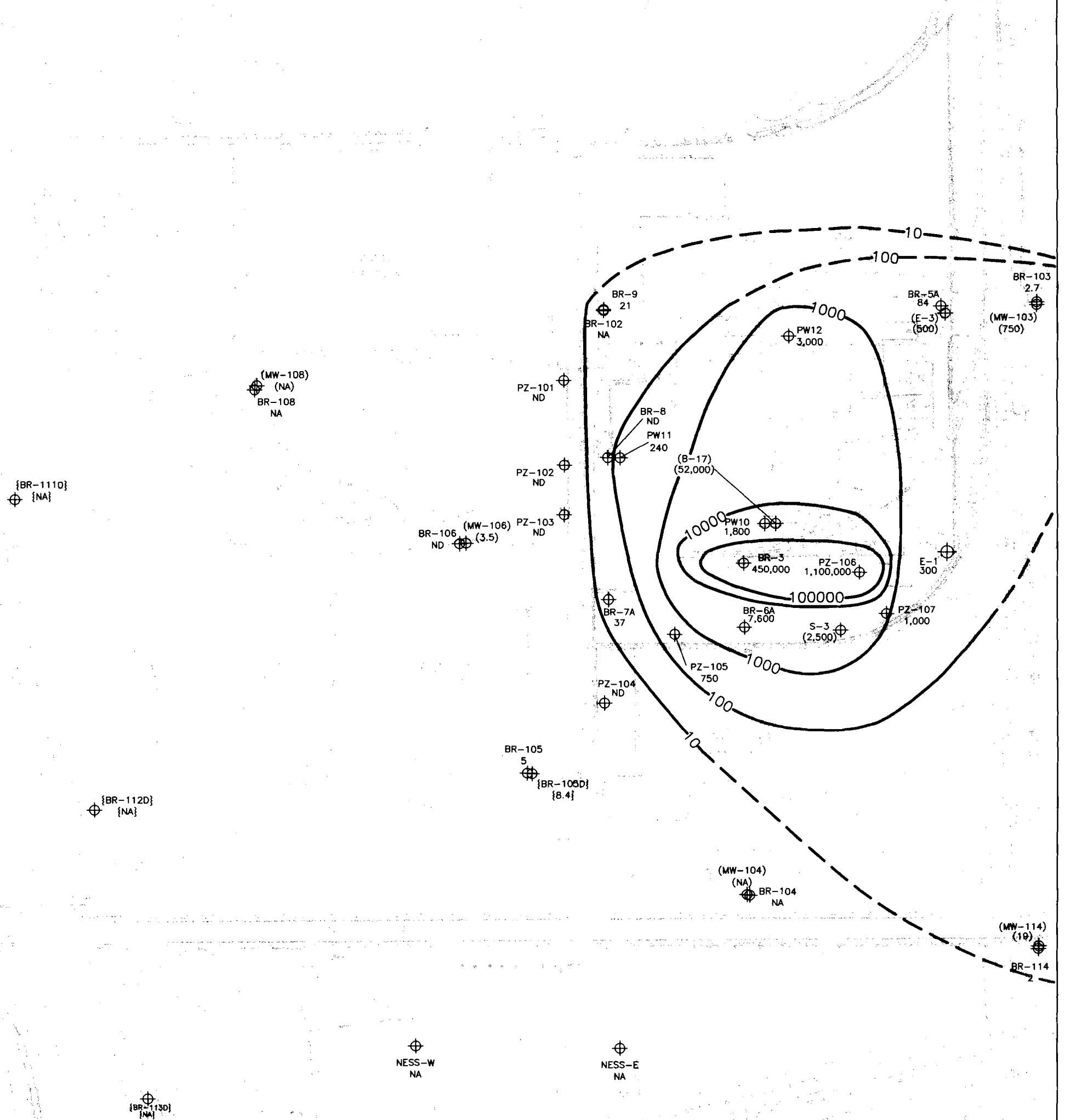
The quarry seep sample (QS-4) was analyzed for a comprehensive list of parameters during the Spring 2002 sampling event. This sample location is believed to be representative of the groundwater quality at the proposed location for the off-site extraction well. An initial review of that data suggests that chloropyridines are the only site-related compounds present in the groundwater. Several water quality parameters also appear somewhat elevated (hardness, alkalinity, sodium, sulfate, chloride), but are believed to reflect the natural groundwater quality in the area. This data will be used to support discussions with the NYSDEC Division of Water in the near future regarding an application for a State Pollutant Discharge Elimination System permit for the discharge from proposed extraction well.

## **6.0 NEXT MONITORING EVENT**

The next monitoring event will occur in November 2002 and will include groundwater, surface water, and seep sampling.

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

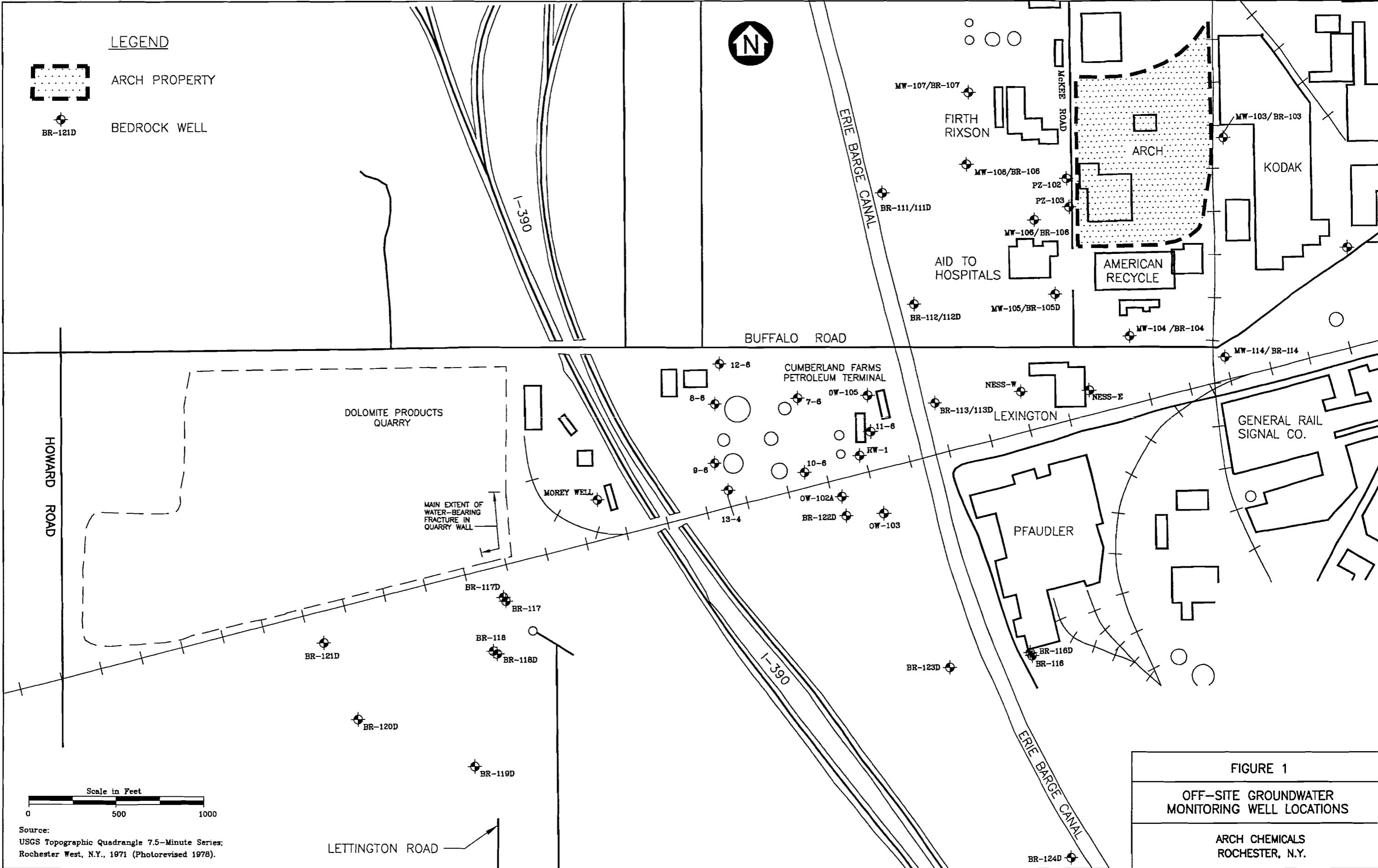
## **Figures**

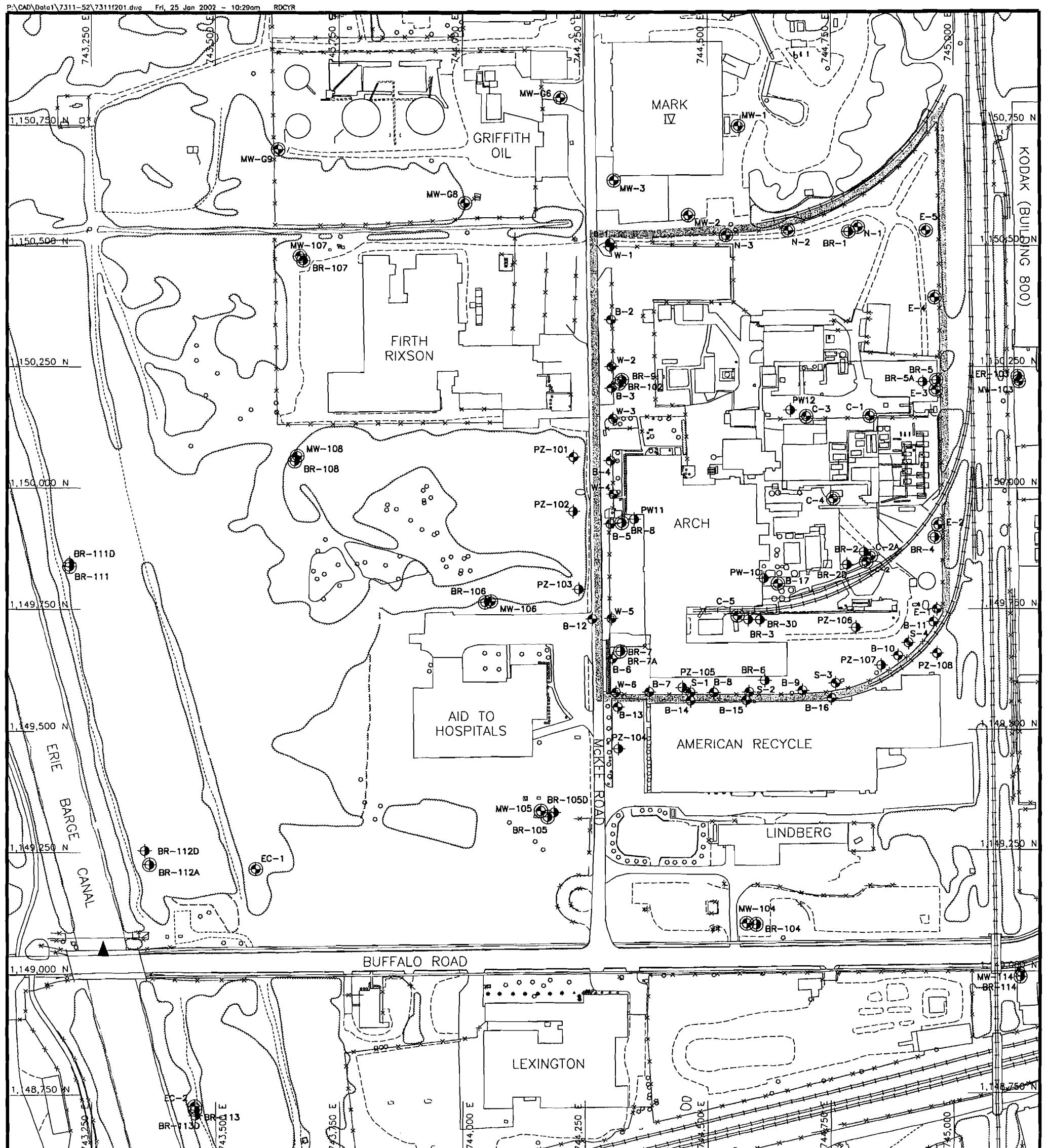


**NOTES:**

1. SAMPLES COLLECTED FROM MAY 29 THRU JUNE 4, 2002.
2. SELECTED VOCs CONSIST OF CARBON TETRACHLORIDE, CHLOROFORM, METHYLENE CHLORIDE, TCE, AND PCE.
3. CONCENTRATION CONTOURS REPRESENTED FOR BEDROCK WELLS AND SELECTED OVERBURDEN AND DEEP BEDROCK WELLS.
4. DASHED CONCENTRATION CONTOURS REPRESENT INFERRENCES FROM HISTORICAL ANALYTICAL RESULTS.

**FIGURE 9**  
**SPRING 2002**  
**SELECTED VOLATILE ORGANIC**  
**COMPOUND CONCENTRATION**  
**CONTOURS FOR GROUNDWATER**





## LEGEND

— X — X —

## 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**

**NOTE:**

- ## **1. OFF-SITE WELL LOCATIONS ALSO INCLUDED ON FIGURE 1**

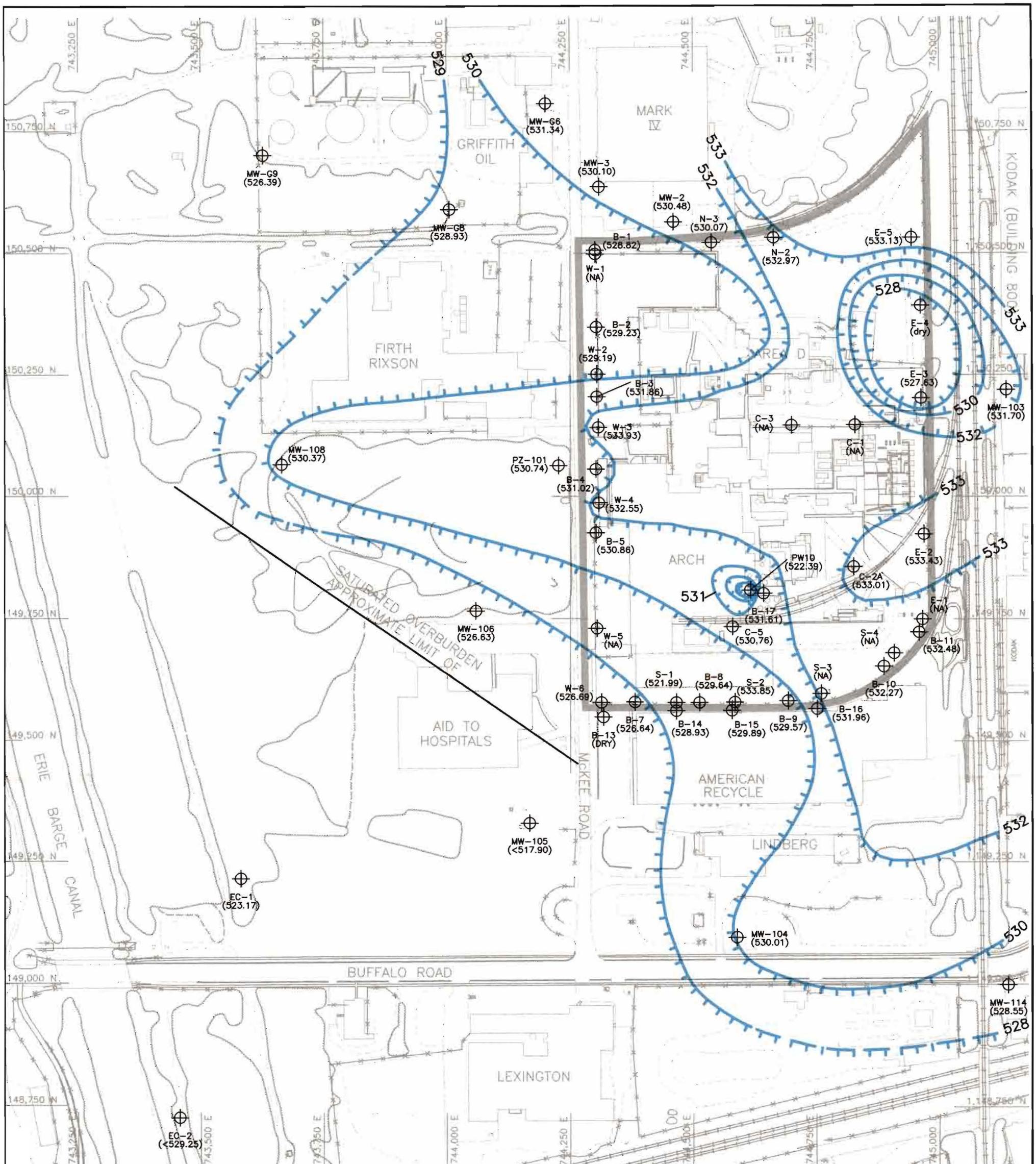
0 100 200 400 FEET

SCALE: 1"=200'

FIGURE 2

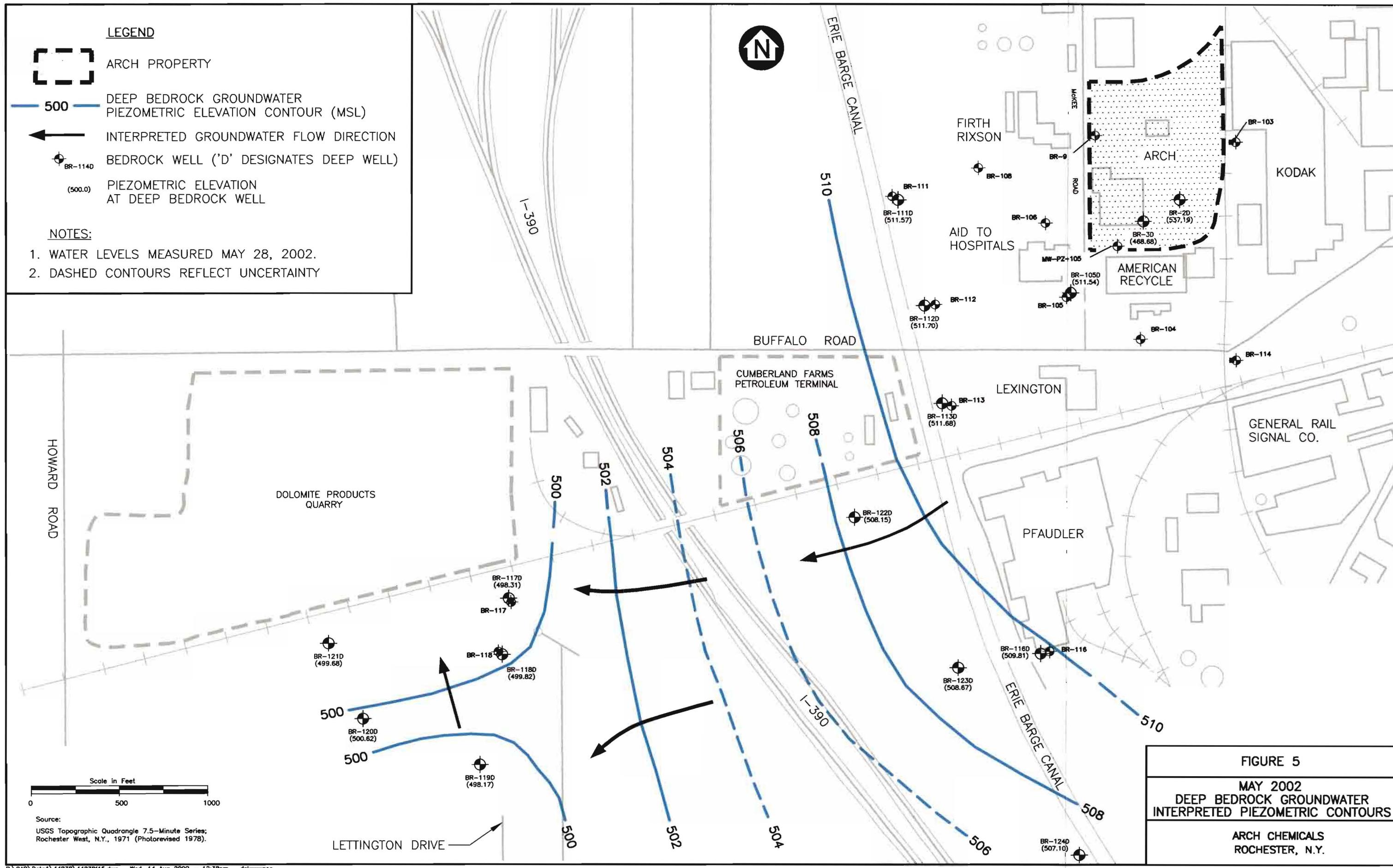
**ON-SITE  
MONITORING WELL  
LOCATIONS**

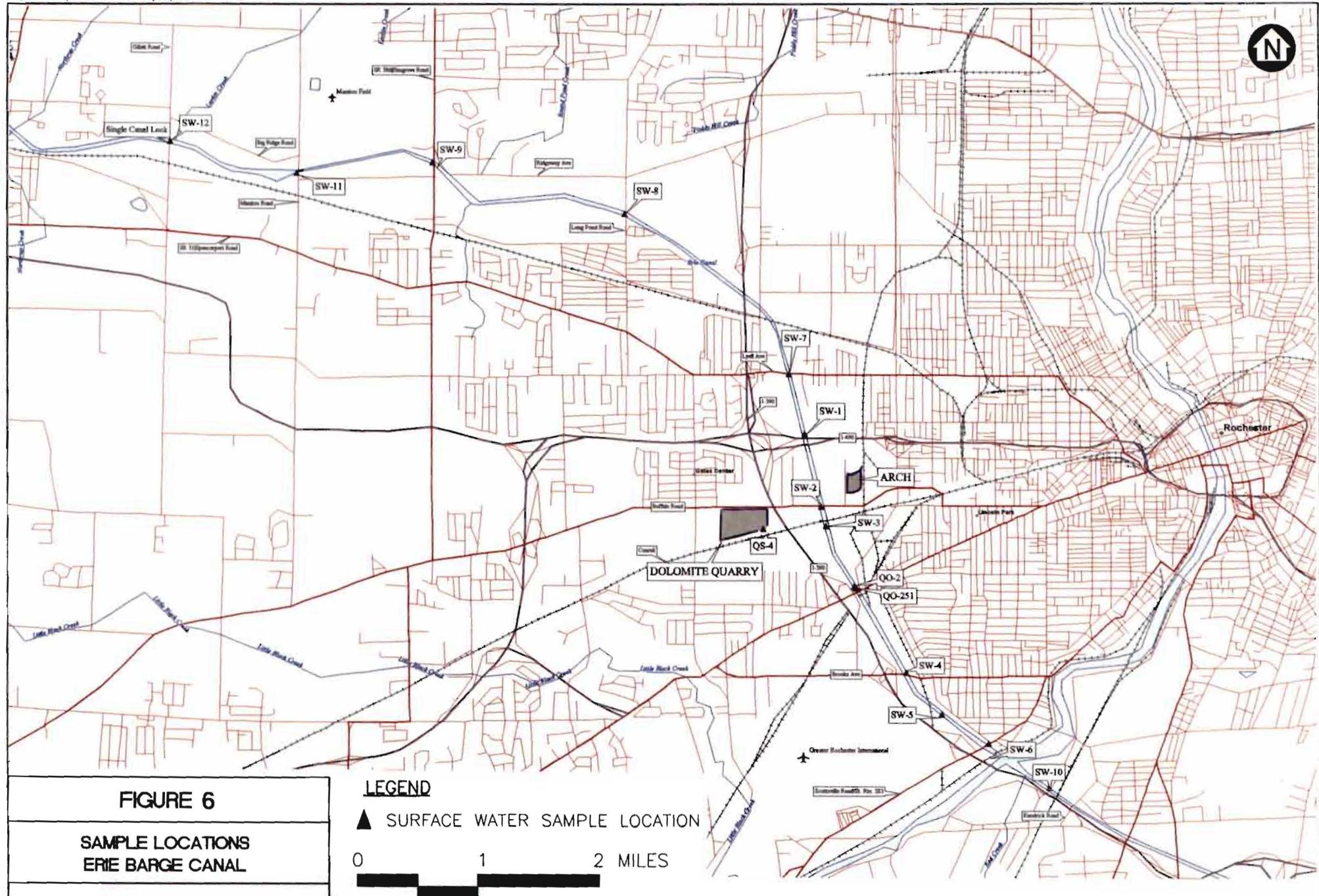
**ARCH CHEMICALS  
ROCHESTER, N.Y.**



**FIGURE 3**  
**MAY 2002**  
**OVERBURDEN GROUNDWATER**  
**INTERPRETED PIEZOMETRIC**  
**CONTOURS**

ARCH CHEMICALS







Buffalo Road

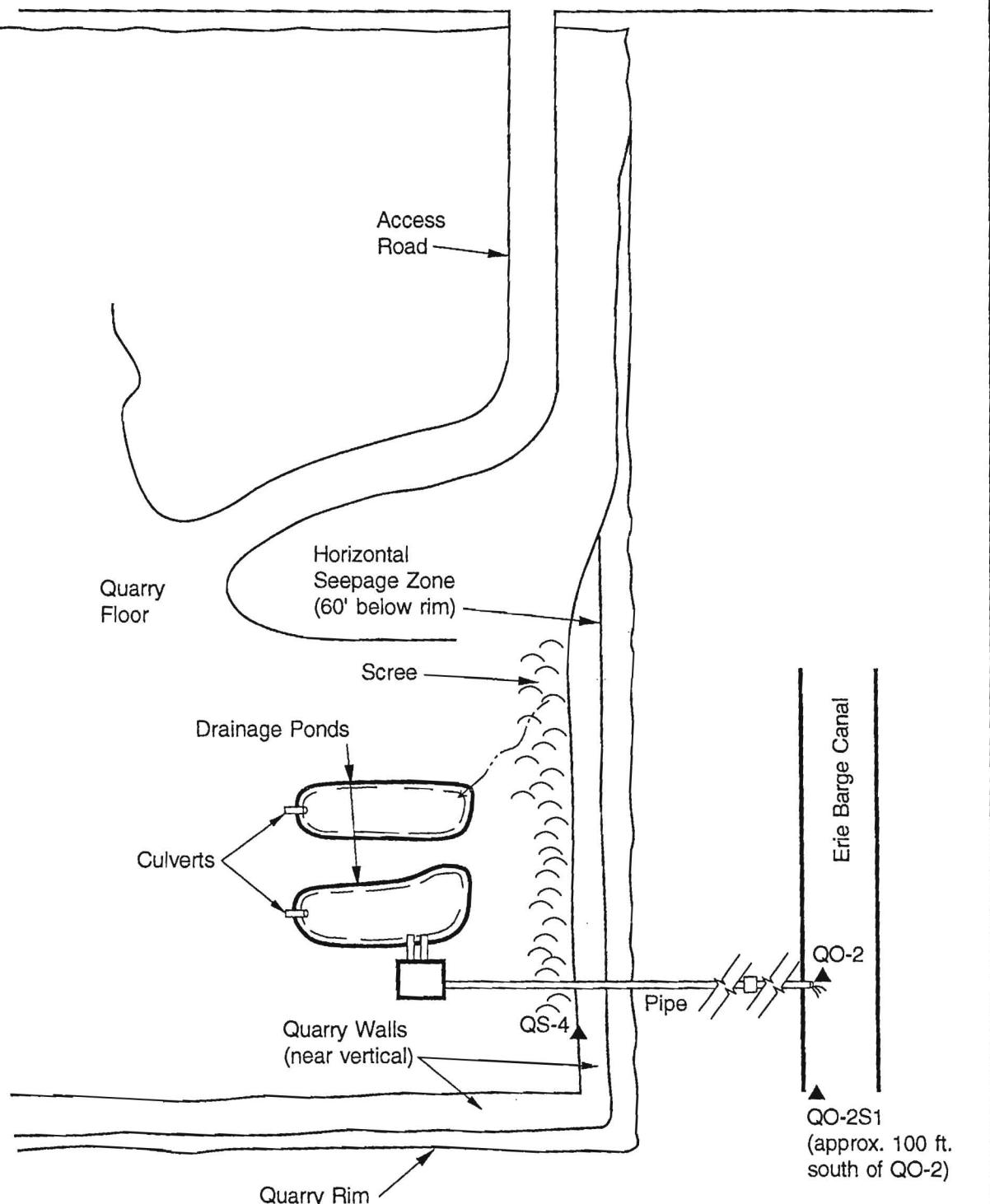


FIGURE 7

SAMPLE LOCATIONS  
DOLOMITE PRODUCTS  
QUARRY

Not to Scale

ARCH CHEMICALS  
ROCHESTER, NEW YORK

## **Tables**

**TABLE 1**  
**SPRING 2002 GROUNDWATER SAMPLING AND ANALYTICAL PROGRAM**

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

<b>SITE / AREA</b>	<b>WELL</b>	<b>DATE</b>	<b>ANALYSIS</b>	<b>PYRIDINES<sup>1</sup></b>	<b>VOCs<sup>2</sup></b>
			<b>QC TYPE</b>		
AID TO HOSPITALS	BR-106	05/30/02	Sample	X	X
	BR-108	05/31/02	Sample	X	
	MW-106	05/30/02	Sample	X	X
	PZ-101	05/31/02	Sample	X	X
	PZ-102	05/31/02	Sample	X	X
	PZ-103	05/31/02	Sample	X	X
AMERICAN RECYCLE MANUF. (58 MCKEE ROAD)	PZ-104	05/31/02	Sample	X	X
ARCH ROCHESTER	B-17	05/29/02	Sample	X	X
	B-7	05/30/02	Sample	X	X
	B-9	05/30/02	Sample	X	X
	BR-3	05/30/02	Sample	X	X
	BR-5A	06/04/02	Sample	X	X
	BR-6A	06/04/02	Sample	X	X
	BR-7A	06/04/02	Sample	X	X
	BR-8	05/30/02	Sample	X	X
	BR-9	06/04/02	Sample	X	X
	E-1	05/30/02	Sample	X	X
	E-3	05/30/02	Sample	X	X
	PW10	06/04/02	Sample	X	X
	PW11	06/04/02	Sample	X	X
	PW12	06/04/02	Sample	X	X
	PZ-105	05/30/02	Sample	X	X
	PZ-106	05/29/02	Sample	X	X
	PZ-107	05/29/02	Sample	X	X
DOLOMITE PRODUCTS, INC.	S-3	05/29/02	Sample	X	X
	S-4	05/29/02	Sample	X	X
	W-5	05/31/02	Sample	X	X
EASTMAN KODAK (FORMERLY GERBER PROPERTY)	BR-117D	06/03/02	Sample	X	
	BR-118D	06/03/02	Sample	X	
	QS-4	06/04/02	Sample	X	X
ERIE BARGE CANAL	BR-103	05/29/02	Sample	X	X
	MW-103	05/29/02	Sample	X	X
JACKSON WELDING	BR-112D	05/31/02	Sample	X	
	BR-113D	06/04/02	Sample	X	
	BR-122D	06/03/02	Sample	X	
	BR-123D	06/03/02	Sample	X	
	QO-2	06/04/02	Sample	X	X
	QO-2S1	06/04/02	Sample	X	X
LEXINGTON MACHINING	BR-114	06/04/02	Duplicate	X	X
	BR-114	06/04/02	Sample	X	X
	MW-114	06/03/02	Sample	X	X
PFAUDLER, INC.	NESS-E	05/29/02	Sample	X	
	NESS-W	05/29/02	Sample	X	
RG & E RIGHT OF WAY	BR-116	05/31/02	Sample	X	
	BR-116D	05/31/02	Sample	X	
	BR-104	05/29/02	Sample	X	
	BR-105	05/30/02	Sample	X	X
	BR-105D	05/30/02	Sample	X	X
	MW-104	05/29/02	Sample	X	
<b>Totals</b>				<b>49</b>	<b>36</b>

Notes:

- 1) Pyridines analysis by USEPA SW-846 Method 8270C.  
 2) VOCs analysis by USEPA SW-846 Method 8260B.

**TABLE 2**  
**SPRING 2002 GROUNDWATER MONITORING RESULTS**  
**CHLOROPYRIDINES**

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

LOCATION:	B-17	B-7	B-9	BR-103	BR-104	BR-105	BR-105D	BR-106	BR-108	BR-112D
SAMPLE DATE:	05/29/02	05/30/02	05/30/02	05/29/02	05/29/02	05/30/02	05/30/02	05/30/02	05/31/02	05/31/02
QC TYPE:	N	N	N	N	N	N	N	N	N	N
<b>BY SW-846 Method 8270C (µg/L)</b>										
2,6-Dichloropyridine	12000 J	300	28 J	2 J	9 U	500 U	500 U	1300	10 U	3 J
2-Chloropyridine	280000	600	54	1 J	3 J	570	1100	8100	4 J	22
3-Chloropyridine	100000 U	250 U	4 J	9 U	9 U	500 U	500 U	500 U	10 U	10 U
4-Chloropyridine	100000 U	250 U	50 U	9 U	9 U	500 U	500 U	500 U	10 U	10 U
p-Fluoroaniline	100000 U	250 U	50 U	9 U	9 U	500 U	500 U	280 J	10 U	10 U
Pyridine	130000 J	620 U	120 U	23 U	24 U	1200 U	1200 U	1200 U	24 U	24 U

Notes:

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

J = Estimated value.

**TABLE 2**  
**SPRING 2002 GROUNDWATER MONITORING RESULTS**  
**CHLOROPYRIDINES**

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

LOCATION:	BR-113D	BR-114	BR-114	BR-116	BR-116D	BR-117D	BR-118D	BR-122D	BR-123D	BR-3
SAMPLE DATE:	06/04/02	06/04/02	06/04/02	05/31/02	05/31/02	06/03/02	06/03/02	06/03/02	06/03/02	05/30/02
QC TYPE:	N	D	N	N	N	N	N	N	N	N
<b>BY SW-846 Method 8270C (µg/L)</b>										
2,6-Dichloropyridine	3 J	99	95	10 U	10 U	1 J	4 J	17	28	33000
2-Chloropyridine	65	320	360	10 U	10 U	23	130	110	130	
3-Chloropyridine	9 U	47	43	10 U	10 U	9 U	2 J	0.8 J	10 U	20000
4-Chloropyridine	9 U	10 U	10 U	10 U	10 U	9 U	9 U	10 U	10 U	5000 U
p-Fluoroaniline	5 J	10 U	5 J	10 U	10 U	9 U	5 J	5 J	5 J	3100 J
Pyridine	24 U	9 J	9 J	24 U	30000					

Notes:

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

J = Estimated value.

**TABLE 2**  
**SPRING 2002 GROUNDWATER MONITORING RESULTS**  
**CHLOROPYRIDINES**

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

LOCATION:	BR-5A	BR-6A	BR-7A	BR-8	BR-9	E-1	E-3	MW-103	MW-104	MW-106
SAMPLE DATE:	06/04/02	06/04/02	06/04/02	05/30/02	06/04/02	05/30/02	05/30/02	05/29/02	05/29/02	05/30/02
QC TYPE:	N	N	N	N	N	N	N	N	N	N
<b>BY SW-846 Method 8270C (µg/L)</b>										
2,6-Dichloropyridine	33	5000	7100	820	64	710 J	15	9	0.8 J	680 J
2-Chloropyridine	110	30000	20000	2600	290	22000	29	17	1 J	3900
3-Chloropyridine	10 U	820 J	1000 U	500 U	2 J	380 J	2 J	9 U	9 U	2500 U
4-Chloropyridine	10 U	1000 U	1000 U	500 U	9 U	2000 U	9 U	9 U	9 U	2500 U
p-Fluoroaniline	38	540 J	600 J	500 U	15	2000 U	9 U	9 U	9 U	2500 U
Pyridine	10 J	3900	2500 U	1200 U	8 J	1700 J	24 U	23 U	24 U	6200 U

Notes:

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

J = Estimated value.

**TABLE 2**  
**SPRING 2002 GROUNDWATER MONITORING RESULTS**  
**CHLOROPYRIDINES**

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

LOCATION:	MW-114	NESS-E	NESS-W	PW10	PW11	PW12	PZ-101	PZ-102	PZ-103	PZ-104
SAMPLE DATE:	06/03/02	05/29/02	05/29/02	06/04/02	06/04/02	06/04/02	05/31/02	05/31/02	05/31/02	05/31/02
QC TYPE:	N	N	N	N	N	N	N	N	N	N
<b>BY SW-846 Method 8270C (µg/L)</b>										
2,6-Dichloropyridine	1 J	45 J	2 J	11000	360	670	36 J	1600	2900	360
2-Chloropyridine	1 J	390	0.9 J	66000	1700	950	19 J	6400	10000	4300
3-Chloropyridine	10 U	48 U	9 U	2200	15 J	25 J	50 U	15 J	1000 U	18 J
4-Chloropyridine	10 U	48 U	9 U	220 J	50 U	100 U	50 U	200 U	1000 U	100 U
p-Fluoroaniline	10 U	48 U	9 U	360 J	57	160	50 U	140 J	560 J	64 J
Pyridine	24 U	120 U	23 U	7000	48 J	570	120 U	500 U	2500 U	250 U

Notes:

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

J = Estimated value.

**TABLE 2**  
**SPRING 2002 GROUNDWATER MONITORING RESULTS**  
**CHLOROPYRIDINES**

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

LOCATION:	PZ-105	PZ-106	PZ-107	S-3	S-4	W-5
SAMPLE DATE:	05/30/02	05/29/02	05/29/02	05/29/02	05/29/02	05/31/02
QC TYPE:	N	N	N	N	N	N
<b>BY SW-846 Method 8270C (µg/L)</b>						
2,6-Dichloropyridine	1400	27000	510	1600 J	420	10000 U
2-Chloropyridine	10000	95000	1600	7900	100	10000 U
3-Chloropyridine	1200 U	500 U	210	1900 U	100 U	10000 U
4-Chloropyridine	1200 U	500 U	200 U	1900 U	100 U	10000 U
p-Fluoroaniline	1200 U	500 U	200 U	1900 U	100 U	10000 U
Pyridine	3100 U	1000 J	500 U	4700 U	250 U	25000 U

Notes:

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

J = Estimated value.

**TABLE 3**  
**SPRING 2002 GROUNDWATER MONITORING RESULTS**  
**VOLATILE ORGANIC COMPOUNDS**

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

LOCATION:	B-17	B-7	B-9	BR-103	BR-105	BR-105D	BR-106	BR-114	BR-114	BR-3	BR-5A
SAMPLE DATE:	05/29/02	05/30/02	05/30/02	05/29/02	05/30/02	05/30/02	05/30/02	06/04/02	06/04/02	05/30/02	06/04/02
QC TYPE:	N	N	N	N	N	N	N	D	N	N	N
<b>VOLATILE ORGANIC COMPOUNDS</b>											
<b>BY SW-846 Method 8260/5ML (<math>\mu\text{g/L}</math>)</b>											
1,1,1-Trichloroethane	1,000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2,500 U	5 U
1,1,2,2-Tetrachloroethane	1,000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2,500 U	5 U
1,1,2-Trichloroethane	1,000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2,500 U	5 U
1,1-Dichloroethane	1,000 U	5 U	5 U	5 U	2 J	7	1 J	5 U	5 U	2,500 U	5 U
1,1-Dichloroethene	1,000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2,500 U	5 U
1,2-Dichloroethane	1,000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2,500 U	5 U
1,2-Dichloroethylene (total)	1,000 U	5 U	5 U	19	100	10	1 J	5 U	5 U	2,500 U	24
1,2-Dichloropropane	1,000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2,500 U	5 U
2-Butanone	2,000 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5,000 U	10 U
2-Hexanone	2,000 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5,000 U	10 U
4-Methyl-2-pentanone	2,000 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5,000 U	10 U
Acetone	5,000 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	12,000 U	25 U
Benzene	1,000 U	3 J	1 J	5 U	3 J	9	30	6	6	2,500 U	9
Bromodichloromethane	1,000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2,500 U	5 U
Bromoform	1,000 U	14	54	5 U	5 U	5 U	5 U	5 U	5 U	13,000	5 U
Bromomethane	2,000 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5,000 U	10 U
Carbon disulfide	1,200	23	190	5 U	2 J	7	2 J	5 U	5 U	61,000	5 U
Carbon tetrachloride	27,000	150	410	5 U	5 U	5 U	5 U	5 U	5 U	100,000	5 U
Chlorobenzene	240 J	12	5 U	5 U	4.3 J	5 U	160	5 U	5 U	2500 U	7.3
Chloroethane	2,000 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5,000 U	10 U
Chloroform	23,000	100	970	3 J	2 J	8	5 U	2 J	2 J	250,000	49
Chloromethane	2,000 U	1 J	1 J	10 U	710 J	10 U					
cis-1,3-Dichloropropene	1,000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2,500 U	5 U
Dibromochloromethane	1,000 U	5 U	4 J	5 U	5 U	5 U	5 U	5 U	5 U	940 J	5 U
Ethylbenzene	1,000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2,500 U	5 U
Methylene chloride	2,400 U	6 U	140	5 U	5 U	5 U	5 U	5 U	5 U	92,000	34 U
Styrene	1,000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2,500 U	5 U
Tetrachloroethene	2,200	6	13	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3,600
Toluene	1,400 U	11 U	36	5 U	5 U	5 U	5 U	5 U	5 U	5 U	8,400
Total Xylenes	3,000 U	15 U	15 U	15 U	15 U	15 U	1 J	2 J	2 J	7,500 U	15 U
trans-1,3-Dichloropropene	1,000 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2,500 U	5 U
Trichloroethene	1,000 U	5 U	5 U	5 U	5 U	3 J	5 U	5 U	5 U	2,500 U	35
Vinyl acetate	2,000 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5,000 U	10 U
Vinyl chloride	1,000 U	5 U	5 U	3 J	5 U	5 U	5 U	5 U	5 U	2,500 U	8

Notes:

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

J = Estimated value.

**TABLE 3**  
**SPRING 2002 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	PW10	PW11
SAMPLE DATE:	06/04/02	06/04/02	05/30/02	06/04/02	05/30/02	05/30/02	05/29/02	05/30/02	06/03/02	06/04/02	06/04/02
QC TYPE:	N	N	N	N	N	N	N	N	N	N	N
<b>VOLATILE ORGANIC COMPOUNDS</b>											
<b>BY SW-846 Method 8260/5ML (µg/L)</b>											
1,1,1-Trichloroethane	250 U	25 U	25 U	25 U	10 U	5 U	5 U	5 U	5 U	100 U	10 U
1,1,2,2-Tetrachloroethane	250 U	25 U	25 U	25 U	10 U	5 U	5 U	5 U	5 U	100 U	10 U
1,1,2-Trichloroethane	250 U	25 U	25 U	25 U	10 U	5 U	5 U	5 U	5 U	100 U	10 U
1,1-Dichloroethane	250 U	9 J	25 U	18 J	10 U	5 U	5 U	5 U	5 U	100 U	11
1,1-Dichloroethene	250 U	25 U	25 U	25 U	10 U	5 U	5 U	5 U	5 U	100 U	10 U
1,2-Dichloroethane	250 U	25 U	25 U	25 U	10 U	5 U	5 U	5 U	5 U	100 U	10 U
1,2-Dichloroethene (total)	250 U	21 J	25 U	670	4 J	5 U	5 U	5 U	5 U	21 J	190
1,2-Dichloropropane	250 U	25 U	25 U	25 U	10 U	5 U	5 U	5 U	5 U	100 U	10 U
2-Butanone	500 U	50 U	50 U	50 U	20 U	10 U	10 U	10 U	10 U	200 U	20 U
2-Hexanone	500 U	50 U	50 U	50 U	20 U	10 U	10 U	10 U	10 U	200 U	20 U
4-Methyl-2-pentanone	500 U	50 U	50 U	50 U	20 U	10 U	10 U	10 U	10 U	200 U	20 U
Acetone	600 J	120 U	120 U	120 U	50 U	25 U	25 U	25 U	25 U	380 J	25 J
Benzene	250 UJ	56	13 J	130	10 U	5 U	5 U	24	5 U	100 UJ	37
Bromodichloromethane	250 U	25 U	25 U	25 U	10 U	5 U	5 U	5 U	5 U	100 U	10 U
Bromoform	82 J	25 U	25 U	25 U	12	28	23	5 U	5 U	55 J	10 U
Bromomethane	500 U	50 U	50 U	50 U	20 U	10 U	10 U	10 U	10 U	200 U	20 U
Carbon disulfide	350	8 J	7 J	25 U	40	50	38	1 J	5 U	73 J	10 U
Carbon tetrachloride	1,900	9 J	25 U	9 J	130	200	300	5 U	1 J	720	10 U
Chlorobenzene	83 J	480	620	21 J	12	5 U	5 U	140	5 U	67 J	200
Chloroethane	500 U	50 U	50 U	50 U	20 U	10 U	10 U	10 U	10 U	200 U	20 U
Chloroform	5,500	22 J	25 U	12 J	160	300	440	5 U	9	970	240
Chloromethane	500 U	50 U	50 U	8 J	20 U	10 U	10 U	10 U	10 U	200 U	20 U
cis-1,3-Dichloropropene	250 U	25 U	25 U	25 U	10 U	5 U	5 U	5 U	5 U	100 U	10 U
Dibromochloromethane	250 U	25 U	25 U	25 U	10 U	2 J	2 J	5 U	5 U	100 U	10 U
Ethylbenzene	250 UJ	25 U	25 U	16 J	10 U	5 U	5 U	5 U	5 U	100 UJ	5 J
Methylene chloride	560 U	25 U	29 U	25 U	12 U	16 U	5 U	5 U	5 U	210 U	16 U
Styrene	250 UJ	25 U	25 U	25 U	10 U	5 U	5 U	5 U	5 U	100 UJ	10 U
Tetrachloroethene	220 J	6 J	25 U	25 U	10 J	8	6	5 U	3 J	97 J	10 U
Toluene	170 J	24 J	25 U	10 J	12 U	16	5 U	5 U	5 U	53 J	66
Total Xylenes	750 UJ	75 U	75 U	75 U	3 J	15 U	15 U	1 J	15 U	300 UJ	10 J
trans-1,3-Dichloropropene	250 U	25 U	25 U	25 U	10 U	5 U	5 U	5 U	5 U	100 U	10 U
Trichloroethene	250 U	25 U	25 U	25 U	10 U	5 U	5 U	4 J	6	100 U	3 J
Vinyl acetate	500 U	50 U	50 U	50 U	20 U	10 U	10 U	10 U	10 U	200 U	20 U
Vinyl chloride	250 U	38	25 U	230	2 J	5 U	5 U	5 U	5 U	100 U	170

Notes:

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

J = Estimated value.

**TABLE 3**  
**SPRING 2002 GROUNDWATER MONITORING RESULTS**  
**VOLATILE ORGANIC COMPOUNDS**

ARCH CHEMICALS, INC.  
 ROCHESTER, NEW YORK

LOCATION:	PW12	PZ-101	PZ-102	PZ-103	PZ-104	PZ-105	PZ-106	PZ-107	S-3	S-4	W-5
SAMPLE DATE:	06/04/02	05/31/02	05/31/02	05/31/02	05/31/02	05/30/02	05/29/02	05/29/02	05/29/02	05/29/02	05/31/02
QC TYPE:	N	N	N	N	N	N	N	N	N	N	N
<b>VOLATILE ORGANIC COMPOUNDS</b>											
<b>BY SW-846 Method 8260/5ML (µg/L)</b>											
1,1,1-Trichloroethane	250 U	5 U	25 U	50 U	5 U	25 U	25,000 U	5 U	50 U	5 U	5 U
1,1,2,2-Tetrachloroethane	250 U	5 U	25 U	50 U	5 U	25 U	25,000 U	5 U	50 U	5 U	5 U
1,1,2-Trichloroethane	250 U	5 U	25 U	50 U	5 U	25 U	25,000 U	5 U	50 U	5 U	5 U
1,1-Dichloroethane	250 U	5 U	25 U	50 U	5 U	25 U	25,000 U	5 U	13 J	5 U	5 U
1,1-Dichloroethene	250 U	5 U	25 U	50 U	5 U	25 U	25,000 U	5 U	50 U	5 U	5 U
1,2-Dichloroethane	470 J	5 U	25 U	50 U	5 U	25 U	25,000 U	5 U	50 U	5 U	5 U
1,2-Dichloroethene (total)	250 U	5 U	25 U	50 U	5 U	25 U	25,000 U	7	370	5 U	5 U
1,2-Dichloropropane	250 U	5 U	25 U	50 U	5 U	25 U	25,000 U	5 U	50 U	5 U	5 U
2-Butanone	500 U	10 U	50 U	100 U	10 U	50 U	50,000 U	10 U	100 U	10 U	10 U
2-Hexanone	500 U	10 U	50 U	100 U	10 U	50 U	50,000 U	10 U	100 U	10 U	10 U
4-Methyl-2-pentanone	500 U	10 U	50 U	100 U	10 U	50 U	50,000 U	10 U	100 U	10 U	10 U
Acetone	1,200 U	25 U	120 U	250 U	25 U	120 U	120,000 U	25 U	250 U	25 U	25 U
Benzene	91 J	5 U	23 J	42 J	4 J	12 J	25,000 U	4 J	81	5 U	5 U
Bromodichloromethane	250 U	5 U	25 U	50 U	5 U	25 U	25,000 U	15	50 U	5 U	5 U
Bromoform	530 J	5 U	25 U	50 U	5 U	28	19,000 J	140	42 J	24	5 U
Bromomethane	500 U	10 U	50 U	100 U	10 U	50 U	50,000 U	10 U	100 U	10 U	10 U
Carbon disulfide	250 U	5 U	25 U	50 U	5 U	120	210,000	940	200	66	5 U
Carbon tetrachloride	250 U	5 U	25 U	50 U	5 U	290	130,000	940	500	250	5 U
Chlorobenzene	9300 J	7.8	430	650	5.3	69	25000 U	2.6 J	160	1.7 J	5 U
Chloroethane	500 U	10 U	50 U	100 U	10 U	50 U	50,000 U	10 U	100 U	10 U	10 U
Chloroform	2,900 J	5 U	25 U	50 U	5 U	450	980,000		2,000	610	9
Chloromethane	500 U	10 U	50 U	100 U	10 U	50 U	50,000 U	10 U	100 U	10 U	10 U
cis-1,3-Dichloropropene	250 U	5 U	25 U	50 U	5 U	25 U	25,000 U	5 U	50 U	5 U	5 U
Dibromochloromethane	250 U	5 U	25 U	50 U	5 U	25 U	25,000 U	13	50 U	2 J	5 U
Ethylbenzene	740 J	5 U	25 U	50 U	5 U	25 U	25,000 U	5 U	10 J	5 U	5 U
Methylene chloride	2,300 U	5 U	25 U	50 U	5 U	51 U	50,000 U	56	93 U	5 U	5 U
Styrene	53 J	5 U	25 U	50 U	5 U	25 U	25,000 U	5 U	50 U	5 U	5 U
Tetrachloroethene	92 J	5 U	25 U	50 U	5 U	10 J	25,000 U	19	34 J	6	5 U
Toluene	22,000	5 U	25 U	11 J	1 J	30 U	25,000 U	5 U	50 U	5 U	5 U
Total Xylenes	4,900 J	15 U	75 U	150 U	15 U	75 U	75,000 U	15 U	150 U	15 U	15 U
trans-1,3-Dichloropropene	250 U	5 U	25 U	50 U	5 U	25 U	25,000 U	5 U	50 U	5 U	5 U
Trichloroethene	250 U	5 U	25 U	50 U	5 U	25 U	25,000 U	2 J	50 U	5 U	5 U
Vinyl acetate	500 U	10 U	50 U	100 U	10 U	50 U	50,000 U	10 U	100 U	10 U	10 U
Vinyl chloride	250 U	5 U	25 U	50 U	5 U	25 U	25,000 U	3 J	200	5 U	5 U

Notes:

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

J = Estimated value.

**TABLE 4**  
**COMPARISON OF SPRING 2002**  
**CHLOROPYRIDINES AND VOLATILE ORGANICS CONCENTRATIONS**  
**IN GROUNDWATER TO PREVIOUS RESULTS (ug/L)**

**ARCH ROCHESTER**  
**SEMI-ANNUAL GROUNDWATER MONITORING REPORT - SPRING 2002**

WELL	SELECTED CHLOROPYRIDINES						SELECTED VOCs					
	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	MAY-2002 RESULT	=< MEAN OR ND	> MEAN	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	MAY-2002 RESULT	=< MEAN OR ND	> MEAN
<b>ON-SITE WELLS/LOCATIONS</b>												
B-17	6	28,000,000	160,000	420,000		X	6	345,000	81,000	52,000	X	
B-7	4	6,100	2,800	900	X		4	91	23	260		X
B-9	4	4,000	2,000	86	X		4	30	13	1,500		X
BR-3	5	6,500,000	170,000	86,000	X		5	600,000	450,000	450,000	X	
BR-5A	9	1,700	150	190		X	9	9,400	64	84		X
BR-6A	9	93,000	34,000	40,000		X	9	26,000	9,700	7,600	X	
BR-7A	9	510,000	20,000	28,000		X	9	3,000	540	37	X	
BR-8	8	57,000	10,000	3,400	X		8	6,900	1	ND		
BR-9	6	720	540	380	X		6	160	97	21	X	
E-1	6	20,000	7,500	25,000		X	6	5,300	710	300	X	
E-3	8	600	36	46		X	8	12,000	110	510		X
PW10	5	160,000	90,000	87,000	X		5	120,000	65,000	1,800	X	
PW11	3	27,000	10,000	2,200	X		3	1,300	440	240	X	
PW12	7	11,000	2,900	2,400	X		7	120,000	7,900	3,000	X	
PZ-105	5	190,000	40,000	11,000	X		4	9,700	850	750	X	
PZ-106	6	110,000	12,000	120,000		X	6	960,000	450,000	1,100,000		X
PZ-107	7	11,000	1,900	2,300		X	7	12,000	800	1,000		X
S-3	4	6,800	5,600	9,500		X	4	1,200	360	2,500		X
S-4	4	3,200	1,600	520	X		4	18	4.5	870		X
W-5	NA	450,000	NA	ND			NA	25	NA	8.7		

**TABLE 4**  
**COMPARISON OF SPRING 2002**  
**CHLOROPYRIDINES AND VOLATILE ORGANICS CONCENTRATIONS**  
**IN GROUNDWATER TO PREVIOUS RESULTS (ug/L)**

**ARCH ROCHESTER**  
**SEMI-ANNUAL GROUNDWATER MONITORING REPORT - SPRING 2002**

WELL	SELECTED CHLOROPYRIDINES						SELECTED VOCs					
	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	MAY-2002 RESULT	=< MEAN OR ND	> MEAN	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	MAY-2002 RESULT	=< MEAN OR ND	> MEAN
<b>OFF-SITE WELLS/LOCATIONS</b>												
BR-103	7	400	33	3	X		5	1	ND	2.7		X
BR-104	8	3,100	11	3	X		6	9	ND	NA		
BR-105	9	24,000	2,900	570	X		7	310	5	4.9	X	
BR-105D	9	10,000	3,400	1,100	X		7	230	15	8.4	X	
BR-106	9	21,000	9,900	9,700	X		6	6,300	2.5	ND	X	
BR-108	8	1,700	220	4	X		5	ND	ND	NA		
BR-112D	8	310	66	25	X		3	4	0.43	NA		
BR-113D	8	490	110	73	X		ND	3	ND	NA		
BR-114	8	450	160	510		X	5	5	4.2	1.9	X	
BR-116	8	12	1.5	ND	X		2	84	45	NA		
BR-116D	9	710	260	ND	X		3	120	39	NA		
BR-117D	6	80	36	24	X		2	1.9	0.93	NA		
BR-118D	6	330	160	140	X		2	6.6	4.8	NA		
BR-122D	6	650	160	130	X		3	ND	ND	NA		
BR-123D	6	860	480	160	X		3	4	1.3	NA		
MW-103	6	82	14	26		X	5	ND	ND	750		X
MW-104	6	180	16	1.8	X		5	1	ND	NA		
MW-106	6	130,000	19,000	4,600	X		6	89	ND	3.5		X
MW-114	8	18	3.1	2	X		5	11	9.3	19		X
NESS-E	7	5,000	550	440	X		5	700	ND	NA		
NESS-W	7	2,100	550	2.9	X		5	89	0.22	NA		

**TABLE 4**  
**COMPARISON OF SPRING 2002**  
**CHLOROPYRIDINES AND VOLATILE ORGANICS CONCENTRATIONS**  
**IN GROUNDWATER TO PREVIOUS RESULTS (ug/L)**

**ARCH ROCHESTER**  
**SEMI-ANNUAL GROUNDWATER MONITORING REPORT - SPRING 2002**

WELL	SELECTED CHLOROPYRIDINES						SELECTED VOCs					
	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	MAY-2002 RESULT	=< MEAN OR ND	> MEAN	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	MAY-2002 RESULT	=< MEAN OR ND	> MEAN
<b>OFF-SITE WELLS/LOCATIONS</b>												
PZ-101	6	27,000	2,100	55	X		4	ND	ND	ND	X	
PZ-102	6	58,000	8,900	8,200	X		4	10,000	ND	ND	X	
PZ-103	6	73,000	36,000	13,000	X		4	4,900	ND	ND	X	
PZ-104	5	9,100	3,800	4,700		X	4	40	ND	ND	X	
QO-2	20	380	42	2	X		6	ND	ND	ND	X	
QO-2S1	18	27	1.5	ND	X		1	ND	ND	ND	X	
QS-4	20	3,400	750	330	X		6	ND	ND	ND	X	

Note: 1) Number of samples and mean reflect 5-year sampling period from March 1997 through November 2001.

Historic maximum based on all available results from March 1990 through November 2001

2) Chloropyridines represented by: 2-Chloropyridine, 2,6-Dichloropyridine, and 3-Chloropyridine, p-Fluoroaniline, and Pyridine.

3) Selected VOCs represented by Carbon Tetrachloride, Chloroform, Methylene Chloride, Tetrachloroethene, and Trichloroethene.

4) X = Comparison of May 2002 concentration to 5-year mean.

5) NA = Not analyzed or not applicable

ND = Not detected

**TABLE 5**  
**SPRING 2002 CANAL/QUARRY MONITORING RESULTS**

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

Class	Parameter	WELL / POINT		QO-2S1 06/04/02	QS-4 06/04/02
		DATE	QO-2 06/04/02		
VOCs (µg/L)	1,1,1-Trichloroethane	5	U	5	U
	1,1,2,2-Tetrachloroethane	5	U	5	U
	1,1,2-Trichloroethane	5	U	5	U
	1,1-Dichloroethane	5	U	5	U
	1,1-Dichloroethene	5	U	5	U
	1,2-Dichloroethane	5	U	5	U
	1,2-Dichloroethene (total)	5	U	5	U
	1,2-Dichloropropane	5	U	5	U
	2-Butanone	10	U	10	U
	2-Hexanone	10	U	10	U
	4-Methyl-2-pentanone	10	U	10	U
	Acetone	25	U	25	U
	Benzene	5	U	5	U
	Bromodichloromethane	5	U	5	U
	Bromoform	5	U	5	U
	Bromomethane	10	U	10	U
	Carbon disulfide	5	U	5	U
	Carbon tetrachloride	5	U	5	U
	Chlorobenzene	5	U	5	U
	Chloroethane	10	U	10	U
	Chloroform	5	U	5	U
	Chloromethane	10	U	10	U
	cis-1,3-Dichloropropene	5	U	5	U
	Dibromochloromethane	5	U	5	U
	Ethylbenzene	5	U	5	U
	Methylene chloride	5	U	5	U
	Styrene	5	U	5	U
	Tetrachloroethene	5	U	5	U
	Toluene	5	U	5	U
SVOCs (µg/L)	Total Xylenes	15	U	15	U
	trans-1,3-Dichloropropene	5	U	5	U
	Trichloroethene	5	U	5	U
	Vinyl acetate	10	U	10	U
	Vinyl chloride	5	U	5	U
	1,2,4-Trichlorobenzene				9 U
	1,3-Dichlorobenzene				9 U
	1,4-Dichlorobenzene				9 U
	2,4,5-Trichlorophenol				9 U
	2,4,6-Trichlorophenol				9 U
	2,4-Dichlorophenol				9 U
	2,4-Dimethylphenol				9 U
	2,4-Dinitrophenol				47 U
	2,4-Dinitrotoluene				9 U

**TABLE 5**  
**SPRING 2002 CANAL/QUARRY MONITORING RESULTS**

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

Class	Parameter	WELL / POINT		QO-2S1 06/04/02	QS-4 06/04/02
		DATE	QO-2 06/04/02		
SVOCs (µg/L)	2-Nitrophenol				9 U
	3,3-Dichlorobenzidine				19 U
	3-Nitroaniline				47 U
	4,6-Dinitro-2-methylphenol				47 U
	4-Bromophenyl-phenylether				9 U
	4-Chloro-3-Methylphenol				9 U
	4-Chloroaniline				9 U
	4-Chlorophenyl-phenylether				9 U
	4-Methylphenol				9 U
	4-Nitroaniline				47 U
	4-Nitrophenol				47 U
	Acenaphthene				9 U
	Anthracene				9 U
	Benzo(a)anthracene				9 U
	Benzo(a)pyrene				9 U
	Benzo(b)fluoranthene				9 UJ
	Benzo(g,h,i)perylene				9 U
	Benzo(k)fluoranthene				9 U
	Benzoic acid				R
	Benzyl alcohol				19 U
	Bis(2-Chloroethoxy)methane				9 U
	Bis(2-Chloroethyl)ether				1 J
	Bis(2-Chloroisopropyl)ether				9 U
	Bis(2-ethylhexyl)phthalate				9 U
	Butylbenzylphthalate				18
	Chrysene				9 U
	Di-n-butylphthalate				0.6 J
	Di-n-octylphthalate				0.9 J
	Dibenzo(a,h)Anthracene				9 U
	Dibenzofuran				9 U
	Diethylphthalate				9 U
	Dimethylphthalate				9 U
	Fluoranthene				9 U
	Fluorene				9 UJ
	Hexachlorobenzene				9 U
	Hexachlorobutadiene				9 U
	Hexachlorocyclopentadiene				9 U
	Hexachloroethane				9 U
	Indeno(1,2,3-c,d)Pyrene				9 U
	Isophorone				9 U
	N-Nitroso-di-n-propylamine				9 U
	N-Nitrosodiphenylamine				9 U
	Naphthalene				9 U
	Nitrobenzene				9 U
	Pentachlorophenol				47 U
	Phenanthrene				9 U
	Phenol				9 U
	Pyrene				9 U

**TABLE 5**  
**SPRING 2002 CANAL/QUARRY MONITORING RESULTS**

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

Class	Parameter	WELL / POINT	QO-2 06/04/02	QO-2S1 06/04/02	QS-4 06/04/02
		DATE			
<b>Pyridines(µg/L)</b>	2,6-Dichloropyridine	10	U	10	U
	2-Chloropyridine	2	J	10	U
	3-Chloropyridine	10	U	10	U
	4-Chloropyridine	10	U	10	U
	p-Fluoroaniline	10	U	10	U
	Pyridine	24	U	24	U
<b>Pest/PCBs (µg/L)</b>	4,4-DDD				0.019 U
	4,4-DDE				0.019 U
	4,4-DDT				0.0094 U
	Chlordane				0.094 U
	Dieldrin				0.019 U
	Methoxychlor				0.014 J
<b>Inorganics (mg/L)</b>	Aluminum				0.2 U
	Antimony				0.02 U
	Arsenic				0.007 U
	Barium				0.13
	Beryllium				0.005 U
	Cadmium				0.001 U
	Calcium				180
	Chromium				0.002 U
	Cobalt				0.005 U
	Copper				0.01 U
	Cyanide				0.01 U
	Iron				0.03 U
	Iron				0.05 U
	Lead				0.01 U
	Magnesium				43.2
	Manganese				0.27
	Mercury				0.0002 U
	Nickel				0.01 U
	Potassium				5.6
	Selenium				0.01 U
	Silver				0.003 U
	Sodium				175
	Thallium				0.02 U
	Vanadium				0.005 U
	Zinc				0.026 U
<b>Other (mg/L)</b>	Ammonia				1.2
	Chloride				240
	Nitrate				0.05 U
	Nitrite				0.05 U
	Sulfate				189
	Total Alkalinity				422
	Total Hardness				566

Notes:

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

J = Estimated value.

NA = Not analyzed

**TABLE 6**  
**EXTRACTION WELL WEEKLY FLOW MEASUREMENTS - JANUARY 2002 THROUGH JUNE 2002**

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

<b>Week Ending</b>	<b>BR-5A [Gal./Week]</b>	<b>BR-6A [Gal./Week]</b>	<b>BR-7A [Gal./Week]</b>	<b>BR-9 [Gal./Week]</b>	<b>PW-10 [Gal./Week]</b>	<b>PW-11 [Gal./Week]</b>	<b>PW-12 [Gal./Week]</b>	<b>Total [Gal.]</b>
<b>January</b>								
01/04/02	54,902	47,157	94,448	3	3,457	16,788	101	216,755
01/11/02	42,619	46,604	79,182	17,116	7,660	16,129	10,480	209,310
01/18/02	29,513	53,328	74,118	26,637	6,790	16,878	36,249	207,264
01/25/02	17,406	52,076	83,655	25,625	6,680	15,013	26,301	200,455
							<b>Total [Gal.]</b>	<b>833,784</b>
<b>February</b>								
02/01/02	21,208	53,633	84,768	28,450	6,490	15,163	47,345	209,712
02/08/02	35,297	27,895	75,301	41,946	3,190	12,830	26,797	196,459
02/15/02	66,331	23,355	72,707	51,831	7,820	15,869	31,836	237,913
02/22/02	59,288	12,832	55,337	49,817	5,890	12,502	28,748	195,666
							<b>Total [Gal.]</b>	<b>839,750</b>
<b>March</b>								
03/01/02	61,266	21,228	52,566	50,155	7,500	16,020	35,509	208,735
03/08/02	50,290	44,117	27,706	38,503	6,490	20,764	15,083	187,870
03/15/02	62,529	38,727	76,281	46,282	7,960	18,651	25,365	250,430
03/22/02	57,678	30,370	57,239	38,485	7,556	17,038	47,547	208,366
03/29/02	60,254	34,082	46,173	11,309	6,950	16,362	22,987	175,130
							<b>Total [Gal.]</b>	<b>1,030,531</b>
<b>April</b>								
04/05/02	53,679	21,401	65,119	19,006	9,008	17,108	31,556	185,321
04/12/02	61,896	15,241	52,002	29,178	5,780	15,336	30,547	179,433
04/19/02	56,123	29,340	69,460	32,365	8,090	18,637	36,533	214,015
04/26/02	56,647	32,102	64,234	22,081	7,460	17,678	42,304	200,202
							<b>Total [Gal.]</b>	<b>778,970</b>
<b>May</b>								
05/03/02	64,006	31,228	68,048	3,954	7,870	22,067	39,378	197,173
05/10/02	58,506	25,335	59,510	63,547	7,730	32,436	43,425	247,064
05/17/02	66,412	23,673	65,697	66,589	7,580	32,520	33,505	262,471
05/24/02	65,999	13,231	61,373	91,795	7,240	30,993	26,237	270,631
05/31/02	54,769	19,227	56,238	50,144	6,500	27,001	40,480	213,879
							<b>Total [Gal.]</b>	<b>1,191,218</b>
<b>June</b>								
06/07/02	67,101	28,113	76,893	46,089	6,380	23,218	49,048	247,794
06/14/02	57,567	21,965	71,452	17,829	3,340	23,656	42,337	195,809
06/21/02	73,031	10,876	78,397	74,725	6,130	25,812	32,733	268,971
06/28/02	70,607	23,623	91,773	29,293	6,100	25,698	9,095	247,094
							<b>Total [Gal.]</b>	<b>959,668</b>

**Total 6 Mo.**

<b>Removal</b>	1,424,923	780,759	1,759,677	972,754	173,641	522,167	811,526	6,445,447
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TABLE 7

MASS REMOVAL SUMMARY  
PERIOD: 12/1/01 - 5/31/02

ARCH ROCHESTER  
SPRING 2002 GROUNDWATER MONITORING REPORT

Well	Total Vol. Pumped (gallons)	Avg. VOC Conc. (ppm)	Avg. PYR. Conc. (ppm)	VOCs Removed (pounds)	PYR. Removed (pounds)
BR-5A	1,369,000	0.12	0.22	1.4	2.5
BR-6A	891,000	6.4	48	48	356
BR-7A	1,783,000	0.11	44	2	654
BR-9	857,000	0.019	0.3	0.1	2.1
PW-10	154,000	21	73	27	94
PW-11	486,000	0.77	1.7	3.1	7
PW-12	720,000	6.5	3.8	39	22.8
Totals:	6,260,000			119.7	1137.7

Note: VOC and pyridine concentrations used in this table are an average of the analytical results from the Fall 2001 and Spring 2002 sampling events for each well

**TABLE 8**  
**2002 SAMPLING SCHEDULE**  
**ARCH CHEMICALS, INC.**  
**ROCHESTER, NEW YORK**

ARCH ROCHESTER							2002					
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	ALH	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	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	annual monitoring, VOCs & PYR	trend monitoring		1	1			1	1
	PZ-105	BR	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring		1	1			1	1
	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	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/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
	B-9	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
	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	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	1	1	2	2
	QO-2	quarry outfall	CANAL	semi-annual monitoring, VOCs & PYR	trend monitoring		1	1	1	1	2	2
	QO-2S1	canal at outfall	CANAL	semi-annual monitoring, VOCs & PYR	surface water monitoring		1	1	1	1	2	2
ONE-TIME SAMPLING	W-5	OB	ON-SITE				1	1			1	1
<b>TOTAL SAMPLES</b>							48	35	23	22	71	57

Note:

**Appendix A**  
**Groundwater Field Sampling Data Sheets**

Sampling Survey Table  
HARDING LAWSON ASSOCIATES  
MAY 2002  
RI SAMPLING/ROCHESTER NY FACILITY

Sample Point	Water Level		Water Level	Water Elevation	Bottom Of Well	Field Measurements		pH	Spec. Cond.	Temp	Turb.	Other Field Measurements	
	Date	Time	(ft)*	(ft)**	(ft)*	Date	Time	(STD) (Units)	(umhos)	(°C)	(NTU)		
B-17	05/29/2002	1020	7.12	N/A	16.23	05/29/2002	1050	9.41	8979	16.0	4.00	EH(mv)= -131	DO(ppm)= 0
	Comments: SL TURBID												
B-7	05/30/2002	1403	13.94	N/A	20.90	05/30/2002	1427	6.43	1632	19.1	50.00	EH(mv)= -71	DO(ppm)= 0
	Comments: SL TURBID												
B-9	05/30/2002	1150	5.98	N/A	11.70	05/30/2002	1215	7.18	233	19.9	57.00	EH(mv)= 57	DO(ppm)= 0
	Comments: SL.TURBID												
BR-101	06/04/2002	1035	12.31	N/A	N/A	06/04/2002	1042	6.61	2344	16.0	3.51	EH(mv)= -77	DO(ppm)= 0
	Comments: CLEAR												
BR-103	05/29/2002	1435	5.65	N/A	43.45	05/29/2002	1505	7.25	1343	14.8	15.90	EH(mv)= -189	DO(ppm)= .33
	Comments: CLEAR												
BR-104	05/29/2002	1225	8.25	N/A	19.20	05/29/2002	1250	9.15	1760	12.7	40.20	EH(mv)= -87	DO(ppm)= 3.60
	Comments: SL TURBID												
BR-105	05/30/2002	1350	22.10	N/A	44.60	05/30/2002	1450	6.69	2250	15.3	12.80	EH(mv)= -175	DO(ppm)= .54
	Comments: CLEAR												
BR-105D	05/30/2002	1310	23.80	N/A	79.50	05/30/2002	1345	6.84	1600	20.9	2.60	EH(mv)= -366	DO(ppm)= .12
	Comments: CLEAR												
BR-106	05/30/2002	1143	21.40	N/A	43.22	05/30/2002	1225	6.79	288	16.5	71.40	EH(mv)= -274	DO(ppm)= .15
	Comments: SL.TURBID												
BR-108	05/30/2002	1215	27.30	N/A	29.75	05/31/2002	1055	6.82	865	16.2	13.69	EH(mv)= 33	
	Comments: CLEAR												
BR-112D	05/30/2002	1520	36.04	N/A	72.26	05/31/2002	1115	7.04	1788	13.4	50.50	EH(mv)= -45	
	Comments: CLEAR												
BR-113D	06/04/2002	1113	31.40	N/A	79.25	06/04/2002	1150	7.60	2587	12.2	1.25	EH(mv)= -196	DO(ppm)= .54
	Comments: CLEAR BLACK TINT												
BR-114	06/04/2002	949	12.98	N/A	36.93	06/04/2002	1035	6.59	2240	14.1	8.77	EH(mv)= -78	DO(ppm)= .55
	Comments: CLEAR FIELD DUP												
BR-116	05/31/2002	1125	27.34	N/A	62.20	05/31/2002	1205	6.78	262	17.2	4.10	EH(mv)= -115	DO(ppm)= .59
	Comments: CLEAR												
BR-116D	05/31/2002	1233	35.05	N/A	98.10	05/31/2002	1310	8.97	560	18.2	95.60	EH(mv)= -73	DO(ppm)= 4.43
	Comments: CLEAR												
BR-117D	06/03/2002	1145	48.77	N/A	82.24	06/03/2002	1215	7.71	1955	12.5	15.17	EH(mv)= -92	DO(ppm)= .53
	Comments: CLEAR												

SG - Specific Gravity

\* From Top of Riser

EH - Redox

\*\* Elevation Above Sea Level

DO - Dissolved Oxygen

Date: 06/21/2002  
Time: 11:26:01

Sampling Survey Table  
HARDING LAWSON ASSOCIATES  
MAY 2002  
RI SAMPLING/ROCHESTER NY FACILITY

Page: 2  
Rept: AN0821

Sample Point	Water Level		Water Level (ft)*	Water Elevation (ft)**	Bottom Of Well (ft)*	Field Measurements		pH (STD)	Spec. Cond. (umhos)	Temp (°C)	Turb. (NTU)	Other Field Measurements	
	Date	Time				Date	Time (Units)						
BR-118D	06/03/2002	1050	48.24	N/A	87.27	06/03/2002	1130	6.82	2387	12.5	6.80	EH(mv)= -171	DO(ppm)= .62
	Comments: CLEAR												
BR-122D	06/03/2002	1335	44.02	N/A	82.57	06/03/2002	1400	7.07	2381	11.7	9.15	EH(mv)= -169	DO(ppm)= .45
	Comments: CLEAR												
BR-123D	06/03/2002	1245	44.78	N/A	97.56	06/03/2002	1315	8.84	1687	12.3	24.90	EH(mv)= -104	DO(ppm)= 0
	Comments: CLEAR												
BR-3	05/30/2002	1110	10.05	N/A	23.25	05/30/2002	1132	6.39	20440	18.1	50.00	EH(mv)= -74	DO(ppm)= 0
	Comments: TURBID/STRONG ODER												
BR-5A	06/04/2002	1021	13.51	N/A	N/A	06/04/2002	1026	6.30	1416	13.8	6.92	EH(mv)= 13	DO(ppm)= 0
	Comments: SL TURBID												
BR-6A	06/04/2002	1104	17.31	N/A	N/A	06/04/2002	1106	8.52	4124	16.7	2.79	EH(mv)= -170	DO(ppm)= 0
	Comments: CLEAR												
BR-7A	06/04/2002	1126	28.39	N/A	N/A	06/04/2002	1130	6.99	2775	15.4	21.50	EH(mv)= -156	DO(ppm)= 0
	Comments: SL TURBID												
BR-8	05/30/2002	1510	8.25	N/A	31.74	05/30/2002	1532	7.09	5420	18.0	108.30	EH(mv)= -179	DO(ppm)= 0
	Comments: TURBID												
BR-9	06/04/2002	1118	37.09	N/A	N/A	06/04/2002	1205	7.11	2043	14.5	6.65	EH(mv)= -75	DO(ppm)= 0
	Comments: CLEAR												
E-1	05/30/2002	1320	2.17	N/A	9.75	05/30/2002	1342	7.66	11480	18.6	48.00	EH(mv)= -232	DO(ppm)= 0
	Comments: SL TURBID/WELL FLOODED UNABLE TO CAL. STANDING WATER VOL.												
E-3	05/29/2002	1000	8.94	N/A	12.05	05/30/2002	1351	6.98	765	22.6	21.40	EH(mv)= -45	DO(ppm)= 0
	Comments: SL TURBID												
MW-103	05/29/2002	1420	1.57	N/A	8.05	05/29/2002	1456	6.63	536	18.0	1.33	EH(mv)= 143	DO(ppm)= 0
	Comments: CLEAR												
MW-104	05/29/2002	1117	7.58	N/A	18.10	05/29/2002	1200	7.24	529	17.3	101.50	EH(mv)= -162	DO(ppm)= .33
	Comments: TURBID												
MW-106	05/30/2002	1035	8.53	N/A	19.35	05/30/2002	1125	6.85	236	16.8	100.70	EH(mv)= -162	DO(ppm)= .29
	Comments: SL.TURBID/ORANGE												
MW-114	06/03/2002	1425	11.30	N/A	15.76	06/03/2002	1455	6.70	2379	14.9	7.36	EH(mv)= -17	DO(ppm)= 0
	Comments: CLEAR												
NESS-E	05/29/2002	1335	40.38	N/A	74.52	05/29/2002	1412	7.19	2110	19.8	191.00	EH(mv)= -77	DO(ppm)= .71
	Comments: SL TURBID												

SG - Specific Gravity  
EH - Redox  
DO - Dissolved Oxygen

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

Sampling Survey Table  
HARDING LAWSON ASSOCIATES  
MAY 2002  
RI SAMPLING/ROCHESTER NY FACILITY

Sample Point	Water Level		Water Level	Water Elevation	Bottom Of Well	Field Measurements		pH (STD)	Spec. Cond. (umhos)	Temp (°C)	Turb. (NTU)	Other Field Measurements	
	Date	Time	(ft)*	(ft)**	(ft)*	Date	Time	(Units)				EH(mv)=	DO(ppm)=
NESS-W	05/29/2002	1000	31.29	N/A	77.23	05/29/2002	1045	7.12	2180	14.5	4.37	EH(mv)= -234	DO(ppm)= .41
PW-10	Comments: CLEAR												
PW-10	06/04/2002	1054	15.91	N/A	N/A	06/04/2002	1056	7.51	3122	18.6	32.40	EH(mv)= -119	DO(ppm)= 0
PW-11	Comments: SL TURBID												
PW-11	06/04/2002	1140	17.79	N/A	N/A	06/04/2002	1155	7.01	3460	17.6	37.50	EH(mv)= -62	DO(ppm)= 0
PZ-101	Comments: SL TURBID												
PZ-101	05/31/2002	1226	11.15	N/A	21.69	05/31/2002	1247	6.71	1144	15.1	18.72	EH(mv)= -8	DO(ppm)= 0
PZ-102	Comments: CLEAR												
PZ-102	05/31/2002	1154	10.22	N/A	32.60	05/31/2002	1217	7.26	3047	16.6	1.61	EH(mv)= -124	DO(ppm)= 0
PZ-103	Comments: CLEAR												
PZ-103	05/31/2002	1125	9.87	N/A	32.52	05/31/2002	1148	6.98	2870	13.6	1.42	EH(mv)= -161	DO(ppm)= 0
PZ-104	Comments: CLEAR												
PZ-104	05/31/2002	1054	13.69	N/A	23.93	05/31/2002	1117	6.89	1788	14.9	14.50	EH(mv)= -93	DO(ppm)= 0
PZ-105	Comments: CLEAR												
PZ-105	05/30/2002	1239	5.12	N/A	32.86	05/30/2002	1302	7.29	917	19.1	200.00	EH(mv)= 61	DO(ppm)= 0
PZ-106	Comments: TURBID												
PZ-106	05/29/2002	1105	10.02	N/A	27.90	05/29/2002	1148	5.71	17980	17.9	30.01	EH(mv)= 71	DO(ppm)= 0
PZ-107	Comments: TURBID												
PZ-107	05/29/2002	1154	6.52	N/A	27.90	05/29/2002	1120	7.00	2369	16.7	2.68	EH(mv)= -94	DO(ppm)= 0
QO-2	Comments: SL TURBID												
QO-2	06/04/2002	1250	0.00	N/A	N/A	06/04/2002	1255	8.07	1741	15.4	5.84	EH(mv)= -39	
QO-2S1	Comments: CLEAR												
QO-2S1	06/04/2002	1310	0.00	N/A	N/A	06/04/2002	1315	8.11	809	16.3	6.75	EH(mv)= -36	
QS-4	Comments: CLEAR												
QS-4	06/04/2002	1225	0.00	N/A	N/A	06/04/2002	1230	8.17	1795	12.2	2.22	EH(mv)= -27	
S-3	Comments: CLEAR												
S-3	05/29/2002	1255	1.32	N/A	13.38	05/29/2002	1326	6.70	2591	16.2	4.92	EH(mv)= -129	DO(ppm)= 0
S-4	Comments: CLEAR												
S-4	05/29/2002	1330	0.76	N/A	13.05	05/29/2002	1356	7.54	470	14.7	13.71	EH(mv)= -59	DO(ppm)= 0
W-5	Comments: TURBID												
W-5	05/31/2002	1000	0.00	N/A	N/A	05/31/2002	1040	7.11	1933	17.4	200.00	EH(mv)= -47	DO(ppm)= 0

SG - Specific Gravity

\* From Top of Riser

EH - Redox

\*\* Elevation Above Sea Level

DO - Dissolved Oxygen

Date: 06/11 02  
Time: 16:21:06

Groundwater Elevation Report  
HARDING LAKE ASSOC.  
MAY 2002  
ARCH-ROCHESTER WATER LEVEL MEASUREMENTS

Sample Point	Date	Time	Casing Elevation	Depth to Water	GW Elv.	Comments
B-1	05/28/2002	1116	0.00	8.93	N/A	
B-10	05/28/2002	1017	0.00	6.53	N/A	
B-11	05/28/2002	1015	0.00	3.52	N/A	
B-13	05/28/2002	1155	0.00	N/A	N/A	DRY
B-14	05/28/2002	1210	0.00	9.02	N/A	
B-15	05/28/2002	1200	0.00	5.40	N/A	
B-16	05/28/2002	1203	0.00	4.25	N/A	
B-17	05/28/2002	958	0.00	7.13	N/A	
B-2	05/28/2002	1111	0.00	9.79	N/A	
B-3	05/28/2002	1102	0.00	9.95	N/A	
B-4	05/28/2002	1130	0.00	11.85	N/A	
B-5	05/28/2002	1134	0.00	9.35	N/A	
B-7	05/28/2002	1145	0.00	14.47	N/A	
B-8	05/28/2002	1034	0.00	9.24	N/A	
B-9	05/28/2002	1041	0.00	5.98	N/A	
BR-1	05/28/2002	1120	0.00	7.74	N/A	
BR-102	05/28/2002	1119	0.00	23.15	N/A	
BR-103	05/28/2002	1023	0.00	5.72	N/A	
BR-104	05/28/2002	1027	0.00	8.19	N/A	
BR-105	05/28/2002	959	0.00	22.51	N/A	
BR-105D	05/28/2002	958	0.00	24.95	N/A	
BR-106	05/28/2002	951	0.00	22.89	N/A	
BR-107	05/28/2002	0	0.00	N/A	N/A	DESTROYED
BR-108	05/28/2002	929	0.00	27.91	N/A	
BR-111	05/28/2002	1216	0.00	28.66	N/A	
BR-111D	05/28/2002	1215	0.00	28.77	N/A	
BR-112A	05/28/2002	1221	0.00	29.25	N/A	
BR-112D	05/28/2002	1225	0.00	36.21	N/A	
BR-113	05/28/2002	1208	0.00	31.31	N/A	
BR-113D	05/28/2002	1210	0.00	31.25	N/A	
BR-114	05/28/2002	1010	0.00	13.54	N/A	
BR-116	05/28/2002	1128	0.00	27.69	N/A	
BR-116D	05/28/2002	1130	0.00	35.41	N/A	
BR-117	05/28/2002	1056	0.00	34.44	N/A	

Date: 06/11/02  
Time: 16:21:36

Groundwater Elevation Report  
HARDING LAWSON ASSOC.  
MAY 2002  
ARCH-ROCHESTER WATER LEVEL MEASUREMENTS

Sample Point	Date	Time	Casing Elevation	Depth to Water	GW Elv.	Comments
BR-117D	05/28/2002	1055	0.00	48.85	N/A	
BR-118	05/28/2002	1105	0.00	34.61	N/A	
BR-118D	05/28/2002	1100	0.00	48.11	N/A	
BR-119D	05/28/2002	1108	0.00	68.89	N/A	
BR-120D	05/28/2002	1048	0.00	56.81	N/A	
BR-121D	05/28/2002	1051	0.00	55.11	N/A	
BR-122D	05/28/2002	1145	0.00	44.19	N/A	
BR-123D	05/28/2002	1141	0.00	44.95	N/A	
BR-124D	05/28/2002	1138	0.00	30.35	N/A	
BR-2	05/28/2002	1000	0.00	N/A	N/A	DRY
BR-2A	05/28/2002	957	0.00	8.07	N/A	
BR-2D	05/28/2002	956	0.00	0.07	N/A	
BR-3	05/28/2002	1027	0.00	10.18	N/A	
BR-3D	05/28/2002	1025	0.00	68.99	N/A	
BR-4	05/28/2002	1006	0.00	6.38	N/A	
BR-5	05/28/2002	941	0.00	13.13	N/A	
BR-5A	05/28/2002	943	0.00	19.92	N/A	0.00GPM = FLOW RATE
BR-6	05/28/2002	1040	0.00	11.46	N/A	
BR-6A	05/28/2002	1030	0.00	17.81	N/A	0.00GPM = FLOW RATE
BR-7	05/28/2002	1140	0.00	29.36	N/A	6.50GPM = FLOW RATE
BR-7A	05/28/2002	1141	0.00	19.87	N/A	
BR-8	05/28/2002	1133	0.00	8.99	N/A	
BR-9	05/28/2002	1135	0.00	31.81	N/A	FLOW RATE= 4.30 GPM
C-1	05/28/2002	952	0.00	1.33	N/A	
C-2A	05/28/2002	955	0.00	6.65	N/A	
C-3	05/28/2002	950	0.00	10.23	N/A	BROKE AT GROUND SURFACE
C-4	05/28/2002	0	0.00	N/A	N/A	BUILDING IN THIS AREA/WELL NO LONGER EXISTS
C-5	05/28/2002	1026	0.00	8.87	N/A	
E-1	05/28/2002	1009	0.00	N/A	N/A	FLOODED
E-2	05/28/2002	1005	0.00	4.89	N/A	
E-3	05/28/2002	940	0.00	8.96	N/A	
E-4	05/28/2002	937	0.00	N/A	N/A	DRY
E-5	05/28/2002	935	0.00	6.18	N/A	
EC-1	05/28/2002	1230	0.00	16.82	N/A	

Date: 06/11 02  
Time: 16:21:06

Groundwater I ration Report  
HARDING LAWSON ASSOC.  
MAY 2002  
ARCH-ROCHESTER WATER LEVEL MEASUREMENTS

Sample Point	Date	Time	Casing Elevation	Depth to Water	GW Elv.	Comments
EC-2	05/28/2002	1205	0.00	N/A	N/A	DRY AT 12.75
ERIE CANAL	05/28/2002	1250	0.00	33.05	N/A	
MW-103	05/28/2002	1022	0.00	1.55	N/A	
MW-104	05/28/2002	1028	0.00	7.53	N/A	
MW-105	05/28/2002	958	0.00	N/A	N/A	DRY AT 19.01
MW-106	05/28/2002	950	0.00	8.81	N/A	
MW-107	05/28/2002	0	0.00	N/A	N/A	DESTROYED
MW-108	05/28/2002	927	0.00	10.32	N/A	
MW-114	05/28/2002	1009	0.00	11.14	N/A	
MW-2	05/28/2002	946	0.00	5.02	N/A	
MW-3	05/28/2002	943	0.00	5.79	N/A	
MW-G6	05/28/2002	930	0.00	3.31	N/A	
MW-G7	05/28/2002	933	0.00	3.02	N/A	
MW-G8	05/28/2002	935	0.00	5.32	N/A	
MW-G9	05/28/2002	938	0.00	10.21	N/A	
N-1	05/28/2002	0	0.00	N/A	N/A	DAMAGED CASING/BAILER STUCK IN WELL
N-2	05/28/2002	925	0.00	4.36	N/A	
N-3	05/28/2002	926	0.00	7.31	N/A	
NESS-E	05/28/2002	1005	0.00	41.05	N/A	
NESS-W	05/28/2002	1158	0.00	34.15	N/A	
PW-10	05/28/2002	1045	0.00	16.37	N/A	
PW-11	05/28/2002	1137	0.00	43.50	N/A	
PW-12(BR-101)	05/28/2002	1121	0.00	14.91	N/A	
PZ-101	05/28/2002	915	0.00	12.21	N/A	
PZ-102	05/28/2002	918	0.00	11.80	N/A	
PZ-103	05/28/2002	921	0.00	10.63	N/A	
PZ-104	05/28/2002	1150	0.00	13.80	N/A	
PZ-105	05/28/2002	1155	0.00	11.12	N/A	
PZ-106	05/28/2002	1057	0.00	9.99	N/A	
PZ-107	05/28/2002	1058	0.00	6.47	N/A	
PZ-108	05/28/2002	0	0.00	N/A	N/A	DESTROYED
S-1	05/28/2002	1036	0.00	15.50	N/A	
S-2	05/28/2002	1032	0.00	3.30	N/A	
S-3	05/28/2002	1020	0.00	1.32	N/A	

Date: 06/11 02  
Time: 16:21.6

Groundwater I ation Report  
HARDING LA...ON ASSOC.  
MAY 2002  
ARCH-ROCHESTER WATER LEVEL MEASUREMENTS

Sample Point	Date	Time	Casing Elevation	Depth to Water	GW Elv.	Comments
S-4	05/28/2002	1010	0.00	0.76	N/A	
W-1	05/28/2002	0	0.00	N/A	N/A	UNABLE TO OBTAIN MEASUREMENT/OBSTRUCTION
W-2	05/28/2002	1100	0.00	11.13	N/A	
W-3	05/28/2002	1122	0.00	8.71	N/A	
W-4	05/28/2002	1132	0.00	8.55	N/A	
W-5	05/28/2002	0	0.00	N/A	N/A	UNABLE TO OBTAIN MEASUREMENT/OBSTRUCTION
W-6	05/28/2002	1147	0.00	12.30	N/A	

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: B-17

Field Personnel: P.L.H., CS, TR, CJ

Sample Matrix: G/W

## MONITORING WELL INSPECTION:

Date/Time 5-29-02 1 10Z0

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: 5-29-02 1 10Z5

Date / Time Completed: 5-29-02 1 1045

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 7.12

Elevation. G/W MSL: —

Well Total Depth, Feet: 16.23

Method of Well Purge: PERISTALTIC PUMP

One (1) Riser Volume, Gal: 1.5

Dedicated:  Y  N

Total Volume Purged, Gal: ≈ 2.0

Purged To Dryness  Y  N

Purge Observations: —

Start DARK AMBER Finish DIRK AMBER

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/ftz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other	Other ORP
1030	WL 7.15	0.5	16.4	9.18	9111	4.17	Ø	-138
1035	7.15	1.0	16.1	9.45	8030	4.06	Ø	-132
1040	7.15	1.5	16.0	9.43	8980	4.00	Ø	-131
1045	7.15	2.0	16.0	9.42	8981	4.02	Ø	-130

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID B-17

Date/Time 5-29-02 11047

Water Level @ Sampling, Feet:

7.15

Method of Sampling: POROSITACTIC 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 (O°)	Other (ORP)
1050	16.0	9.41	8979	4.00	0	-131

### INSTRUMENT CHECK DATA:

3043

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130A - 10

H Serial #:          4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-F42N

Conductivity Serial #:          146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: SUN 70's

Sample Characteristics: LOW TURBIDITY / DARK AMBER COLOR / STRONG ODOUR

### COMMENTS AND OBSERVATIONS:

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

Date:

5/29/02

By:

Company: STL

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: B-7

Field Personnel: P.L.H., CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-30-02 1403

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: 5-30-02 1405

Date / Time Completed: 5-30-02 1425

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 13.94

Elevation. G/W MSL: —

Well Total Depth, Feet: 20.90

Method of Well Purge: PORISTALTIC PUMP

One (1) Riser Volume, Gal: 1.13

Dedicated:  Y /  N

Total Volume Purged, Gal: ≈ 1.20

Purged To Dryness  Y /  N

Purge Observations: Start STURBID Finish STURBID

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other DO mg/L	Other ORP (mV)
1410	14.81	.20	20.5	6.47	1639	48.0	Ø	-74
1415	14.81	.50	18.9	6.44	1636	49.0	Ø	-73
1420	14.81	.80	18.7	6.43	1632	51.0	Ø	-69
1425	14.81	1.20	19.1	6.43	1632	50.0	Ø	-71

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID B-7

Date/Time 5-30-2002 1426

Water Level @ Sampling, Feet: 14.81

Method of Sampling: PARI STALTIC 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 ( $\mu\text{S}/\text{cm}$ )	Other ( $\text{mV}$ )
1427	19.1	6.43	1632	50.0	80	-71

### INSTRUMENT CHECK DATA:

3043

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130A - 10

Serial #: 601347 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-F62N

Conductivity Serial #: 601347 146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: SUN 70's

Sample Characteristics: NO ODOR / CLEAR / SL TURBID

### COMMENTS AND OBSERVATIONS:

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

Date: 5/30/2002 By: C. Flory Company: STL

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: B-9

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-30-2002 11150

Cond of seal:  Good  Cracked  None  Buried %

Prot. Casing/riser height: —

Cond of prot. Casing/riser:  Unlocked  Good  
 Loose  Flush Mount  
 Damaged BRUKE AT GROUND LEVEL

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: 5-30-02 11152

Date / Time Completed: 5-30-02 11210

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 1.5

Initial Water Level, Feet: FLOODED 5.98

Elevation. G/W MSL: —

Well Total Depth, Feet: 11.70

Method of Well Purge: PARI STACTIC

One (1) Riser Volume, Gal: —

Dedicated:  Y  N

Total Volume Purged, Gal: ≈ 1.5

Purged To Dryness  Y  N

Purge Observations: —

Start SL TURRID Finish SL TURBID

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other DO mg/L	Other ORP(mv)
1155	1.69	.25	20.6	7.21	192	180.0 <del>180.0</del>	0	-5
1200	1.69	.50	21.8	6.95	229	120.0	0	59
1205	1.69	1.00	21.7	7.18	233	58.0	0	57
1210	1.69	1.50	19.9	7.18	233	57.0	0	57

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID B - 9

Date/Time 5-30-02 11214

Water Level @ Sampling, Feet: 1.69

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 (00 mg/L)	Other (off mV)
1215	19.9	7.18	233	57	0	57

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130R - 10

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

Solutions: 4-E01K, 7-F216, 10-FG2N

Conductivity Serial #:          146.9 umhos/cm= 146.9 1412 umhos/cm= 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: RAIN/SUN 70's

Sample Characteristics: NO ODOR / NO COLOR / SL TURBID

COMMENTS AND OBSERVATIONS:

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

Date: 5/30/2002 By: C. Gray Company: STL

## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: PW-12 (101)

Field Personnel: CS/CJ

Sample Matrix: GW

( Grab ( ) Composite

### SAMPLING INFORMATION:

Date/Time 6-4-02 1 1035

Water Level @ Sampling, Feet: 12.31

Method of Sampling: PARISTALTIC 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 ( $\mu$ g/l)	Other (ORP mV)
1042	16.0	6.61	2394	3.51	0	-77

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. =        NTU      5.0 NTU std. = 50 NTU

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

pH Serial #: 601347 4.0 std.= 4.0      7.0 std.= 7.0      10.0 std. = 10.0

Solutions: 4- FOLK, 7- FZ16, 10- FA2N

Conductivity Serial #: 601347 146.9 umhos/cm= 146.9      1412 umhos/cm= 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: CLOUD'S 60'S

Sample Characteristics: CLEAR / STRONG ODOUR

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

\_\_\_\_\_

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

Date: 6/14/2002 By: CJ Cap Company: STL

## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-103

Field Personnel: P.L.H., CS, TR, CJ

Sample Matrix: GW

### MONITORING WELL INSPECTION:

Date/Time 5-29-02 1 1435

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: 5-29-02 1445

Date / Time Completed: 5-29-21 1505

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 5.65

Elevation, G/W MSL: —

Well Total Depth, Feet: 43.45

Method of Well Purge: BLADDER PUMP

One (1) Riser Volume, Gal: 24.68

Dedicated:  Y / N

Total Volume Purged, Gal: 2.0

Purged To Dryness  Y / N

Purge Observations: —

Start Clear Finish Clear

### PURGE DATA: (if applicable)

Time	Purge Rate (gpm/ftz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (DO)	Other (orp)
14.55	400	WL 5.81		14.90	7.26	1357	36.0	.46 -190
14.55	400	5.75	1.0	14.83	7.21	1346	20.0	.31 -193
1500	400	5.80		14.83	7.25	1340	18.9	.34 -186
1505	400	5.85	2.0	14.8	7.25	1343	15.9	.33 -189

SAMPLED 1505 ON 5-29-02  
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## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID BR-103

Date/Time 5-29-02 / 1505

Water Level @ Sampling, Feet: 5.85

Method of Sampling: By DODGE 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)
<u>1505</u>	<u>14.8</u>	<u>7.25</u>	<u>1347</u>	<u>15.4</u>	<u>-189</u>	<u>.33</u>

### INSTRUMENT CHECK DATA:

3097

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 1301 - 10

pH Serial #: QED Flow cell 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-F62N

Conductivity Serial #: QED 146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: Sun 75°

Sample Characteristics: clear

### COMMENTS AND OBSERVATIONS:

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

Date: 5/29/02 By: JL Zoller Company: STR

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-104

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5/29/02 1 1225

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: 5/29/02 1230

Date / Time Completed: 5/29/02 1250

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 8.20

Elevation. G/W MSL: —

Well Total Depth, Feet: 19.20

Method of Well Purge: Low flow Bladder pump

One (1) Riser Volume, Gal: 7.18

Dedicated:  N

Total Volume Purged, Gal: 2.0

Purged To Dryness  N

Purge Observations: —

Start SL TURNO Finish SC TURNO

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/ft <sup>2</sup> )	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (DO)	Other (o:p)
1235	300	8.18	12.7	9.16	.172	80.8	3.70	-89
1240		8.28	1.0	12.6	9.01	.173	50.1	3.69
1245		8.38		12.7	9.15	.175	44.3	3.61
1250	↓	8.38	2.0	12.7	9.15	.176	40.2	-87

SAMPLED AT Q50 5-29-02  
JL Lott

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID BR-104

Date/Time 5/29/02 1 1250

Water Level @ Sampling, Feet:

8.38

Method of Sampling: Low Flow Bladder 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 ( <u>06</u> )	Other ( <u>05P</u> )
1250	12.7	9.15	ms/cm ,17C	40.2	3.60	-87

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130A - 10

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

Solutions: 4-E01K, 7-F216, 10-E42N

Conductivity Serial #: 146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: 70°F Sunny

Sample Characteristics: SC TURBID

### COMMENTS AND OBSERVATIONS:

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

Date: 5/29/02

By: Al Zeta

Company: STL

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-105

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-30-02 1 1350

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: 5-30-02 1 1430

Date / Time Completed: 5-30-02 1 1450

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 22.10

Elevation. G/W MSL: —

Well Total Depth, Feet: 44.60

Method of Well Purge: BLADDER PUMP

One (1) Riser Volume, Gal: 14.69

Dedicated: BL  N

Total Volume Purged, Gal: 2.0

Purged To Dryness Y  N

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 O/H	Other D/C
1435	200	22.10	15.8	6.69	2.25 <sup>mS/cm</sup>	26.5	-170	1.54
1440	1	22.10	1.0	15.5	6.68	2.25	21.0	-173
1445		22.10		15.4	6.68	2.25	13.88	-176 .78
1450	✓	22.10	2.0	15.3	6.69	2.25	12.80	-175 .54

SAMPLE AT 1450 / 5-30-02

P.L. 200

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID BR-105

Date/Time 5-30-02 / 1450

Water Level @ Sampling, Feet: 22.10

Method of Sampling: SCANNER FLOW

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 (OK)	Other (OK)
<u>1450</u>	<u>15.3</u>	<u>6.69</u>	<u>2.25</u>	<u>12.80</u>	<u>-175</u>	<u>.54</u>

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130R-10

H Serial #: QEA Flow Cell 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-F22N

Conductivity Serial #: QEA Flow Cell 146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: 75° Sun/Cloudy

Sample 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 protocols.

Date: 5/30/02 By: JL Zee Company: STR

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-105 D

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-30-02 / 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): — 1 —

## PURGE INFORMATION:

Date / Time Initiated: 5-30-02 / 1315

Date / Time Completed: 5-30-02 / 1345

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 23.80

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

Well Total Depth, Feet: 79.50

Method of Well Purge: SL1000ER pump

One (1) Riser Volume, Gal: 9.09

Dedicated:  N

Total Volume Purged, Gal: 2.5

Purged To Dryness Y  N

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

Start Clear Finish Clear

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/ft <sup>2</sup> )	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (DO)	Other (ORP)
1320	150 <sup>m<sup>3</sup>/hr</sup> 24.65		19.86	7.32	910 <sup>ms/cm</sup>	2.80	.01	-302
1325	150 <sup>m<sup>3</sup>/hr</sup> 24.86	1.0	20.76	7.09	13.40	3.18	.39	-330
1330	150 <sup>m<sup>3</sup>/hr</sup> 24.87		20.96	6.91	14.86	2.77	.23	-346
1335	150 <sup>m<sup>3</sup>/hr</sup> 24.71	2.0	20.97	6.85	15.7	2.40	.13	-364
1340	150 <sup>m<sup>3</sup>/hr</sup> 24.91		20.96	6.86	16.0	2.50	.14	-364
1345	150 <sup>m<sup>3</sup>/hr</sup> 24.91	≈2.5	20.96	6.84	16.0	2.60	.12	-366

SAMPLE AT 1345 / 5-30-02

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## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID BR-1050

Date/Time 5-30-02 1 1345

Water Level @ Sampling, Feet: 24.91

Method of Sampling: BLADDER 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)
1345	20.96	6.84	16.0	2.60	-366	.12

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130A - 10

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

Solutions: 4-E01K, 7-F216, 10-FG2N

Conductivity Serial #:          141.9 umhos/cm = 141.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: 75° Sun / cloudy

Sample 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 protocols.

Date: 5/30/02 By: JL Zeller Company: STR

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-106

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-30-02 / 1143

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: 5-30-02 / 1200

Date / Time Completed: 5-30-02 / 1220

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 21.40

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

Well Total Depth, Feet: 43.22

Method of Well Purge: SHOWER PUMP

One (1) Riser Volume, Gal: 14.24

Dedicated:  N

Total Volume Purged, Gal: 2.0

Purged To Dryness Y  N

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

Start 5C TURBO Finish 5C TURBO

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/ftz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other <sup>mS/cm</sup>	Other
1205	200	21.45	17.1	6.78	2.90	93.6	-268	.27
1210	↓	21.45	16.9	6.79	2.88	94.7	-273	.22
1215		21.45	16.5	6.78	2.88	79.2	-275	.17
1220		21.45	16.5	6.79	2.88	71.4	-274	.15

Sampled At 1220 / 5-30-02  
JL

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID BR-106

Date/Time 5-30-02 / 1220

Water Level @ Sampling, Feet: 21.45

Method of Sampling: BUOY 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)
<u>1226</u>	<u>16.5</u>	<u>6.79</u>	<u>2.88</u> <u>mS/cm</u>	<u>71.4</u>	<u>-274</u>	<u>-15</u>

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU      5.0 NTU std. = 5.0 NTU

Solutions: 1301 - 10

Serial #: 4 4.0 std. = 4.0      7.0 std. = 7.0      10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-F62N

Conductivity Serial #: 146.9 umhos/cm = 146.9      1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: Rain 60

Sample Characteristics: clr sc TURBID

### COMMENTS AND OBSERVATIONS:

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

Date: 5/30/02 By: JL Zett Company: SFL

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-108

Field Personnel: P.L.H., CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-30-02 / 1215

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: 5-30-02 1220

Date / Time Completed: 5-30-02 1245

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 27.30

Elevation. G/W MSL: —

Well Total Depth, Feet: 29.75

Method of Well Purge: S/S BAILEY

One (1) Riser Volume, Gal: 1.60

Dedicated:  Y /  N

Total Volume Purged, Gal: 5.0

Purged To Dryness  Y /  N

Purge Observations: —

Start Clear Finish TURBID

## PURGE DATA: (if applicable)

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

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID BA-108

Date/Time 5-31-02 / 10:50

Water Level @ Sampling, Feet:

27.70

Method of Sampling: SS BAICER

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 (CR)	Other
10:55	16.2	6.92	865	13.69	33	

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU      5.0 NTU std. = 5.0 NTU

Solutions: 130A - 10

Serial #: 600750 4.0 std.= 4.0      7.0 std.= 7.0      10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-F62N

Conductivity Serial #: 600750 146.9 umhos/cm= 146.9      1412 umhos/cm= 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: RAIN 73°

Sample Characteristics: Cloudy

### COMMENTS AND OBSERVATIONS:

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

Date: 5/31/02 By: JL Lita Company: STR

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-1120

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-30-02 / 1520

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: 5-30-02 / 1525

Date / Time Completed: 5-30-02 / 1600

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 36.04

Elevation. G/W MSL: —

Well Total Depth, Feet: 72.26

Method of Well Purge: 55 BAILEY

One (1) Riser Volume, Gal: 5.91

Dedicated:  Y  N

Total Volume Purged, Gal: 18.00

Purged To Dryness  Y  N

Purge Observations: —

Start C... Finish TUNED

## PURGE DATA: (if applicable)

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

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID BRII2D

Date/Time 5-31-02 / 1110

Water Level @ Sampling, Feet:

36.05'

Method of Sampling: SS BALER

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 ( °F )	Other
7150	.					
1115	13.4	7.04	1788	50.5	-45	

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130R - 10

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

Solutions: 4-E01K, 7-F216, 10-F22N

Conductivity Serial #:          146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: clouds 73°

Sample 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 protocols.

Date:

5/31/02

By:

St. Lutz

Company:

STC

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-1130

Field Personnel: P.L.HI., CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 6-4-02 / 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: 6-4-02 / 1125

Date / Time Completed: 6-4-02 / 1145

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 31.40

Elevation. G/W MSL: —

Well Total Depth, Feet: 79.25

Method of Well Purge: BLADDER Pump

One (1) Riser Volume, Gal: 7.81

Dedicated:  N

Total Volume Purged, Gal: 2.0

Purged To Dryness Y / N

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 (DO)	Other (ORP)
1130	240	31.41	12.1	6.92	2618	3.98	.60	-18.6
1135	240	3141	12.5	7.62	2593	2.02	.55	-19.9
1140	240	31.41	12.1	7.64	2595	1.56	.54	-19.7
1145	240	31.41	12.2	7.60	2587	1.25	.54	-19.6

SAMPLE AT 1145/6-4-02

*8/12/02*

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID BR-1130

Date/Time 6-4-02 / 1145

Water Level @ Sampling, Feet:

31.41

Method of Sampling: BLADDER 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 ( <u>CR</u> )	Other ( <u>DO</u> )
1150	12.2	7.60	2587	1.25	-196	.54

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130A - 10

T Serial #: QED Flow Cell 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Solutions: 4 - E01K, 7 - F216, 10 - FQ2N

Conductivity Serial #: QED Flow Cell 146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: Clouds 63°

Sample Characteristics: Clear black tint

### COMMENTS AND OBSERVATIONS:

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

Date: 6/4/02 By: RJ Lutz Company: STR

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-114

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 6-4-02 / 949

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: 6-4-02 / 1005

Date / Time Completed: 6-4-02 / 1030

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 12.98

Elevation. G/W MSL: —

Well Total Depth, Feet: 36.93

Method of Well Purge: BLADDER Pump

One (1) Riser Volume, Gal: 15.63

Dedicated:  N

Total Volume Purged, Gal: ~ 2.5

Purged To Dryness Y  N

Purge Observations: —

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 (DO)	Other (temp)
1010	200	12.99	14.4	6.40	2273	42.5	.79	-53
1015	200	12.99	14.2	6.64	2248	21.8	.65	-69
1020		1.0	14.2	5.44	2237	12.63	.60	-78
1025		2.0	13.9	6.59	2243	9.64	.58	-78
1030	↓	~2.5	14.1	6.59	2240	8.77	.55	-78

F.16 P.D.

Sampled At 1030 16-4-02  
PL Zee

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID BR-114

Date/Time 6-4-02 / 1030

Water Level @ Sampling, Feet: 12.99

Method of Sampling: BLADDER 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)
<u>1035</u>	<u>14.1</u>	<u>6.59</u>	<u>2240</u>	<u>8.77</u>	<u>-78</u>	<u>.55</u>

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 <sup>2093</sup> NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130A - 10

Serial #: QFP Flow Cell 4.0 std.= 4.0 7.0 std.= 7.0 10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-FG2N

Conductivity Serial #: QFP Flow Cell 146.9 umhos/cm= 146.9 1412 umhos/cm= 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: Cloudy 63°

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS: Field Dup

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

Date: 6/4/02 By: PL Zorn Company: STC

## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-116

**Field Personnel:** P.L.H., CS, TR, CJ

**Sample Matrix:** GW

## **MONITORING WELL INSPECTION:**

Date/Time 5-31-02 1 1125

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: 5-31-02 / 1140

Date / Time Completed: 5-31-02 1120c

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 27.3<sup>ft</sup>

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

Well Total Depth, Feet: 62,20

## Method of Well Purge:

One (1) Riser Volume, Gal: 5.67 22.7

Dedicated:  N

Total Volume Purged, Gal: 1.5

Purged To Dryness Y  N

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

Start Clear Finish Clear

**PURGE DATA: (if applicable)**

SAMPLE AT 1200/5-31-02  
PL 100

## RAIN STORM white SAMPLERS

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID BR-116

Date/Time 5-31-02 / 1200 Water Level @ Sampling, Feet: 11.40

Method of Sampling: BUOYANT 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 (OK )	Other (10 )
<u>1205</u>	<u>17.2</u>	<u>6.78</u>	<u>2.62</u>	<u>4.10</u>	<u>-115</u>	<u>.59</u>

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3093 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130R - 10

Serial #: QFO Flow Cell 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-FG2N

Conductivity Serial #: QFO Flow Cell 146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: Rain 60°

Sample Characteristics: clear

COMMENTS AND OBSERVATIONS: SEvere RAIN while SAMPLING, ALSO

SEAL IS IN many pieces

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

Date: 5/31/02

By: St. Zeta

Company: STR

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-1160

Field Personnel: P.L.HK., CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-31-02 / 1233

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: 5-31-02 1245

Date / Time Completed: 5-31-02 11305

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 35.05

Elevation. G/W MSL: —

Well Total Depth, Feet: 98.10

Method of Well Purge: fl BENDOVER PUMP

One (1) Riser Volume, Gal: 41.16

Dedicated: (X) (N)

Total Volume Purged, Gal: 2.0

Purged To Dryness Y (N) SC TURBID

Purge Observations: —

Start Effect Finish SC TURBID

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/ftz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORY	Other DO
1250	210	35.05	19.3	8.81	ns/cm 0.055	100.4	0.541	0.527
1255		35.05	1.0	18.9	0.054	99.0	-65	5.06
1300		35.25	16.35	8.90	0.055	96.2	-65	4.75
1305		35.25	2.0	16.18	0.056	95.6	-73	4.43

Sampled At 1305/5-31-02  
JL

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID BR-1160

Date/Time 5-31-02 1 1305

Water Level @ Sampling, Feet: 35.05

Method of Sampling: SCADEFER 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 ( <u>OK</u> )	Other ( <u>DO</u> )
<u>1310</u> <u>1305</u>	<u>18.2</u>	<u>8.97</u>	<u>0.056</u> <u>0.056</u>	<u>95.6</u>	<u>-73</u>	<u>4.43</u>

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 1301 - 10

Serial #: 4 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-FG2N

Conductivity Serial #: 146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: RAIN GO

Sample Characteristics: CLEAR

COMMENTS AND OBSERVATIONS:

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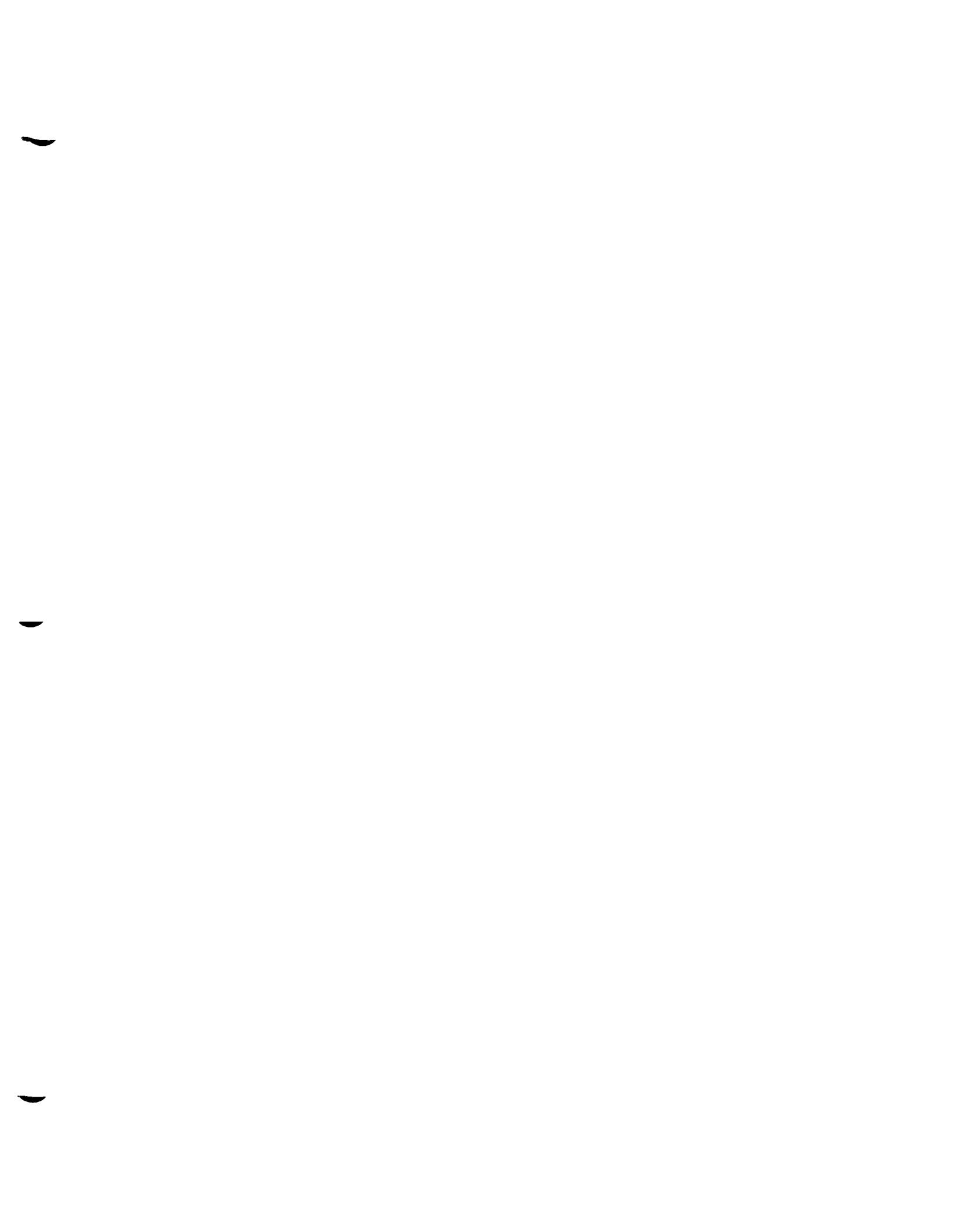
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I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 5/31/02 By: JL Company: STC



# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-1170

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 6-3-02 1145

Cond of seal:  Good  Cracked  
 None  Buried %

Prot. Casing/riser height: ✓ 2.10

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

If prot.casing; depth to riser below: ✓ 0.30

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

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

## PURGE INFORMATION:

Date / Time Initiated: 6-3-02 1 1150

Date / Time Completed: 6-3-02 1 1210

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 48.77

Elevation. G/W MSL:

Well Total Depth, Feet: 82.24

Method of Well Purge: OPEN END PUMP

One (1) Riser Volume, Gal: 50 21.29 21.85

Dedicated: Y N

Total Volume Purged, Gal: 2.0

Purged To Dryness Y I N

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

Start Clear Finish Clear

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/ftHz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORI	Other DW
1155	210	48.79	12.7	7.55	1919	16.35	-72	.62
1200		1.0	12.5	7.78	1965	14.13	-109	.58
1205			12.5	7.74	1950	16.08	-89	.62
1210		48.79	2.0	7.71	1955	15.17	-92	.53

SAMPLE AT 1210 / 6-3-02

*PL*

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID BR- 1170

Date/Time 6-3-02 1 1210

Water Level @ Sampling, Feet: 48.79

Method of Sampling: BLADER 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 (✓)	Other (DO)
1215	12.5	7.71	1955	15.17	-92	.53

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3093 3744 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130X - 10

Serial #: QED flow cell 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-FG2N

Conductivity Serial #: QED flow cell 146.9 umhos/cm = 146.9 1413 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: Sun 65°

Sample Characteristics: clear

COMMENTS AND OBSERVATIONS:

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

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

Date: 6/13/02 By: RJ Company: STC

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR - 1180

Field Personnel: P.L.H., CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 6-3-02 1 1050

Cond of seal:  Good  Cracked  
 None  Buried %

Prot. Casing/riser height: ✓ 2.10

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

If prot.casing; depth to riser below: ✓ .27

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

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

## PURGE INFORMATION:

Date / Time Initiated: 6-3-02 1 1105

Date / Time Completed: 6-3-02 1 1125

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 48.24

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

Well Total Depth, Feet: 87.27

Method of Well Purge: BLASTER PUMP

One (1) Riser Volume, Gal: 25.49

Dedicated: X 1 (N)

Total Volume Purged, Gal: 2.0

Purged To Dryness Y 1 (N)

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 001	Other 00
1110	210	48.28	12.5	6.35	2465	8.03	-137	.95
1115		48.28	1.0	12.3	6.78	2415	-139	.83
1120			12.5	6.82	2390	7.25	-165	.71
1125		48.28	2.0	12.5	6.82	2387	-171	.62

SAMPLED AT 1125/6-3-02  
 by [Signature]

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID BR-1180

Date/Time 6-3-02 1125

Water Level @ Sampling, Feet: 48.28

Method of Sampling: BLADDER 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)
1130	12.5	6.82	2387	6.80	-171	.62

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130A - 10

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

Solutions: 4-E01K, 7-F216, 10-FG2N

Conductivity Serial #:          146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: Clouds 65°

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

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

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

Date:

6/3/02

By:

St. Lutz

Company:

STL SIC

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-1220

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 6-3-02 / 1335

Cond of seal:  Good  Cracked  
 None  Buried %

Prot. Casing/riser height: ✓ 2.70

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: 6-3-02 1340

Date / Time Completed: 6-3-02 1400

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 44.02

Elevation. G/W MSL: —

Well Total Depth, Feet: 82.57

Method of Well Purge: ✓ BLADDER PUMP

One (1) Riser Volume, Gal: 25.17

Dedicated: ✓ N

Total Volume Purged, Gal: ~ 3.0

Purged To Dryness Y I N

Purge Observations: —

Start clear Finish clear

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/ftz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other O&P	Other DO
1345	300	44.05	12.5	7.19	2368	9.80	-171	.57
1350		1.5	11.8	7.15	2380	9.15	-169	.50
1355			11.8	6.95	2385	9.15	-169	.47
1400		~ 3.0	11.7	7.07	2381	9.15	-169	.45

SAMPLE AT 1400  
16-3-02

Bl. Locs

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID BR-1220

Date/Time 6-3-02 / 1400

Water Level @ Sampling, Feet:

44.05

Method of Sampling: BLADER 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 (OK)	Other (DO)
<u>1400</u>	<u>11.7</u>	<u>7.0</u>	<u>2381</u>	<u>9.15</u>	<u>-169</u>	<u>.95</u>

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 1301 - 10

T Serial #: 4 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-FG2N

Conductivity Serial #: 146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: Sun/Cloudy 65°

Sample 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 protocols.

Date: 6/13/02 By: JL Company: STR

## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-1230

**Field Personnel:** P.I., H.L., C.S., T.R., C.J.

**Sample Matrix:** GW

## **MONITORING WELL INSPECTION:**

Date/Time 6-3-02 1 1245

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

Prot. Casing/riser height: 2.56

Cond of prot. Casing/riser: ( ) Unlocked (X) 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:** 6-3-21 1256

Date / Time Completed: 6-3-21 1315

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 44.78

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

Well Total Depth, Feet: 97.56

**Method of Well Purge:** Bladder Pump

One (1) Riser Volume, Gal: 37.45

Dedicated:  N

Total Volume Purged, Gal: 32.5

Purged To Dryness Y / N

**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 ORI	Other PO
1255	270	44.81		12.4	8.48	1678	28.1	-96 -28
1300		1.0	13.0	8.48	1676	25.1	-103 -15	
1305	44.81		12.3	8.80	1682	24.9	-103 -0-	
1310		2.0	12.3	8.81	1689	24.9	-104 -0-	
1315	44.81	~2.5	12.3	8.84	1687	24.9	-104 -0-	

Sample At 1315/6-3-02

Al Latt

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID BR-1230

Date/Time 6-3-02 / 1315

Water Level @ Sampling, Feet: 44.81

Method of Sampling: BLADDER 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 ( <u>CR</u> )	Other ( <u>DO</u> )
<u>1315</u>	<u>12.3</u>	<u>8.84</u>	<u>1687</u>	<u>24.9</u>	<u>-104</u>	<u>0</u>

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130N - 10

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

Solutions: 4-E01K, 7-F216, 10-F42N

Conductivity Serial #:          146.9 umhos/cm= 146.9 1412 umhos/cm= 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: 65° Sunny

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

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

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

Date: 6/13/02 By: JL Company: STR

## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-3

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

### MONITORING WELL INSPECTION:

Date/Time 5-30-02 1110

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 5-30-02 1112

Date / Time Completed: 5-30-02 1130

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: ② 4.0

Initial Water Level, Feet: 10.05

Elevation. G/W MSL: —

Well Total Depth, Feet: 23.25

Method of Well Purge: PARISTALTIC

One (1) Riser Volume, Gal: 8.6

Dedicated:  Y  N

Total Volume Purged, Gal: ~ 1.50

Purged To Dryness  Y  N

Purge Observations: —

Start TURRID Finish TURBID

### PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other <small>(0) mg/l</small>	Other <small>(0) ppm (ml.)</small>
1115	11.32	.25	17.2	5.87	20,200	105	0	-67
1120	11.32	.50	17.6	6.38	20,440	53.0	0	-79
1125	11.32	1.00	18.2	6.34	20,430	50.0	0	-76
1130	11.32	1.50	18.5	6.36	20,440	49.0	0	-74

## FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

Date/Time 5-30-02 1131 POINT ID BR-3

Water Level @ Sampling, Feet: 11.32

Method of Sampling: PERISTALTIC PUMP Dedicated: YIN

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

### SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (mg/l)	Other (DRP NTU)
1132	18.1	6.39	20,440	50.0	0	-74

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130R - 10

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

Solutions: 4-E01k, 7-F216, 10-F22n

Conductivity Serial #: 146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: SUN 70's

Sample Characteristics: STRONG ODOR/TURBID (BROWN)

COMMENTS AND OBSERVATIONS:

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

Date: 5/30/02 By: C. J. Gray Company: STC

## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BR-5A

Field Personnel: CS/CJ

Sample Matrix: GW

Grab  Composite

### SAMPLING INFORMATION:

Date/Time 6-4-02 11021

Water Level @ Sampling, Feet: 13.51

Method of Sampling: INSITU 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 (DO mg/l)	Other (ORP mV)
10200	13.8	6.30	1416	6.92	0	13

### 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: CLOUD'S 60'S

Sample Characteristics: SL TURRID / W OODR

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

\_\_\_\_\_

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

Date: 6/19/2002 By: C. J. Carr Company: STL

# FIELD OBSERVATIONS

LeachField Form  
Revision 0  
March 15,2002

Facility: ARCH CHEMICAL

Sample Point ID:

BR-6A

Field Personnel: CS/CS

Sample Matrix:

GW  
() Grab () Composite

## SAMPLING INFORMATION:

Date/Time 6-4-02 1104

Water Level @ Sampling, Feet: 17.31

Method of Sampling: IN SITU PUMP

Dedicated: P/N

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

## SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (00 mg/L)	Other (ORP mV)
1100	16.7	8.52	4124	2.79	0	-170

## 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: CLOUD'S GONE

Sample Characteristics: CLEAR / STRONG ODORE

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

\_\_\_\_\_

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

Date:

6/4/2002

By:

Chay

Company:

STL

# FIELD OBSERVATIONS

LeachField Form  
Revision 0  
March 15, 2002

Facility: ARCH CHEMICAL

Sample Point ID: BR-7A

Field Personnel: CS/CJ

Sample Matrix: GW

Grab  Composite

## SAMPLING INFORMATION:

Date/Time 6-4-02 / 1126

Water Level @ Sampling, Feet: 28.39

Method of Sampling: INSITU 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 (Do mg/l.)	Other (EC mV)
1130	15.4	6.99	2775	21.5	50	-156

## 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: CLOUD'S GO'S

Sample Characteristics: SL TURBID / STRONG ODOR

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

\_\_\_\_\_

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

Date: 6/14/2002 By: C. Hay Company: STL

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: BP-8

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-30-02 11510

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: 5-30-02 11515

Date / Time Completed: 5-30-02 11530

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 8.25

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

Well Total Depth, Feet: 31.74

Method of Well Purge: PARISTALTIC PUMP

One (1) Riser Volume, Gal: 15.3

Dedicated:  Y  N

Total Volume Purged, Gal:  $\approx$  2.0

Purged To Dryness  Y  N

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

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 DO	Other OLP
115		WUL 8.25	20.5	7.09	5397	111.2	0	-162
1520			18.9	7.07	5404	112.4	0	-175
1525			18.5	7.07	5417	109.5	0	-179
1530		$\approx$ 2.0	18.0	7.09	5420	108.1	0	-179

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID BR-8

Date/Time 5-30-2002 11531

Water Level @ Sampling, Feet:

8.29

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 ( $\mu$ g/l)	Other ( $\mu$ V mv)
1532	18.0	7.09	5420	108.3	0	-179

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130A - 10

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

Solutions: 4-E01K, 7-F216, 10-F62N

Conductivity Serial #:          146.9 umhos/cm= 146.9 1412 umhos/cm= 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: SUN 70's

Sample Characteristics: TURBID / LT BROWN / NO ODOR

### COMMENTS AND OBSERVATIONS:

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

Date: 5/30/2002 By: C. Chapin Company: JTL

# FIELD OBSERVATIONS

LeachField Form  
Revision 0  
March 15,2002

Facility: ARCH CHEMICAL

Sample Point ID:

BR-9

Field Personnel: CS/CT

Sample Matrix:

Grd  
 Grab  Composite

## SAMPLING INFORMATION:

Date/Time 6-4-02 / 1118

Water Level @ Sampling, Feet: 37.09

Method of Sampling: IN SITU 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 (Do mg/l)	Other (ORP mV)
1205	14.5	7.11	2043	6.65	0	-75

## 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: RAIN GO'S

Sample Characteristics: CLEAR / SL ODORE

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

\_\_\_\_\_

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

Date: 6/14/2002 By: Chay Company: STL

## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: E-1

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

### MONITORING WELL INSPECTION:

Date/Time 5-30-2002 11320

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: 5-30-02 11323

Date / Time Completed: 5-30-02 11340

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: FLOODED 2.17

Elevation. G/W MSL: —

Well Total Depth, Feet: 9.75

Method of Well Purge: PARISTALTIC PUMP

One (1) Riser Volume, Gal: —

Dedicated:  Y  N

Total Volume Purged, Gal: ≈ 1.00

Purged To Dryness  Y  N

Purge Observations: Start TURBID/BLACK Finish BLACK

Start TURBID/BLACK Finish BLACK

### PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (mg/l)	Other (mv)
1325		.25	18.5	7.52	10,760	49.5	Ø	-246
1330		.50	19.1	7.63	11,470	49.0	Ø	-236
1335		1.00	18.2	7.64	11,490	47.0	Ø	-229
1340		1.00	18.6	7.66	11,480	48.0	Ø	-232

## FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

POINT ID E-1

Date/Time 5-30-2002 11341 Water Level @ Sampling, Feet: Flooded

Method of Sampling: PERISTALTIC PUMP 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 (D mg/L)	Other (ORP (mV))
1342	18.6	7.66	11,480	48.0	8	-232

**INSTRUMENT CHECK DATA:**

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130R - 10

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

Solutions: 4-E01K, 7-F216, 10-F62N

Conductivity Serial #:          146.9 umhos/cm= 146.9 1412 umhos/cm= 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

**GENERAL INFORMATION:**

Weather conditions @ time of sampling: SUN 70's

Sample Characteristics: NO ODOR / LT BROWN COLOR / SL TURBID

**COMMENTS AND OBSERVATIONS:**

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

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

Date: 5/30/2002 By: C. J. Carpenter Company: STL

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: E-3

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-29-02 11000

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: 5-29-02 11005

Date / Time Completed: 5-29-02 11013

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 8.94

Elevation, G/W MSL: —

Well Total Depth, Feet: 12.05

Method of Well Purge: PORISTALTIC PUMP

One (1) Riser Volume, Gal: 0.5

Dedicated:  N

Total Volume Purged, Gal: ~0.5

Purged To Dryness  N

Purge Observations: —

Start SL TURBID Finish CL TURBID

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other DO	Other ORP
1010		.05	15.7	6.95	820	21.3	0	124

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID E-3

Date/Time 5-30-02 11350

Water Level @ Sampling, Feet: 10.04

Method of Sampling: PARISTATIC DUMP 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 (DO mg/l)	Other (ORP/mV)
1351	22.6	6.98	765	21.4	0	-45

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130A - 10

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

Solutions: 4-E01K, 7-F216, 10-FG2N

Conductivity Serial #: \_\_\_\_\_ 146.9 umhos/cm= 146.9 1412 umhos/cm= 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: SUN 70's

Sample Characteristics: SL TURBID / NO COLOR / NO ODOR

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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

Date: 5/30/2002 By: Chase Company: STL

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: MW - 103

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-29-02 11420

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: 5-29-02 11425

Date / Time Completed: 5-29-02 11450

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 1.57

Elevation. G/W MSL: —

Well Total Depth, Feet: 8.05

Method of Well Purge: PARISTALTIC

One (1) Riser Volume, Gal: 1.2

Dedicated:  Y  N

Total Volume Purged, Gal: ~1.5

Purged To Dryness  Y  N

Purge Observations: —

Start CLEAR Finish CLEAR

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/ftz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other	Other OEP
1435	2.21 ft	0.25	19.1	6.57	540	0 1.20	Ø	173
1440	2.21	0.50	17.3	6.60	538	1.29	Ø	147
1445	2.21	1.00	18.0	6.62	536	1.31	Ø	141
1450	2.21	1.50	18.0	6.63	536	1.33	Ø	143

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

Date/Time 5-29-02 11455 POINT ID MW-103  
 Water Level @ Sampling, Feet: 2.21

Method of Sampling: PORISTALTIC 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 (do my/c)	Other (do m/l)
1456	18.0	6.63	536	1.33	0	143

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU      5.0 NTU std. = 5.0 NTU

Solutions: 1301 - 10

T Serial #:          4.0 std. = 4.0      7.0 std. = 7.0      10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-F62N

Conductivity Serial #:          146.9 umhos/cm = 146.9      1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: RAIN/SUN 70's

Sample Characteristics: CLEAR / NO ODOR

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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

Date: 5-29-2002 By: L. J. Fay Company: STL

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: MW-104

Field Personnel: P.L.H., CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-29-02 1 1117

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: 5-29-02 1 130

Date / Time Completed: 5-29-02 1200

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 7.58

Elevation, G/W MSL: —

Well Total Depth, Feet: 18.10

Method of Well Purge: BLADDER Pump

One (1) Riser Volume, Gal: 1.72

Dedicated:  Y/N

Total Volume Purged, Gal: 17 1.5

Purged To Dryness  Y/N

Purge Observations: 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 (Do)	Other (Corr.)
1135	280	Water level 8.30	16.93	7.45	529	23.0	2.32	-170
1140	140	8.52	16.74	7.28	526	100.5	1.07	-173
1145	140	8.60	16.06	7.20	550	101.7	.85	-168
1150	140	8.48	17.20	7.22	613	102.3	.45	-167
1155	140	8.45	17.57	7.23	625	100.6	.40	-163
1200	140	8.45	17.34	7.24	632	101.5	.33	-162

Sampled  
1200

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID MW-104

Date/Time 5/29/02 1200

Water Level @ Sampling, Feet: 8.45

Method of Sampling: Low flow bladder 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 (DO)	Other (temp)
1200	17.34	7.24	529	101.5	.33	-162

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU      5.0 NTU std. = 5.0 NTU

Solutions: 130N - 10

H Serial #: 4.0 std. = 4.0      7.0 std. = 7.0      10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-F62N

Conductivity Serial #: 146.9 umhos/cm = 146.9      1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: 76°F Sunny

Sample Characteristics: TURBID

### COMMENTS AND OBSERVATIONS:

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

Date: 5/29/02

By:

Company:

STL

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: MW-106

Field Personnel: P.L.HH, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-30-02 / 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: — / — % LEL: — / —

Vol. Organic Meter (Calibration/Reading):

Volatiles (ppm) — / —

## PURGE INFORMATION:

Date / Time Initiated: 5-30-02 / 1050

Date / Time Completed: 5-30-02 / 1120

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 8.53

Elevation. G/W MSL: —

Well Total Depth, Feet: 19.35

Method of Well Purge: BLADDER PUMP

One (1) Riser Volume, Gal: 1.77

Dedicated:  N

Total Volume Purged, Gal: 2.0

Purged To Dryness  Y  N

Purge Observations: —

Start TURBID ORANGE Finish SL TURBID ORANGE

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz) <i>ml</i>	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other OK/ NR	Other DO
1055	160	8.88	.5	15.9	6.71	2.11 <sup>mS/cm</sup>	165.8	-112 .50
1100		8.90		16.7	6.77	2.14	150.7	-100 .50
1105		8.90	1.0	16.5	6.78	2.19	130.2	-130 .38
1110		8.95		16.6	6.81	2.26	115.2	-153 .33
1115		8.95	1.5	16.6	6.84	2.33	104.7	-159 .34
1120		8.95	2.0	16.8	6.85	2.36	100.7	-162 .29

SAMPLED AT 1120 / 5-30-02  
*f / L*



# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: MW-114

Field Personnel: P.L.H., CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 6-3-02 / 1425

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: 6-3-02 / 1430

Date / Time Completed: 6-3-02 / 1450

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 11.30

Elevation. G/W MSL: —

Well Total Depth, Feet: 15.76

Method of Well Purge: Puristatic pump

One (1) Riser Volume, Gal: .73

Dedicated:  Y  N

Total Volume Purged, Gal: ~ 1.5

Purged To Dryness  Y  N

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 Pa
1435	200	12.00	15.2	6.71	2519	8.75	-14	0
1440		12.31	14.9	6.53	2388	8.20	-17	0
1445	190	12.31	14.9	6.67	2379	7.50	-17	0
1450		12.31	~ 1.5	6.70	2379	7.36	-17	0

SAMPLED AT 1450 16-3-02  
JL

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID Mar-114

Date/Time 6-3-02 / 1450

Water Level @ Sampling, Feet: 12.31

Method of Sampling: Peristaltic pump

Dedicated: (Y) EPP

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)
<u>1456</u>	<u>14.9</u>	<u>6.70</u>	<u>2379</u>	<u>7.36</u>	<u>-17</u>	<u>0</u>

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130A - 10

Serial #: 4 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-F42N

Conductivity Serial #: 146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: Sun 65°

Sample 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 protocols.

Date: 6/31/02 By: Al Zarr Company: STC

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: NESS-E

Field Personnel: P.L.H., CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5/29/02 / 1335

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: 5/29/02 / 1340

Date / Time Completed: 5/29/02 / 1410

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 40.38

Elevation. G/W MSL: —

Well Total Depth, Feet: 74.52

Method of Well Purge: Low flow Bladder pump

One (1) Riser Volume, Gal: 22.29

Dedicated:  N

Total Volume Purged, Gal: 15 gal 2.0

Purged To Dryness  Y  N

Purge Observations: Start SL-Turbid

Finish SL Turbid

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (DO)	Other (ORP)
1345	260	41.30	18.62	7.10	2120	198	1.18	-154
1350	160	41.35	19.68	7.13	2110	198	0.86	-148
1355	160	41.52	1.0	20.5	2110	196	0.70	-134
1400	160	42.00	20.36	7.18	2110	192	0.64	-81
1405	160	42.49	20.06	7.18	2110	190	0.79	-78
1410	160	42.41	2.0	19.85	7.19	191	0.71	-77

Sampled at  
1412-TB / 15-29-02

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

Date/Time 5/29/02

1440

POINT ID NESS - E

Water Level @ Sampling, Feet: 42.41

Method of Sampling: Low flow Bladder pump

PL  
(N)

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

### SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORI )	Other (PO )
<u>1412</u>	<u>19.85</u>	<u>7.19</u>	<u>2110</u>	<u>191.0</u>	<u>-77</u>	<u>.71</u>

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130R - 10

H Serial #: 4 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-F62N

Conductivity Serial #: 146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: 65°F overcast / light rain

Sample Characteristics: SL. TURBID

### COMMENTS AND OBSERVATIONS:

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

Date: 5/29/02

By:

Thomas A. Bell

Company:

STL

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: NFSS - W

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-29-02 / 1000

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: 5-29-02 / 1020

Date / Time Completed: 5-29-02 / 1045

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 31.29

Elevation. G/W MSL: —

Well Total Depth, Feet: 77.23

Method of Well Purge: Bladder Pump

One (1) Riser Volume, Gal: 29.99

Dedicated:  N

Total Volume Purged, Gal: 3.0

Purged To Dryness Y  N

Purge Observations: —

Start Black Sect-1 Finish Clear

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz) <i>wl</i>	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other OK!	Other DO
1025	280	31.30	1.0	14.3	7.09	2.18	6.11	-220 .58
1030		31.35		14.3	7.09	2.20	4.65	-221 .55
1035		31.35	2.0	14.4	7.10	2.18	4.44	-230 .50
1040		31.35		14.4	7.11	2.18	4.41	-233 .48
1045	↓	31.35	3.0	14.5	7.12	2.18	4.37	-234 .41

SAMPLED AT 1045/5-29-02

*JL*

## FIELD OBSERVATIONS (continued)

**SAMPLING INFORMATION:**

 POINT ID NF33 - W

 Date/Time 5-29-02 1 1045

 Water Level @ Sampling, Feet: 10.45

 Method of Sampling: BLADDER 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 ( <u>old</u> )	Other ( <u>DO</u> )
1045	14.5	7.12	2.18	4.37	-234	.41

**INSTRUMENT CHECK DATA:**

 Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

 Solutions: 130A - 10

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

 Solutions: 4-E01K, 7-F216, 10-F62N

 Conductivity Serial #: 146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

 Solutions: 146.9 - 46-2, 1412 - 46-1
**GENERAL INFORMATION:**

 Weather conditions @ time of sampling: Rain / sun 70

 Sample 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 protocols.

Date:

5/29/02

By:

JL Lue

Company:

ST

# FIELD OBSERVATIONS

LeachField Form  
Revision 0  
March 15, 2002

Facility: ARCH CHEMICAL

Sample Point ID: PW-10

Field Personnel: CS/CJ

Sample Matrix: GW

Grab  Composite

## SAMPLING INFORMATION:

Date/Time 6-4-02 1105'

Water Level @ Sampling, Feet: 15.91

Method of Sampling: INSITU 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 (mg/L)	Other (DRP mL)
1056	18.6	7.51	3122	32.4	8	-119

## 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: CLOUDY & GO'S

Sample Characteristics: SC TURRID / STRONG ODOR

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

\_\_\_\_\_

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

Date: 6/4/02

By:

Company: STL

# FIELD OBSERVATIONS

LeachField Form  
Revision 0  
March 15,2002

Facility: ARCH CHEMICALS

Sample Point ID:

PN-11

Field Personnel: CS/CJ

Sample Matrix:

GW

Grab  Composite

## SAMPLING INFORMATION:

Date/Time 6-4-02 11140

Water Level @ Sampling, Feet: 17.79

Method of Sampling: INSITU DUMP

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 (00 mg/l)	Other (000 mV)
1155	17.6	7.01	3460	37.5	0	-62

## 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 60's

Sample Characteristics: SL TURBID / STRONG ODOR

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

\_\_\_\_\_

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

Date:

6/14/2002

By:

Cayay

Company:

STL

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: PZ-101

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-31-02 1 1226

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: 5-31-02 1 1228

Date / Time Completed: 5-31-02 1 1245

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 11.15

Elevation. G/W MSL: —

Well Total Depth, Feet: 21.69

Method of Well Purge: PERISTALTIC PUMP

One (1) Riser Volume, Gal: 1.7

Dedicated:  Y  N

Total Volume Purged, Gal: ~ 1.00

Purged To Dryness  Y  N

Purge Observations: Start ST TURBID Finish CLEAR

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other DO mg/l	Other ORP mV
1230	11.95	.25	15.8	6.79	1149	51.0	Ø	-14
1235	11.95	.50	15.5	6.99	1151	49.5	Ø	-7
1240	11.95	.75	15.8	6.73	1146	18.70	Ø	-4
1245	11.95	1.00	15.1	6.71	1144	18.22	Ø	-7

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID PZ-101

Date/Time 5-31-02 11246

Water Level @ Sampling, Feet:

11.95

Method of Sampling: PARISTALTIC 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 (xx mg/l)	Other (xx NTU)
1247	15.1	6.71	1144	18.72	8	-8

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130A - 10

Serial #: 601347 4.0 std.= 4.0 7.0 std.= 7.0 10.0 std. = 10.0

Solutions: 4-F01K, 7-F216, 10-F62N

Conductivity Serial #: 601347 146.9 umhos/cm= 146.9 1412 umhos/cm= 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: RAIN GO'S

Sample Characteristics: NO COLOR / CLEAR

### COMMENTS AND OBSERVATIONS:

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

Date:

5/31/2002

By:

C. Long

Company:

STL

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: PZ-102

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-31-02 1154

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: 5-31-02 1155

Date / Time Completed: 5-31-02 11215

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 10.22

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

Well Total Depth, Feet: 32.60

Method of Well Purge: PACISTALTIC PUMP

One (1) Riser Volume, Gal: 3.7

Dedicated:  Y  N

Total Volume Purged, Gal: ≈ 100

Purged To Dryness  Y  N

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

Start SL TURBID Finish CLEAR

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other DO mg/L	Other ORP mV
1200	11.68	.25	15.7	6.95	29.91	5.10	0	-97
1205	11.68	.50	15.9	6.88	3015	2.14	0	-107
1210	11.68	.75	16.0	7.26	3046	1.62	0	-125
1215	11.68	1.00	16.2	7.26	3048	1.59	0	-124

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID PZ-102

Date/Time 5-31-2002 11210

Water Level @ Sampling, Feet: 11.68

Method of Sampling: PERISTALTIC PUMP

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 (Do mg/l)	Other (ORP mV)
12:17	16.6	7.26	3047	1.61	0	-124

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 1301 - 10

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

Solutions: 4-FOLK, 7-F216, 10-F62N

Conductivity Serial #: 141.9 umhos/cm = 141.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: RAIN GO'S

Sample Characteristics: NO DDO/CLEAR

### COMMENTS AND OBSERVATIONS:

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

Date:

5/31/2002

By:

C. Gray

Company:

STL

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: PZ-103

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-31-02 11125

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: 5-31-02 11127

Date / Time Completed: 5-31-02 1145

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 9.87

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

Well Total Depth, Feet: 32.52

Method of Well Purge: PARISTATIC PUMP

One (1) Riser Volume, Gal: 3.7

Dedicated: Y / N

Total Volume Purged, Gal: ~ 1.0

Purged To Dryness Y / N

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

Start SL TURBID Finish CLEAR

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other DO (mg/l)	Other ORP(mv)
1130	11.65	.25	14.3	6.98	2919	3.02	Ø	-136
1135	11.77	.50	13.6	6.96	2796	1.39	Ø	-154
1140	11.77	.75	13.2	6.99	2871	1.40	Ø	-162
1145	11.77	1.00	13.6	6.98	2869	1.37	Ø	-161

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID PZ-103

Date/Time 5-31-02 1147

Water Level @ Sampling, Feet: 11.77

Method of Sampling: PERISTALTIC PUMP 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 ( $\mu$ g/l)	Other ( $\mu$ sec mV)
1148	13.6	6.98	2870	1.42	0	-161

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130N - 10

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

Solutions: 4-E01K, 7-F216, 10-FQ2N

Conductivity Serial #: 141.9 umhos/cm = 141.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: RAIN 60%

Sample Characteristics: NO ODOUR/NO COLOR/CLEAR

### COMMENTS AND OBSERVATIONS:

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

Date:

5/31/2002

By:

Company: STL

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: PZ-104

Field Personnel: P.L.HL., CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-31-2002 11054

Cond of seal:  Good  Cracked  
 None  Buried %

Prot. Casing/riser height: 8 —

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: 5-31-02 11055

Date / Time Completed: 5-31-02 1 115

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 13.69

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

Well Total Depth, Feet: 23.93

Method of Well Purge: PARI STALTIC

One (1) Riser Volume, Gal: 1.7

Dedicated:  N

Total Volume Purged, Gal: ≈ 1.0

Purged To Dryness  Y  N

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 <sup>DO mg/L</sup>	Other <sup>mV</sup>
5-31-02 1100	WL 13.77	.25	16.6	7.40	1279	39.5	0	-68
1105	13.77	.50	14.8	6.85	1798	22.8	0	-92
1110	13.77	0.75	14.9	6.92	1787	14.5	0	-91
1115	13.77	1.00	14.9	6.89	1787	14.6	0	-93

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID PZ-104

Date/Time 5-31-02 1116

Water Level @ Sampling, Feet:

13.77

Method of Sampling: PARENTERALIC 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 (00 mg/L)	Other (000 mV)
1117	14.9	6.89	1788	14.5	0	-93

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130A - 10

T Serial #: 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-F62N

Conductivity Serial #: 146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: RAIN GO'S

Sample Characteristics: CLEAR / NO ODOR

### COMMENTS AND OBSERVATIONS:

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

Date: 5/31/02 By: C. Hoag Company: STC

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: PZ-105

Field Personnel: P.L.HL., CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-30-02 11239

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: 5-30 11240

Date / Time Completed: 5-30-02 11300

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 5.12

Elevation. G/W MSL: —

Well Total Depth, Feet: 32.86

Method of Well Purge: PARISTALTIC PUMP

One (1) Riser Volume, Gal: 4.5

Dedicated:  Y  N

Total Volume Purged, Gal: ≈ 1.50

Purged To Dryness  Y  N

Purge Observations: —

Start SL 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 <sub>(mV)</sub>	Other <sub>(ORP/mv)</sub>
1245	8.32	0.25	19.2	7.28	912	>200	0	63
1250	8.32	0.50	17.5	7.26	918	>200	0	56
1255	8.32	1.00	19.0	7.29	915	>200	0	60
1300	8.32	1.50	19.1	7.29	917	>200	0	61

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID PZ-105

Date/Time 5-30-2002 11301

Water Level @ Sampling, Feet: 8.32

Method of Sampling: DARISTALTIC 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 ( $\mu$ g/l)	Other (ppm)
1302	19.1	7.29	917	>200	0	61

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU      5.0 NTU std. = 5.0 NTU

Solutions: 1301-10

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

Solutions: 4-E01K, 7-F216, 10-F62N

Conductivity Serial #: 146.9 umhos/cm = 146.9      1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: SUN 70's

Sample Characteristics: VERY TURBID / NO ODOR / DARK BROWN COLOR

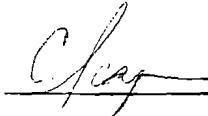
COMMENTS AND OBSERVATIONS:

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

Date:

5/30/2002

By:



Company:

SIL

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: PZ - 106

Field Personnel: P.L.H., CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time HOS 5-29-02 1105

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: 5-29-02 1110

Date / Time Completed: 5-29-02 1135

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 10.02

Elevation. G/W MSL: —

Well Total Depth, Feet: 27.90

Method of Well Purge: PARISTATIC PUMP

One (1) Riser Volume, Gal: 2.9

Dedicated:  Y /  N

Total Volume Purged, Gal: ~1.3

Purged To Dryness  Y /  N

Purge Observations: Start ST TURBID Finish TURBID

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct MS (Umhos/cm)	Turb. (NTU)	Other DO	Other ORP
1115	10.99	0.25	18.3	5.72	18.04	18.20	Ø	84
1120	11.85	0.50	17.7	5.74	18.06	27.20	Ø	70
1125	11.85	0.75	17.3	5.71	17.99	28.10	Ø	69
1130	12.00	1.00	17.9	5.71	17.97	30.03	Ø	69
1135	12.03	1.25	17.5	5.71	17.98	30.01	Ø	71

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID PZ-106

Date/Time 5-29-02 1146 Water Level @ Sampling, Feet: 12.06

Method of Sampling: DARISTATIC PUMP 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 (D)	Other (ORP)
1148	17.9	5.71	17.980	30.01	Ø	71

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 1301 - 10

1 Serial #: 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Solutions: 4-E01K, 7-E216, 10-E42N

Conductivity Serial #: 146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: SUN 70%

Sample Characteristics: TURBID/ct BROWN COLOR /SL ODORE

### COMMENTS AND OBSERVATIONS:

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

Date: 5/29/2002 By: Clay Company: STL

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: PZ-107

Field Personnel: P.L.H., CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-29-2002 1154

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: 5-29-02 1155

Date / Time Completed: 5-29-02 14215

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 6.52

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

Well Total Depth, Feet: 27.90

Method of Well Purge: PARISTALTIC PUMP

One (1) Riser Volume, Gal: 3.5

Dedicated:  Y  N

Total Volume Purged, Gal: 2.00

Purged To Dryness  Y  N

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 DO	Other DO <sub>P</sub>
1200	6.95	0.25	16.4	7.02	2325	3.93	0	-90
1205	6.95	0.5	16.5	7.05	2359	2.71	0	-99
1210	6.95	0.75	16.7	7.04	2349	2.69	0	-91
1215	6.95	1.00	16.7	7.00	2347	2.65	0	-96

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID PZ-107

Date/Time 5-29-02 1116

Water Level @ Sampling, Feet: 6.95

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 (DO)	Other (ORP)
1120	16.7	7.00	2369	2.68	0	-94

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130A - 10

Serial #: 4 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-F62N

Conductivity Serial #: 146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: SUN 70's / 0

Sample Characteristics: LOW TURBIDITY / NO ODOR / NO COLOR

### COMMENTS AND OBSERVATIONS:

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

Date: 5-12-01 2002

By: C. Hart

Company: STL

## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL Sample Point ID: Q0-2  
Field Personnel: PL TB Sample Matrix: SW  
 Grab  Composite

### SAMPLING INFORMATION:

Date/Time 6-4-02 1 1250 Water Level @ Sampling, Feet: NA  
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 (OK)	Other
1255	15.4	8.07	1741	5.84	-39	

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

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

pH Serial #: 601347 4.0 std.= 4.0 7.0 std.= 7.0 10.0 std. = 10.0

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

Conductivity Serial #: 601347 146.9 umhos/cm= 146.9 1412 umhos/cm= 1412

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

### GENERAL INFORMATION:

Weather conditions @ time of sampling: RAIN 63°

Sample Characteristics: clear

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

\_\_\_\_\_

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

Date: 6/14/02 By: PL TB Company: STR

# FIELD OBSERVATIONS

LeachField Form  
Revision 0  
March 15,2002

facility: ARCH CHEMICAL

Sample Point ID:

Q0-251

Field Personnel: PL, TB

Sample Matrix:

SW

Grab ( ) Composite

## SAMPLING INFORMATION:

Date/Time 6-4-02 / 11310

Water Level @ Sampling, Feet:

WT

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 ( <u>0.0</u> )	Other
<u>1315</u>	<u>16.3</u>	<u>8.11</u>	<u>809</u>	<u>6.75</u>	<u>-36</u>	

## INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. =        NTU      5.0 NTU std. = 5.0 NTU

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

pH Serial #: 6d347 4.0 std.= 4.0      7.0 std.= 7.0      10.0 std. = 10.0

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

Conductivity Serial #: 6d347 146.9 umhos/cm= 146.9      1412 umhos/cm= 1412

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

## GENERAL INFORMATION:

Weather conditions @ time of sampling: RAIN 63°

Sample Characteristics: clear

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

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

Date: 6/14/02 By: H. Lott Company: STR

## FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID:

QS-4

Field Personnel: PL, TB

Sample Matrix:

GW

Grab  Composite

### SAMPLING INFORMATION:

Date/Time 6-4-02 1 1225

Water Level @ Sampling, Feet: NA

Method of Sampling: MANUAL GRAD

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
1230	12.2	8.17	1795	2.22	-27	

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 13DR-10

pH Serial #: 601347 4.0 std.= 4.0 7.0 std.= 7.0 10.0 std. = 10.0

Solutions: 4-Folk, 7-F216, 10-FQBW

Conductivity Serial #: 601347 146.9 umhos/cm= 146.9 1412 umhos/cm= 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: RAIN 63°

Sample Characteristics: clear

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

\_\_\_\_\_

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

Date: 6/14/2002 By: M. Lutz Company: STC

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: 5-3

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-29-02 11255

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: 5-29-02 11300

Date / Time Completed: 5-29-02 11320

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 1.32 FLOODED

Elevation. G/W MSL: —

Well Total Depth, Feet: 13.38

Method of Well Purge: PNEUMATIC PUMP

One (1) Riser Volume, Gal: —

Dedicated: (Y) N

Total Volume Purged, Gal: ≈ 2.00

Purged To Dryness Y (N)

Purge Observations: —

Start CLEAR Finish CLEAR

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/ft <sup>2</sup> )	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other DO	Other DCP mV
1305		.50	20.3	6.82	2581	4.62	0	-141
1310		1.00	18.8	6.74	2591	4.91	0	-142
1315		1.50	16.7	6.71	2590	4.96	0	-121
1320		2.00	16.2	6.70	2591	4.92	0	-129

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

Date/Time 5-29-02 11325

POINT ID S - 3

Water Level @ Sampling, Feet:

FLOODED 1.32

Method of Sampling: PARISTALTIC 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 (DO)	Other (ORP)
1326	16.2	6.70	2591	4.92	8	-129

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130A - 10

H Serial #: 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-FG2N

Conductivity Serial #: 146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: RAIN 70's

Sample Characteristics: CLEAR/NO ODOR

### COMMENTS AND OBSERVATIONS:

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

Date: 5/29/2002 By: C. Flory Company: STL

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: S-4

Field Personnel: P.L.HI., CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-29-02 11330

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: 5-29-02 11330

Date / Time Completed: 5-29-02 11350

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: FLOODED .76

Elevation. G/W MSL: —

Well Total Depth, Feet: 13.05

Method of Well Purge: PERISTALTIC PUMP

One (1) Riser Volume, Gal: —

Dedicated:  N

Total Volume Purged, Gal: ~ 2.00

Purged To Dryness  Y /  N

Purge Observations: —

Start TURBID Finish CLEAR

## PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other	Other DGP (mV)
1335		0.5	17.5	7.59	643	20.7	Ø	-112
1340		1.00	15.3	7.55	476	13.72	Ø	-52
1345		1.50	14.6	7.57	470	13.70	Ø	-60
1350		2.00	14.7	7.53	470	13.71	Ø	-59

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

Date/Time 5-29-02 11355

POINT ID 5-4

FEARCEED - .76

Water Level @ Sampling, Feet:

Method of Sampling: PARISTATIC 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 (DO)	Other (ORP)
1356	14.7	7.54	470	13.71	0	-59

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 1301 - 10

Serial #: 601 347 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-F62N

Conductivity Serial #: 601 347 146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: RAINY/SUN 70's

Sample Characteristics: CLEAR / NO ODOUR /

COMMENTS AND OBSERVATIONS:

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

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

Date:

5/29/02

By:

Company: STC

# FIELD OBSERVATIONS

Facility: ARCH CHEMICAL

Sample Point ID: W-5

Field Personnel: P.L.HL, CS, TR, CJ

Sample Matrix: GW

## MONITORING WELL INSPECTION:

Date/Time 5-31-02 / 1000

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: 5-31-02 / 1027

Date / Time Completed: 5-31-02 / 1039

Surf. Meas. Pt:  Prot. Casing  Riser

Riser Diameter, Inches: 4.5

Initial Water Level, Feet: —

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 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	Other

## FIELD OBSERVATIONS (continued)

### SAMPLING INFORMATION:

POINT ID IN-5

Date/Time 5-31-02 1039

Water Level @ Sampling, Feet: -

Method of Sampling: PARISTALTIC PUMP

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 (DU mg/L)	Other (ORP mV)
1040	17.4	7.11	1933	>200	0	-47

### INSTRUMENT CHECK DATA:

Turbidity Serial #: 3794 NTU std. = 5.0 NTU 5.0 NTU std. = 5.0 NTU

Solutions: 130R - 10

Serial #: 601347 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Solutions: 4-E01K, 7-F216, 10-FG2N

Conductivity Serial #: 601347 146.9 umhos/cm = 146.9 1412 umhos/cm = 1412

Solutions: 146.9 - 46-2, 1412 - 46-1

### GENERAL INFORMATION:

Weather conditions @ time of sampling: Clouds 65°

Sample Characteristics: TURBID

COMMENTS AND OBSERVATIONS: HAD TO SAMPLE DOWN EXISTING PIPE, SENT TUBING  
DOWN AND PUSSED 10 min. PIPE NOT WIDE ENOUGH TO SEND WL PIPE  
DOWN AND WELL IS BLOCKED WITH PIPE SO WAS NOT UNABLE TO OBTAIN  
WATER LEVEL

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

Date: 5/31/02

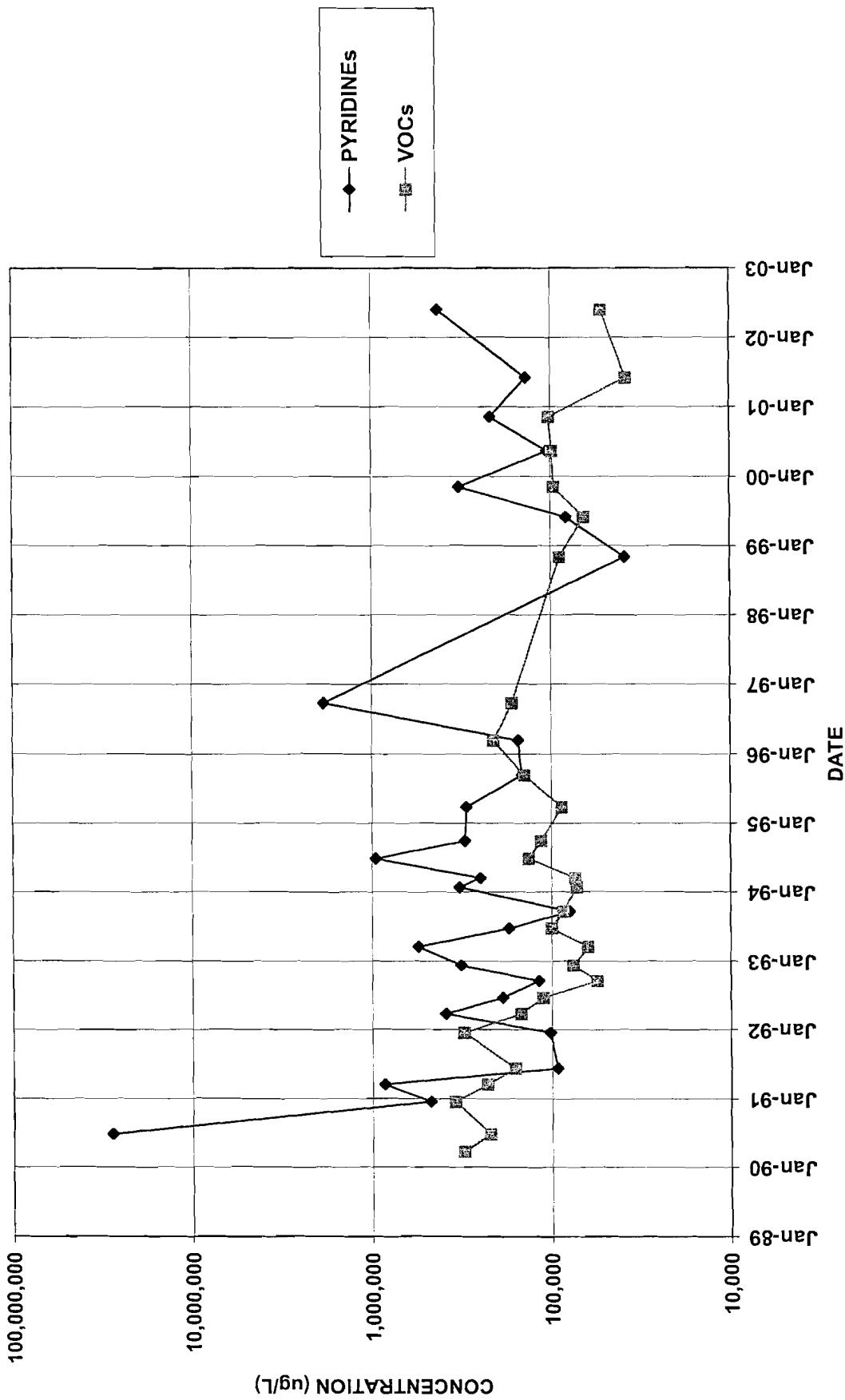
By: JL

Company: STC

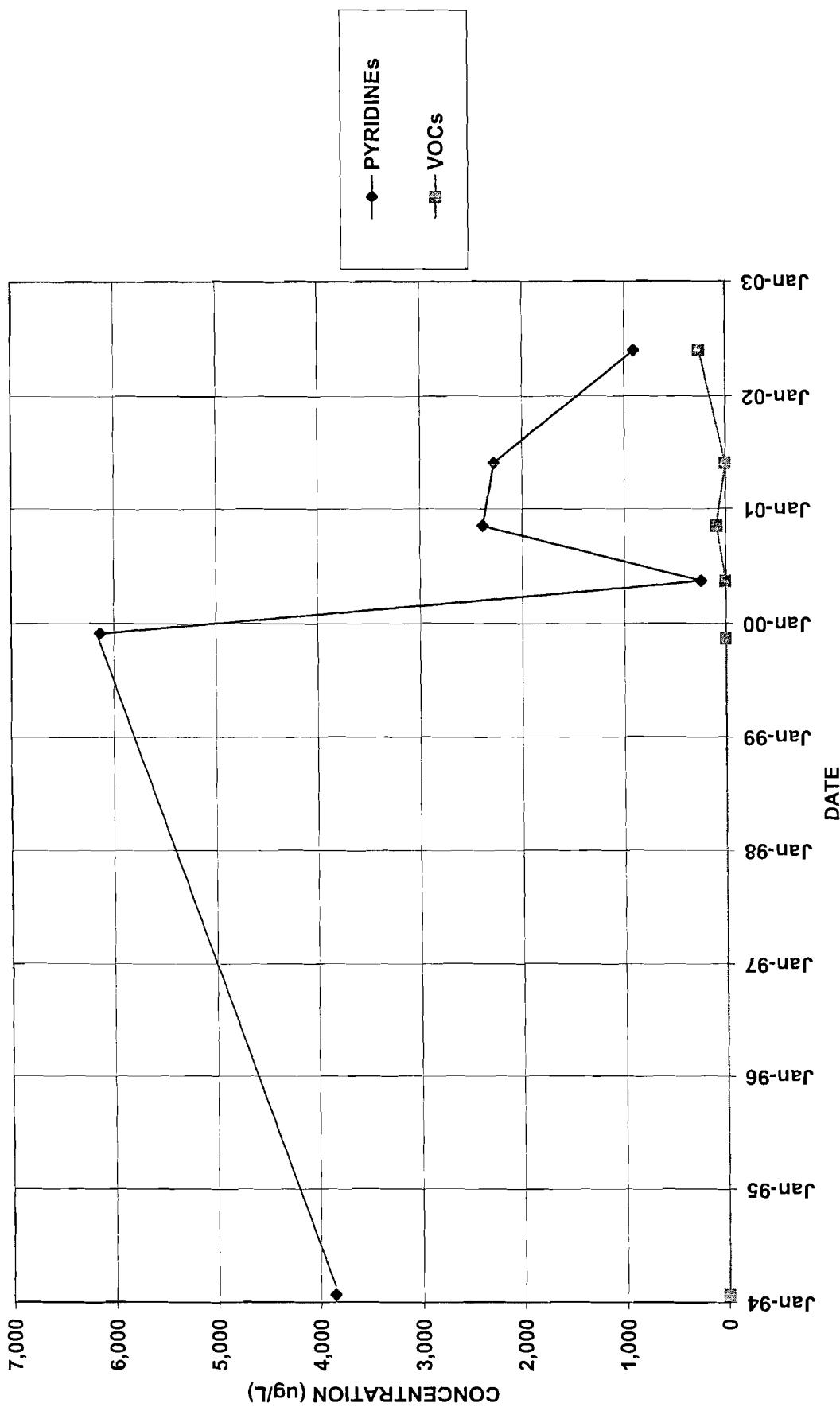
**Appendix B**

**Well Trend Data**

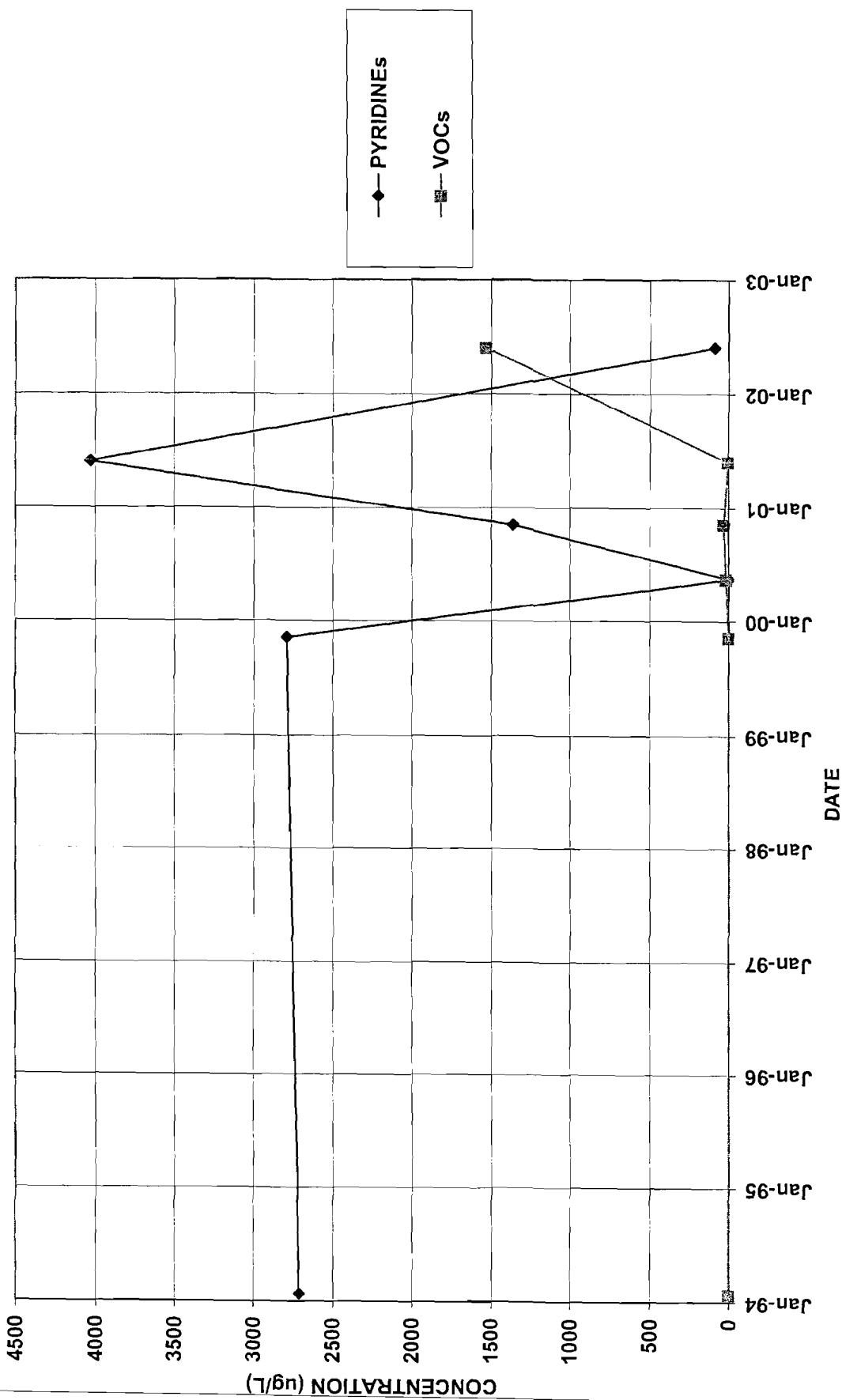
B-17



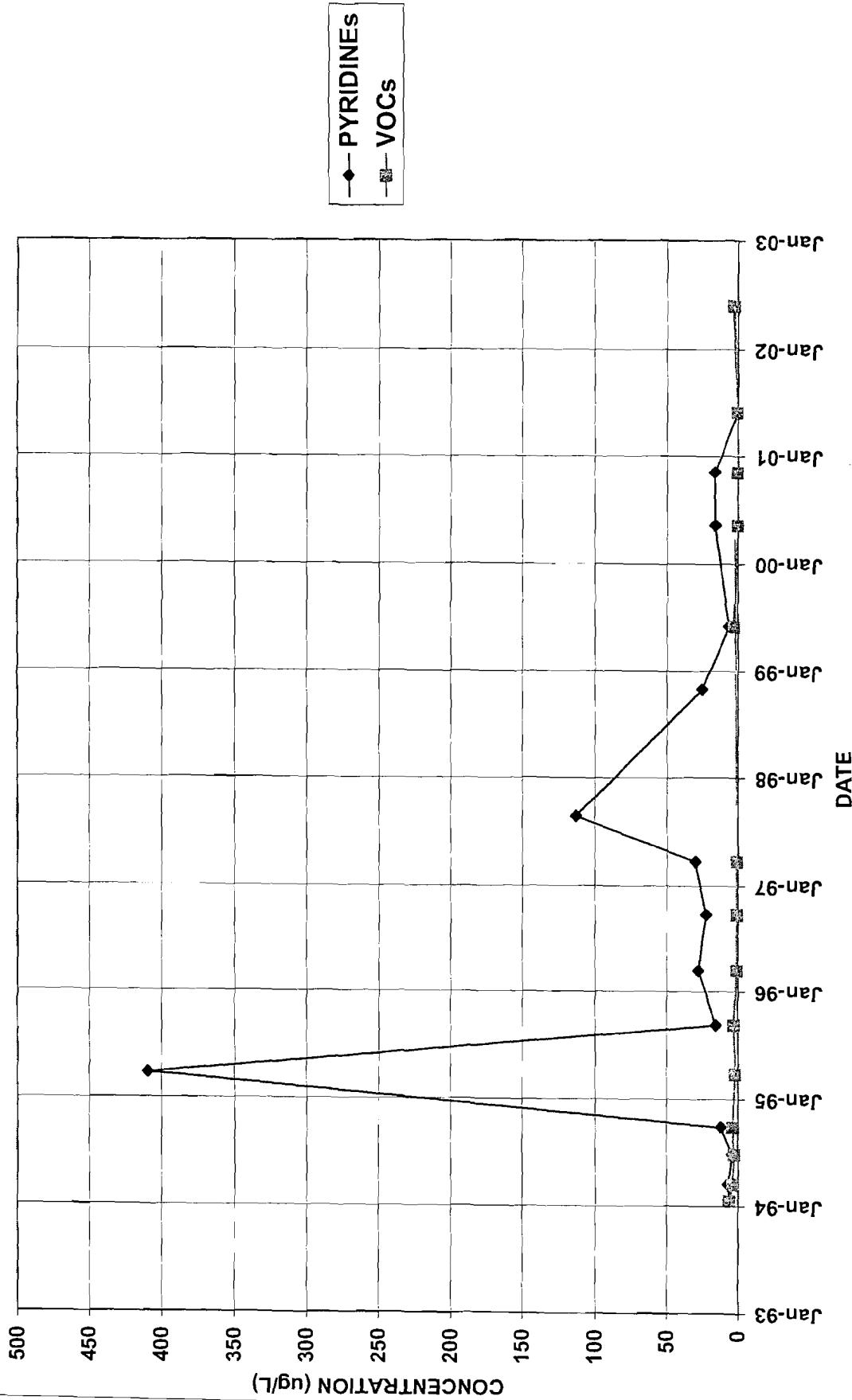
B-7



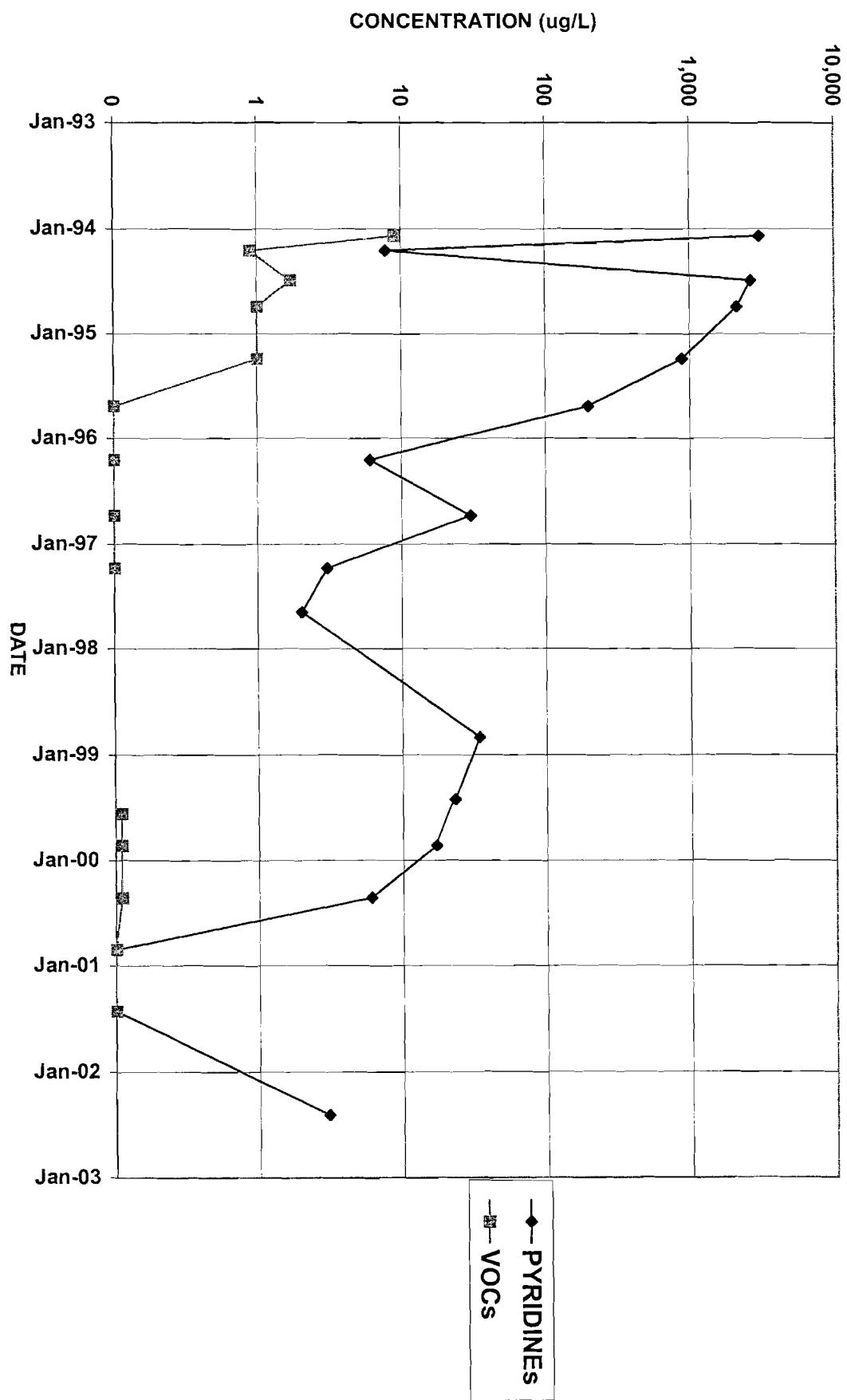
B-9

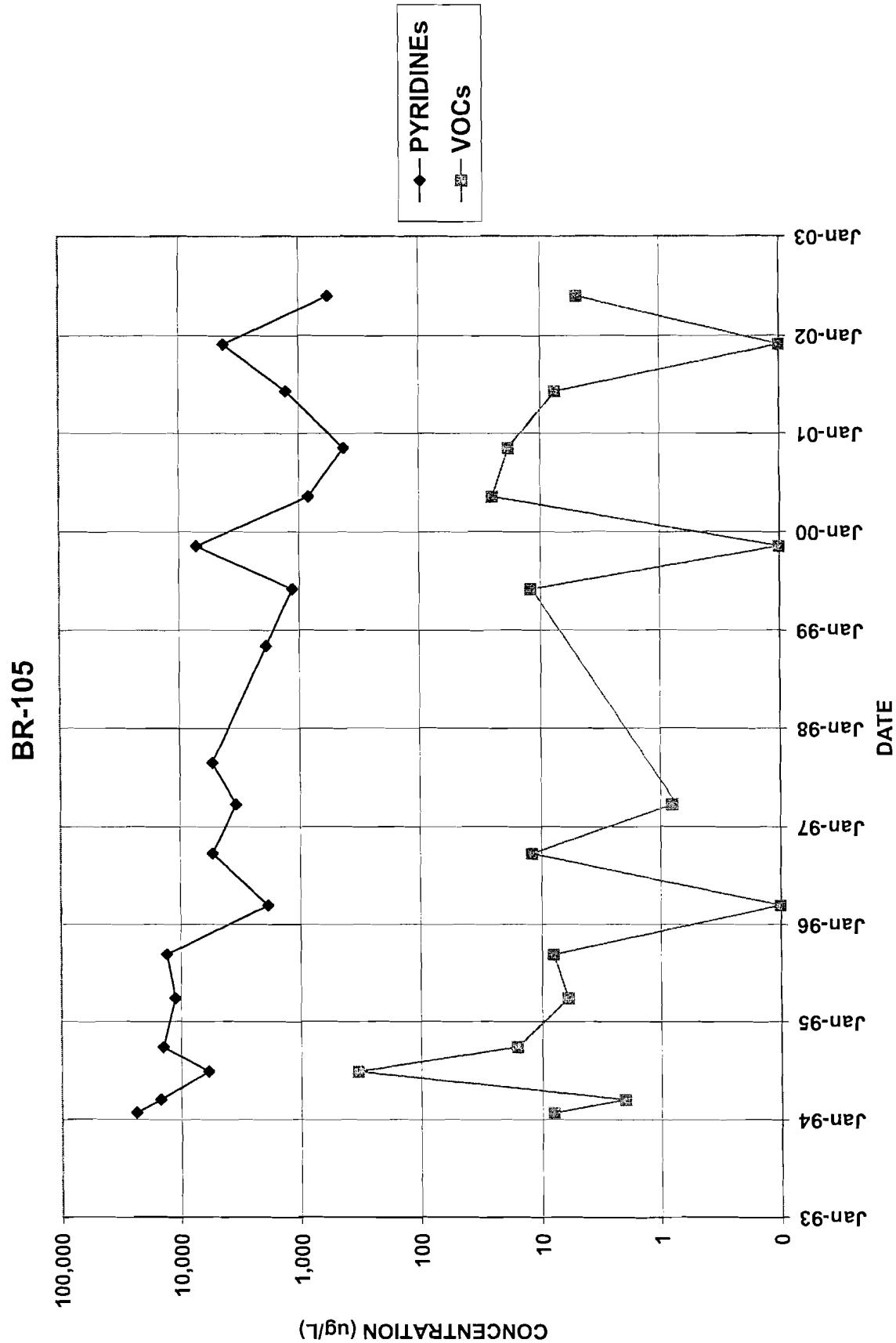


# BR-103

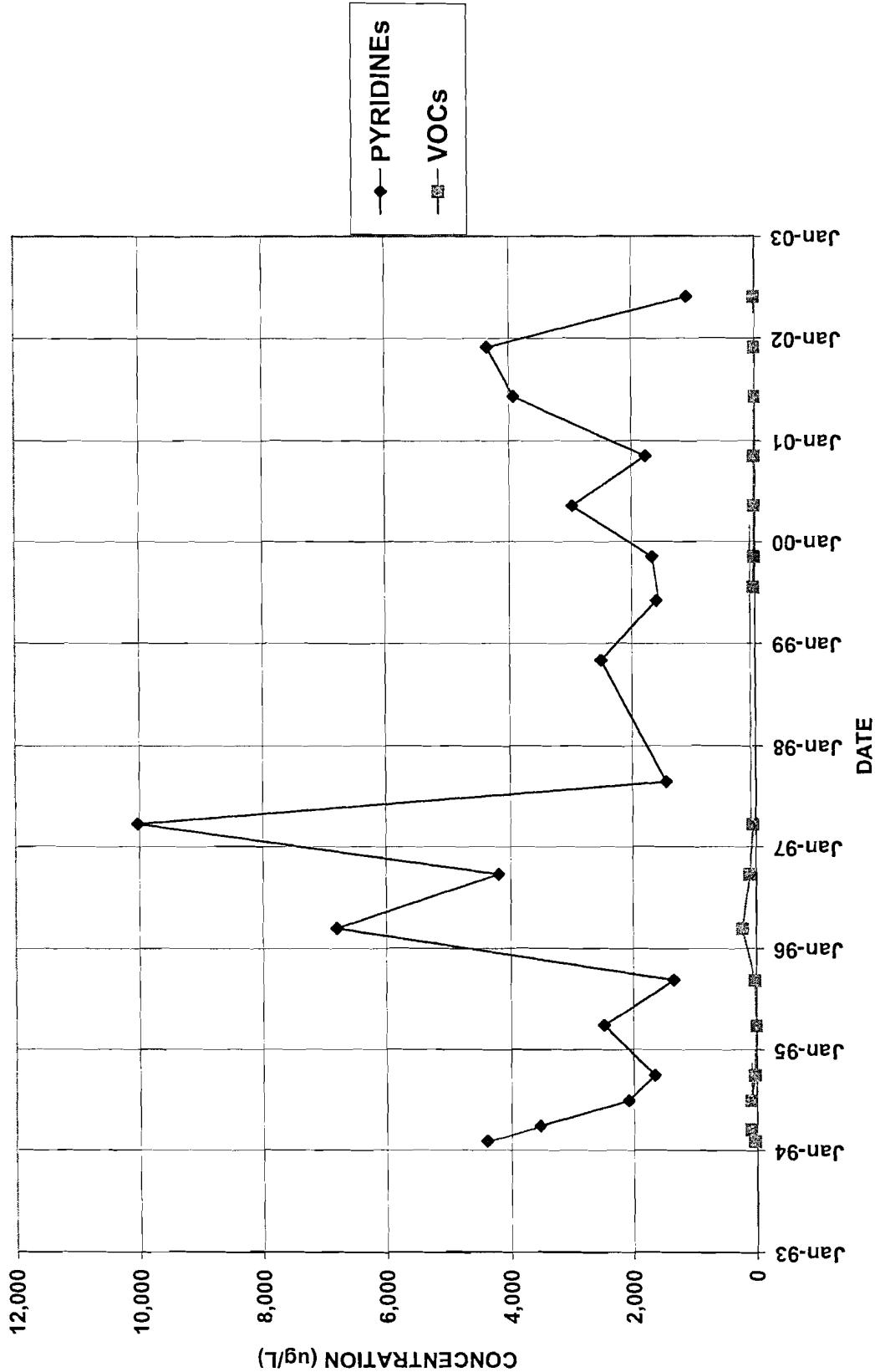


BR-104

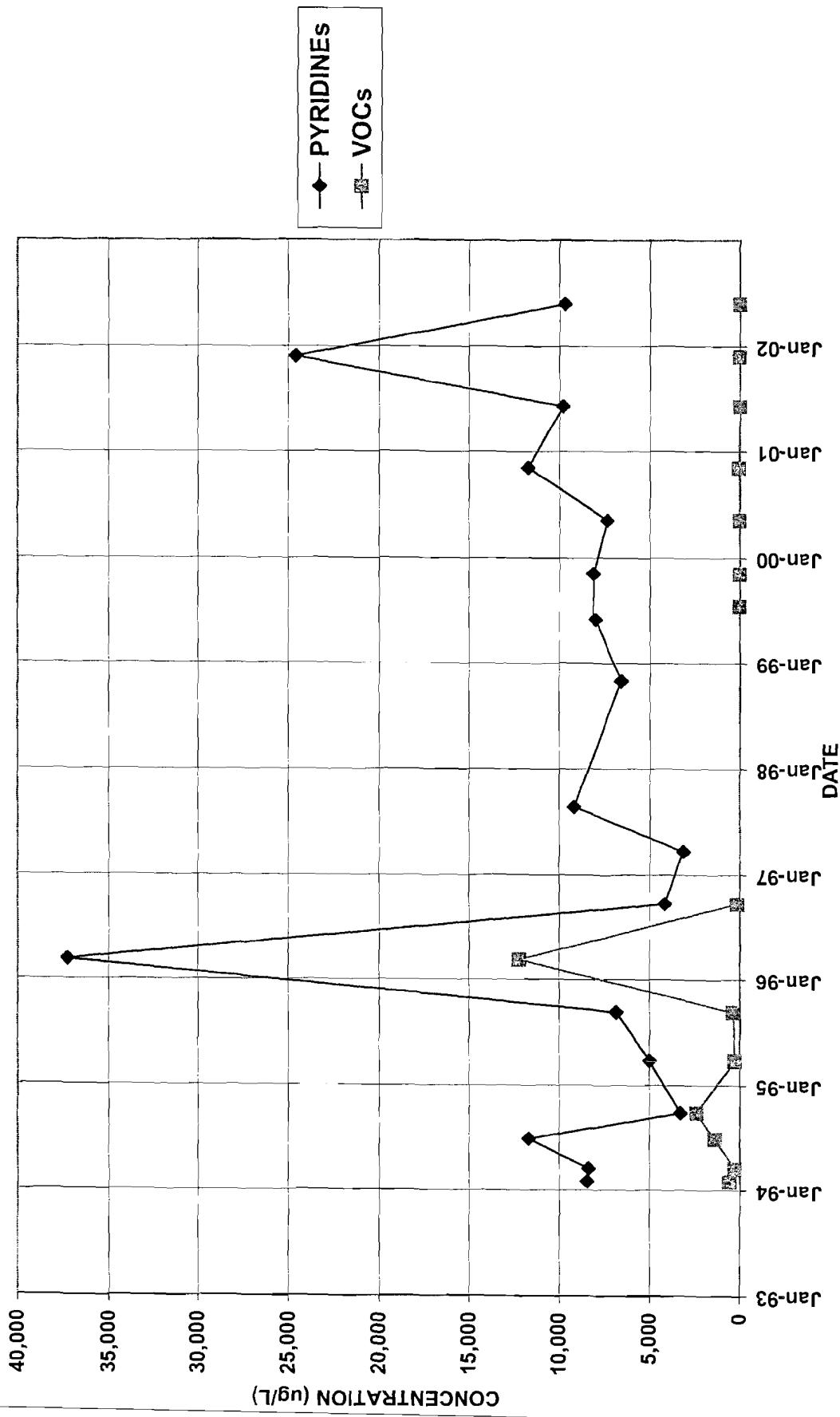




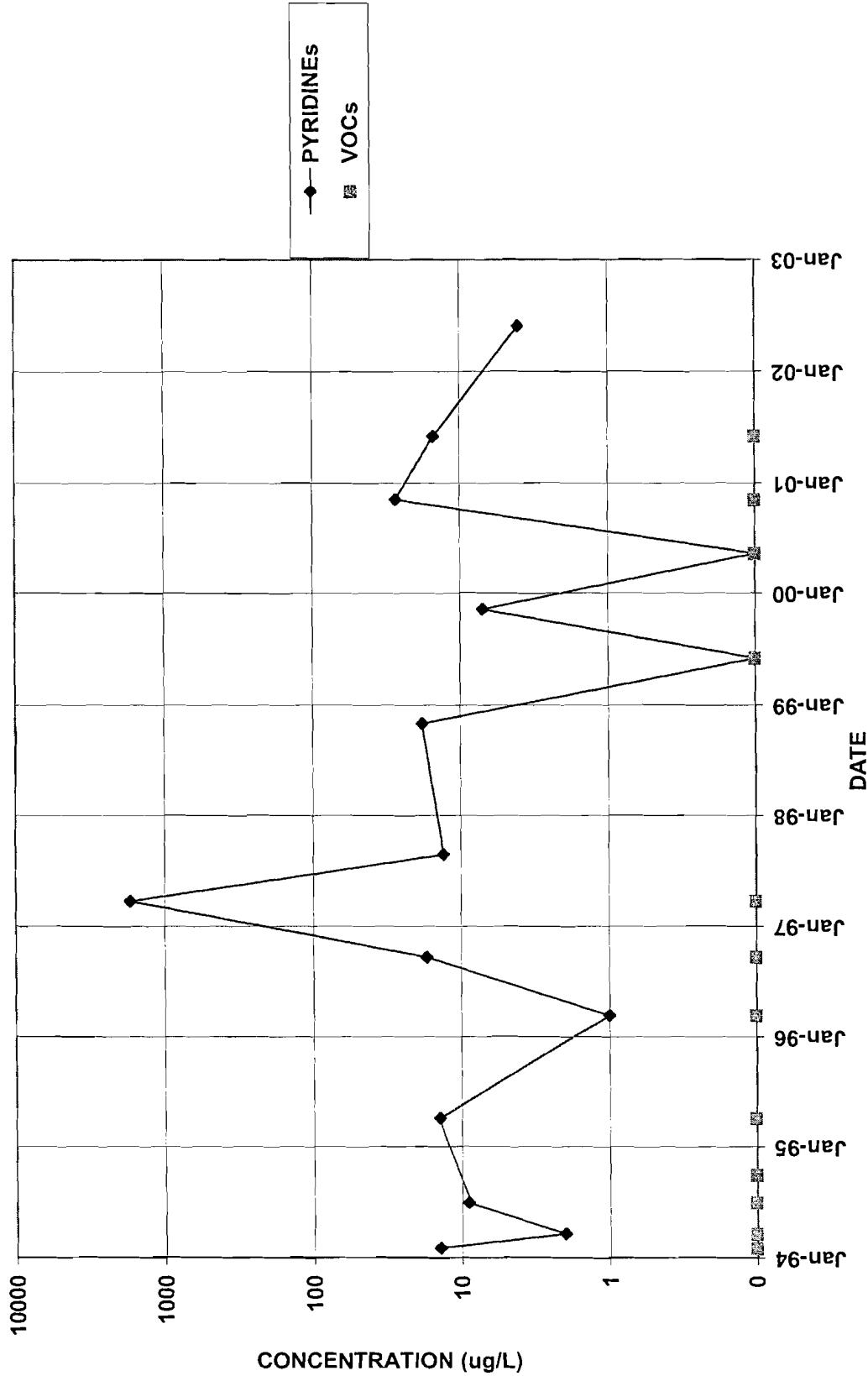
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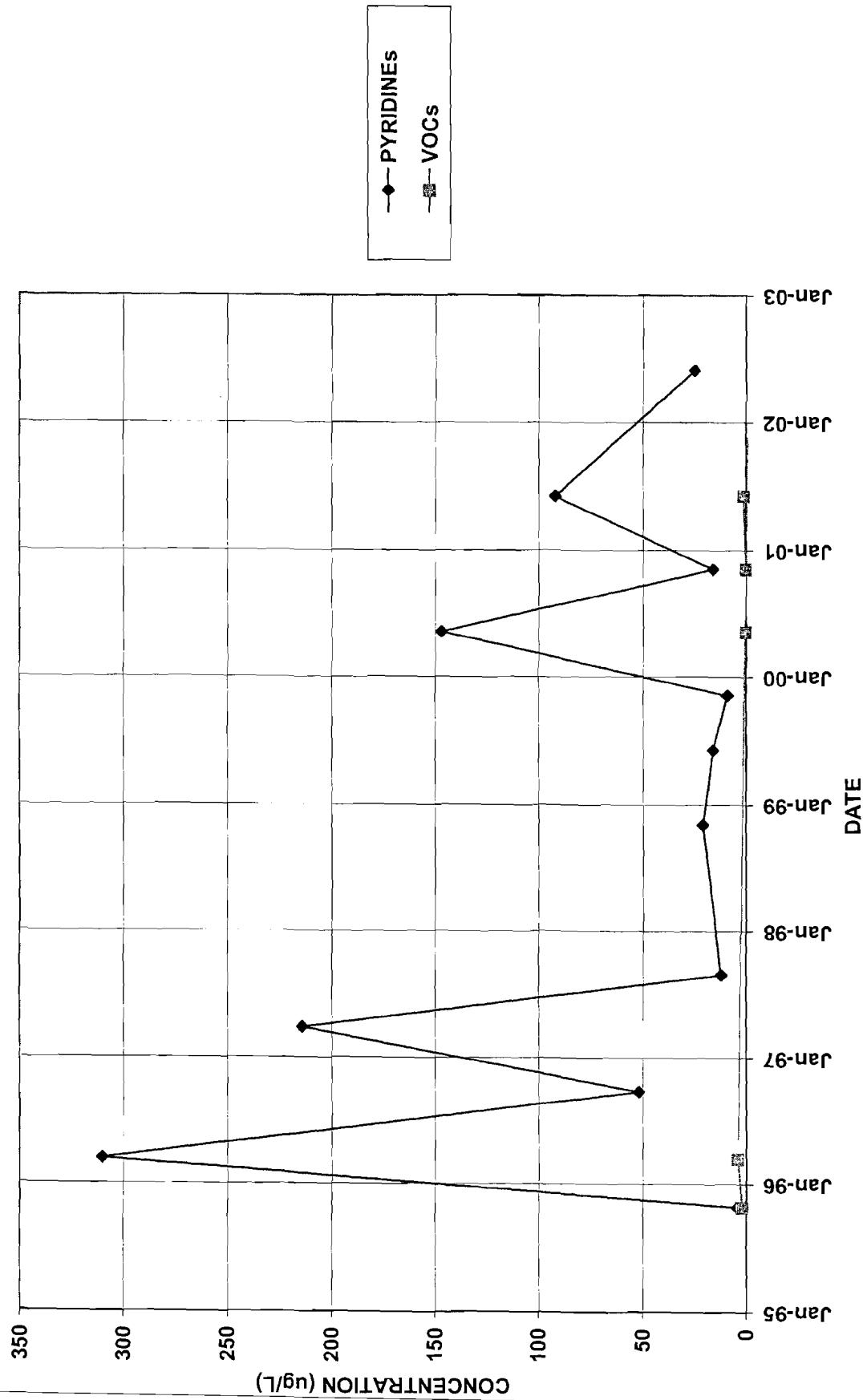
# BR-106



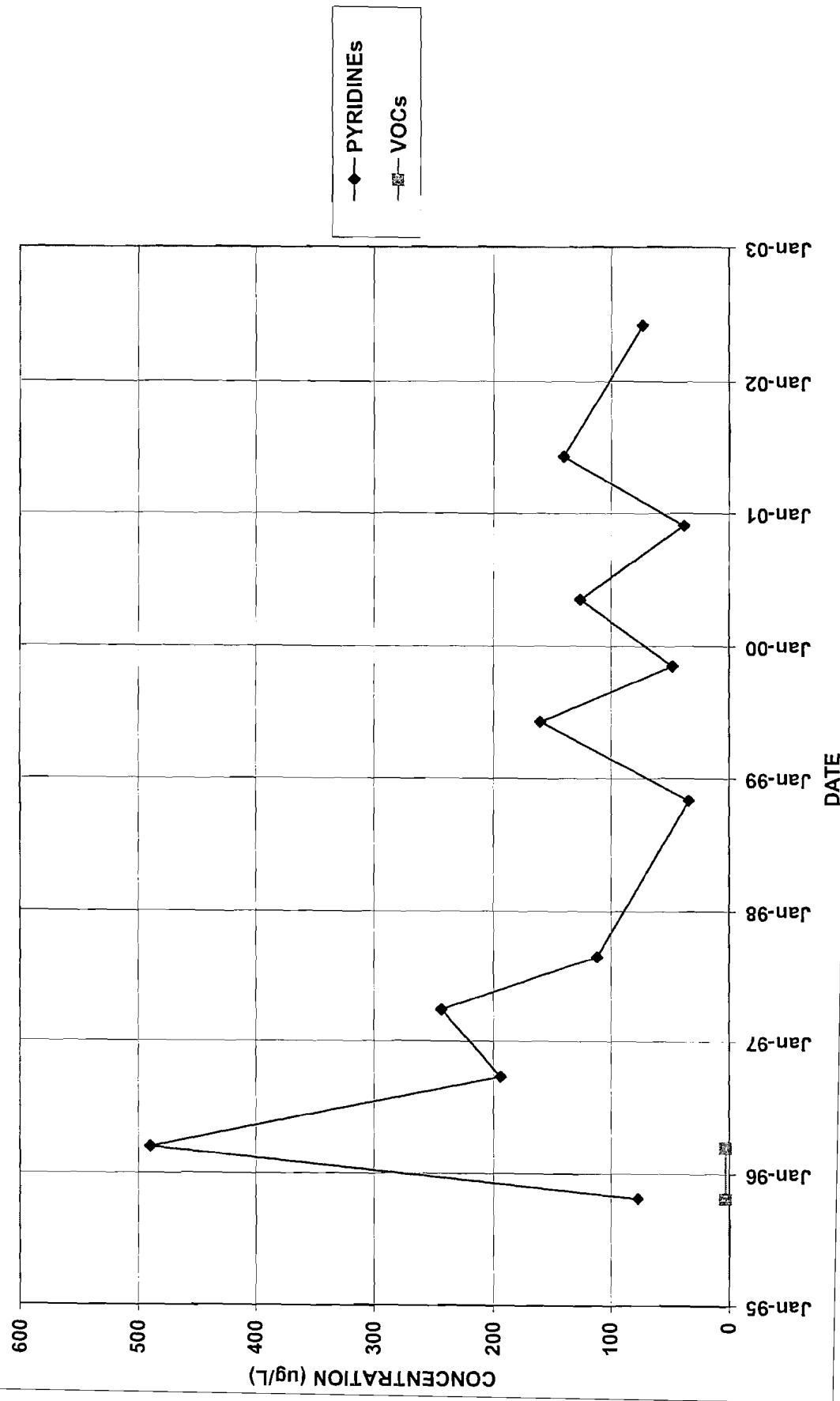
BR-108



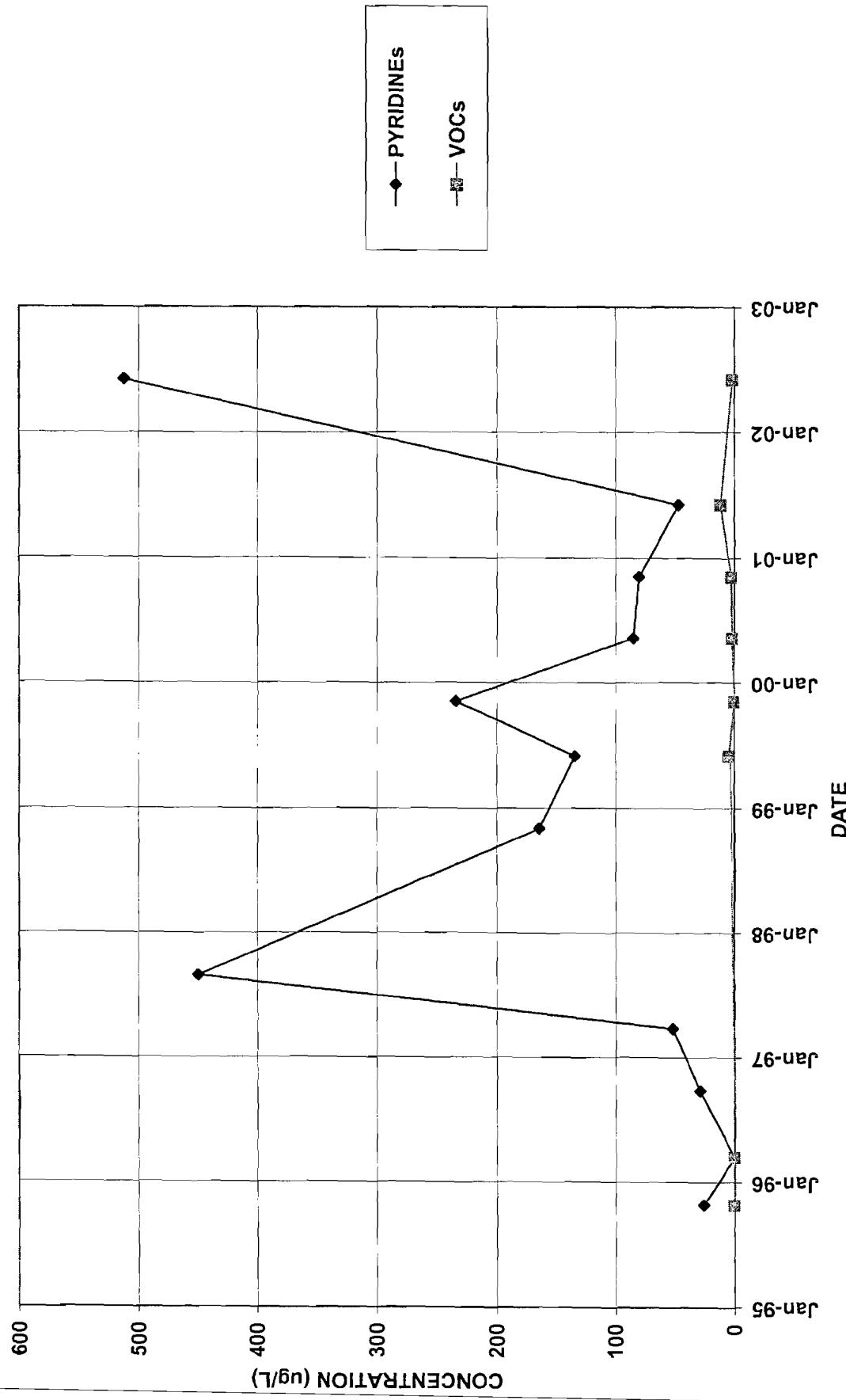
**BR-112D**



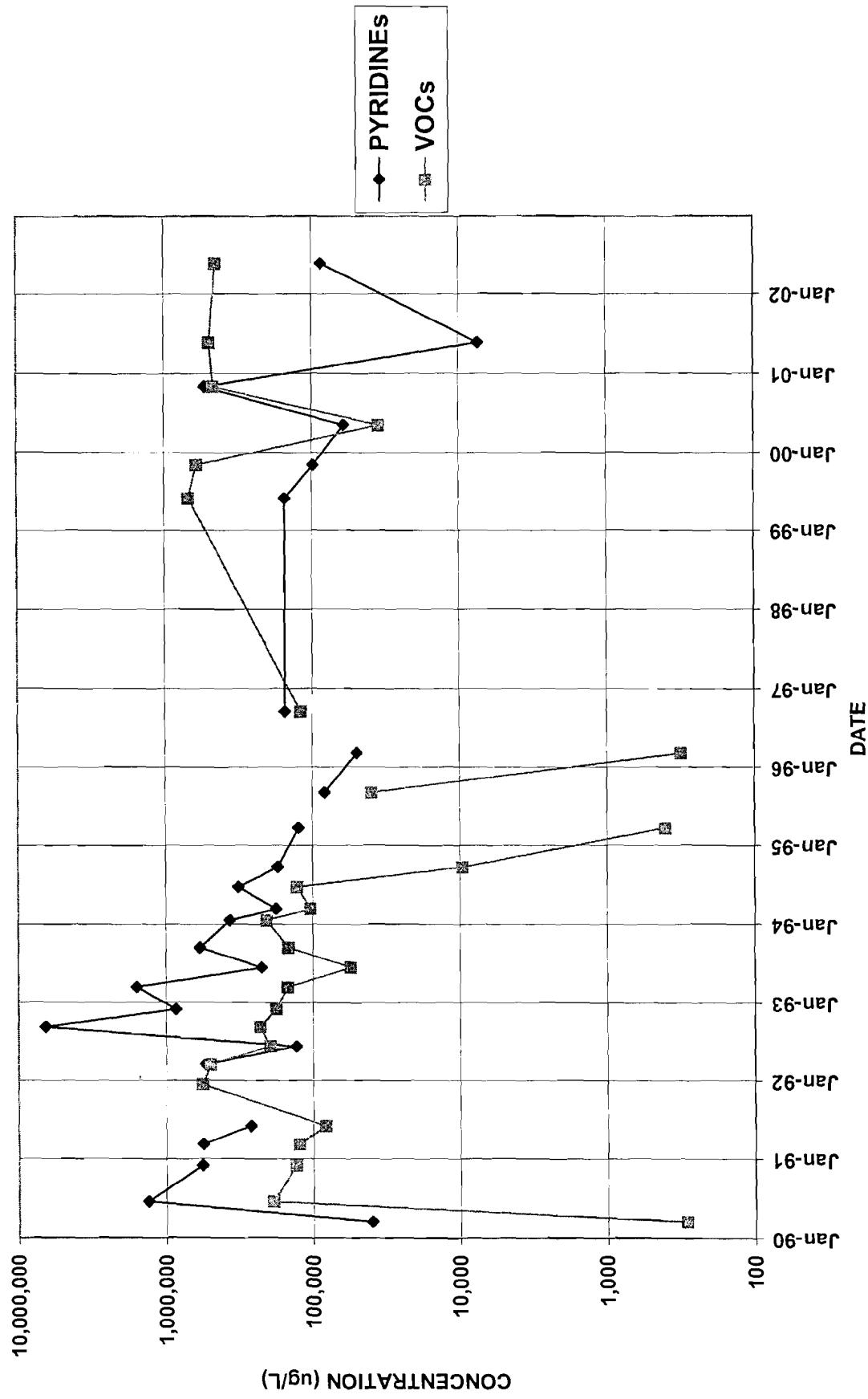
# BR-113D



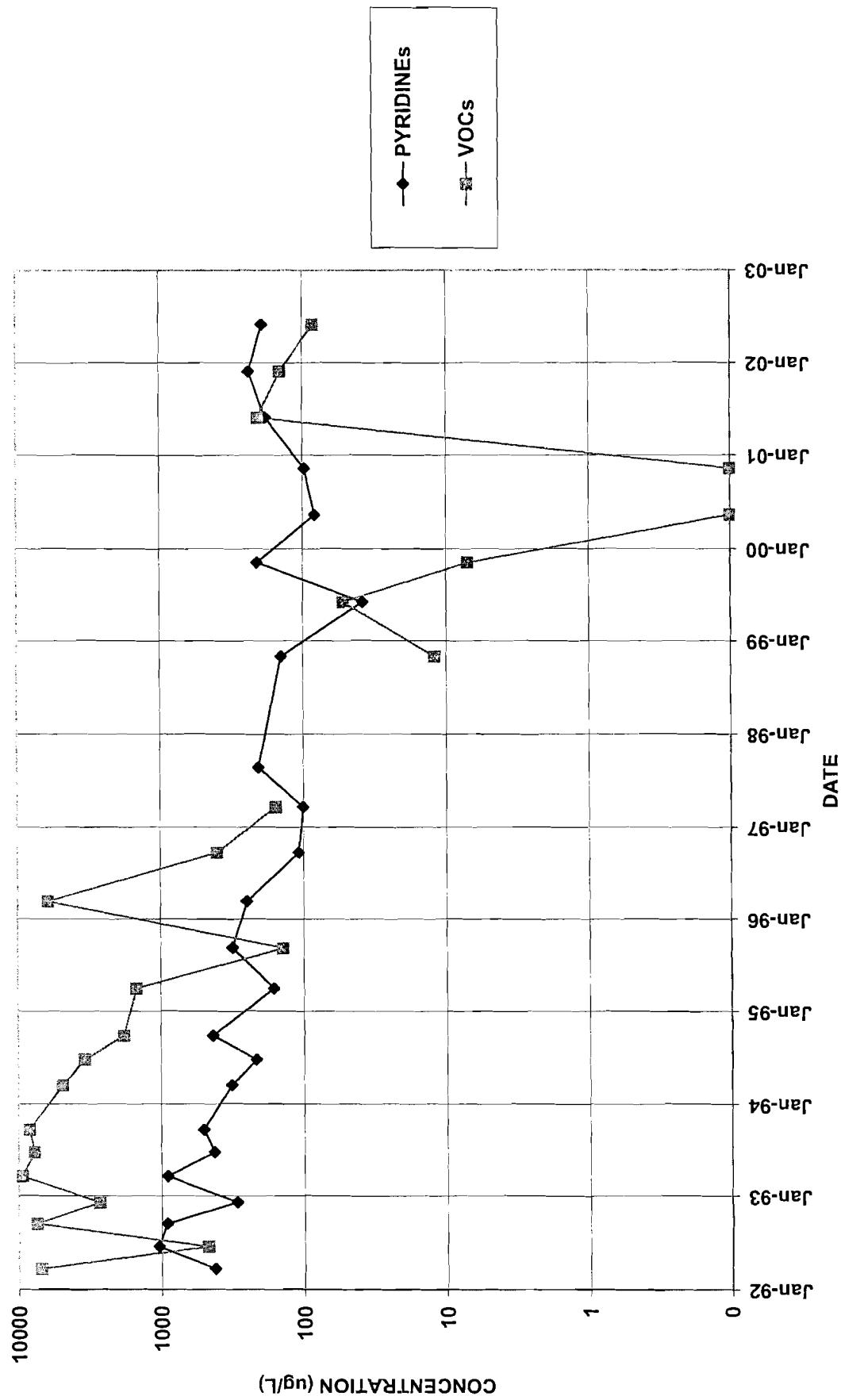
**BR-114**



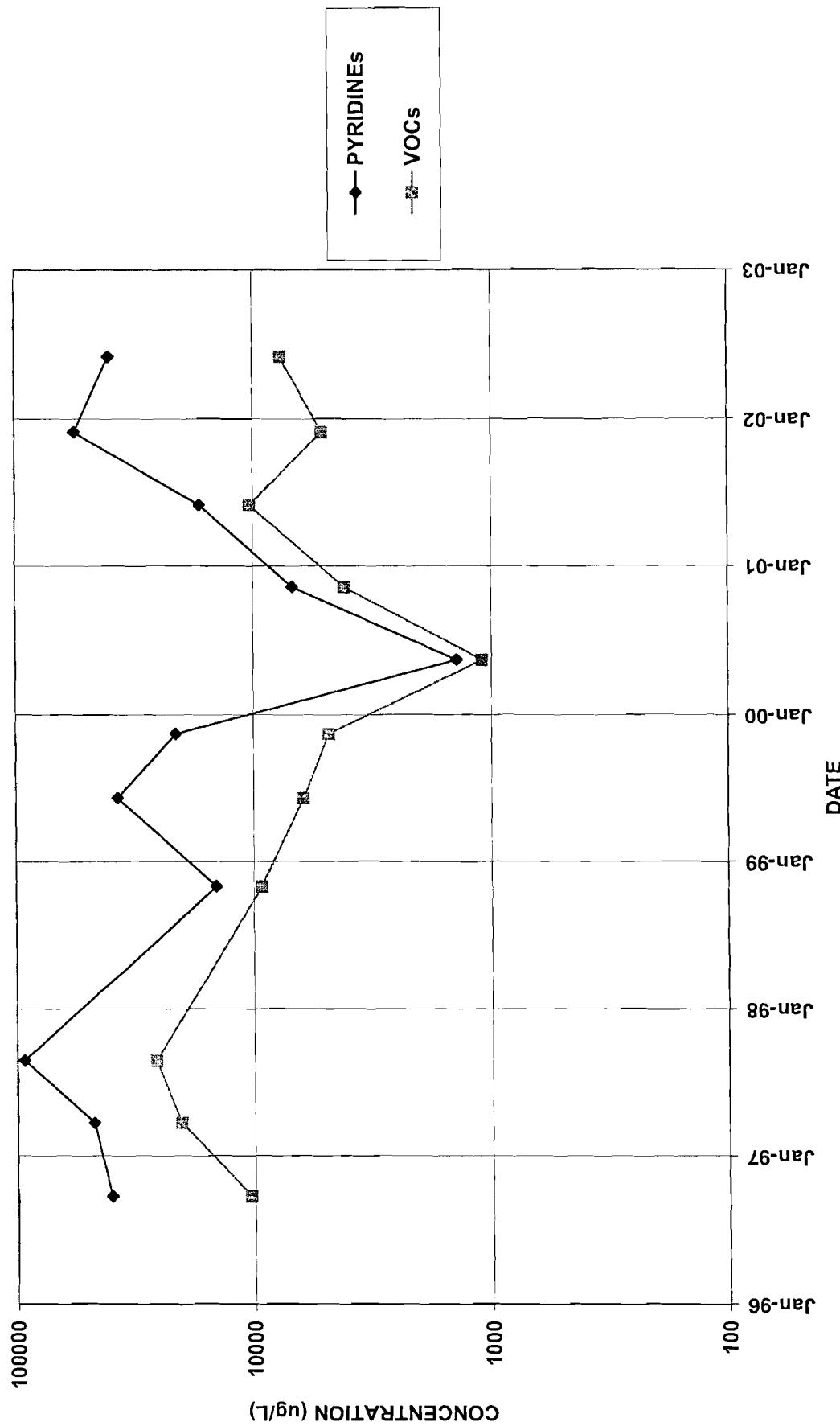
**BR-3**

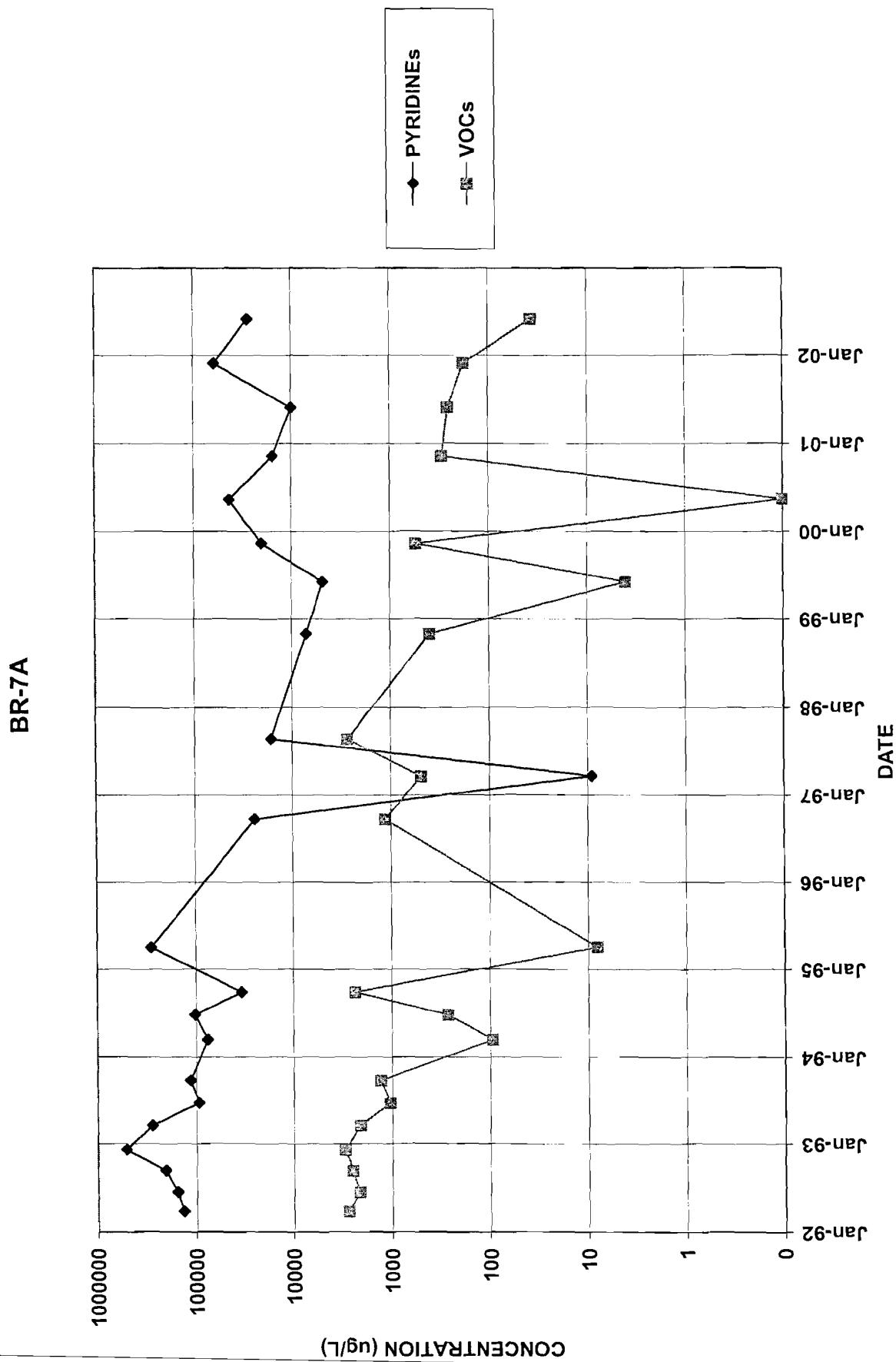


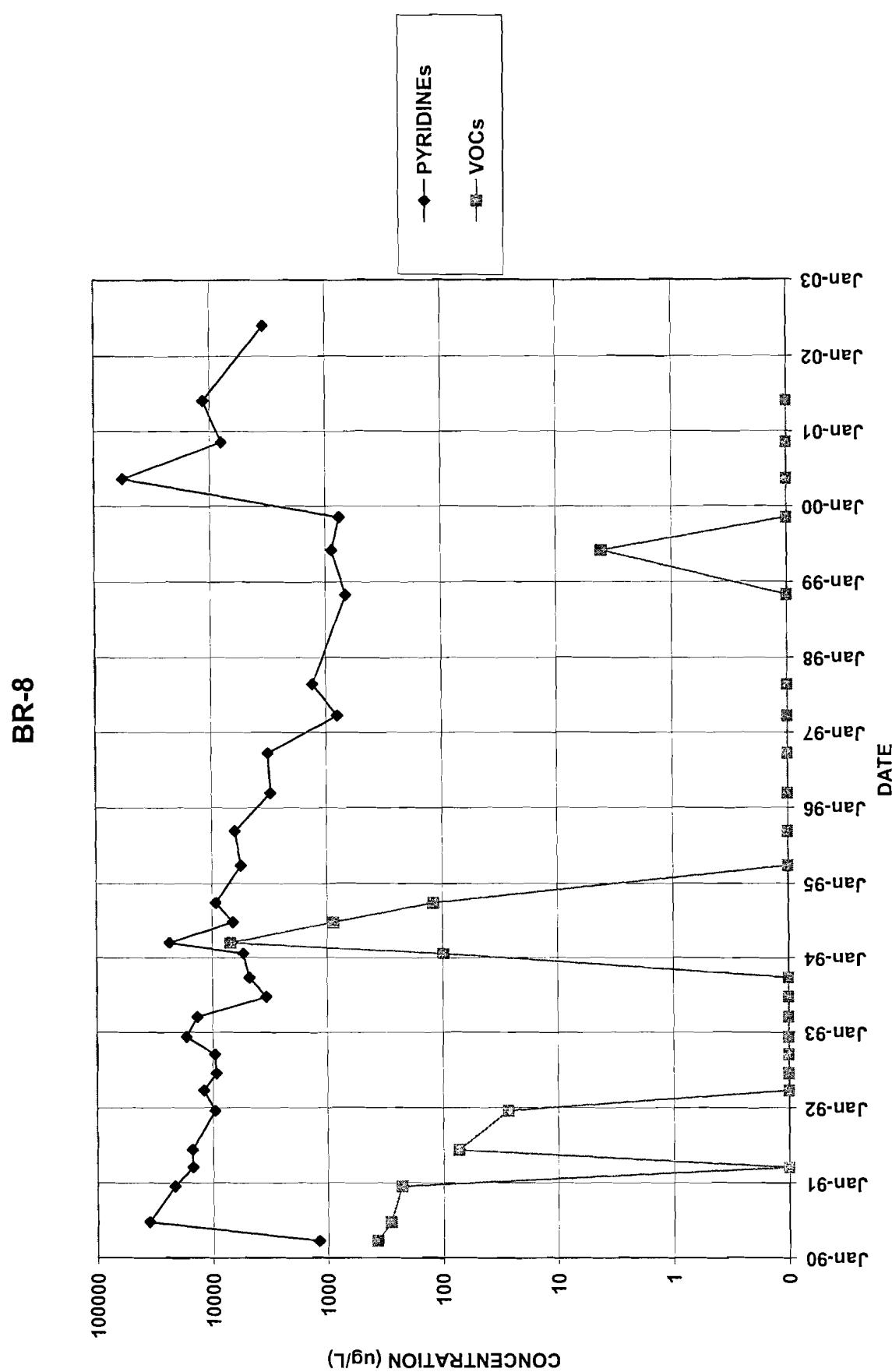
## BR-5A



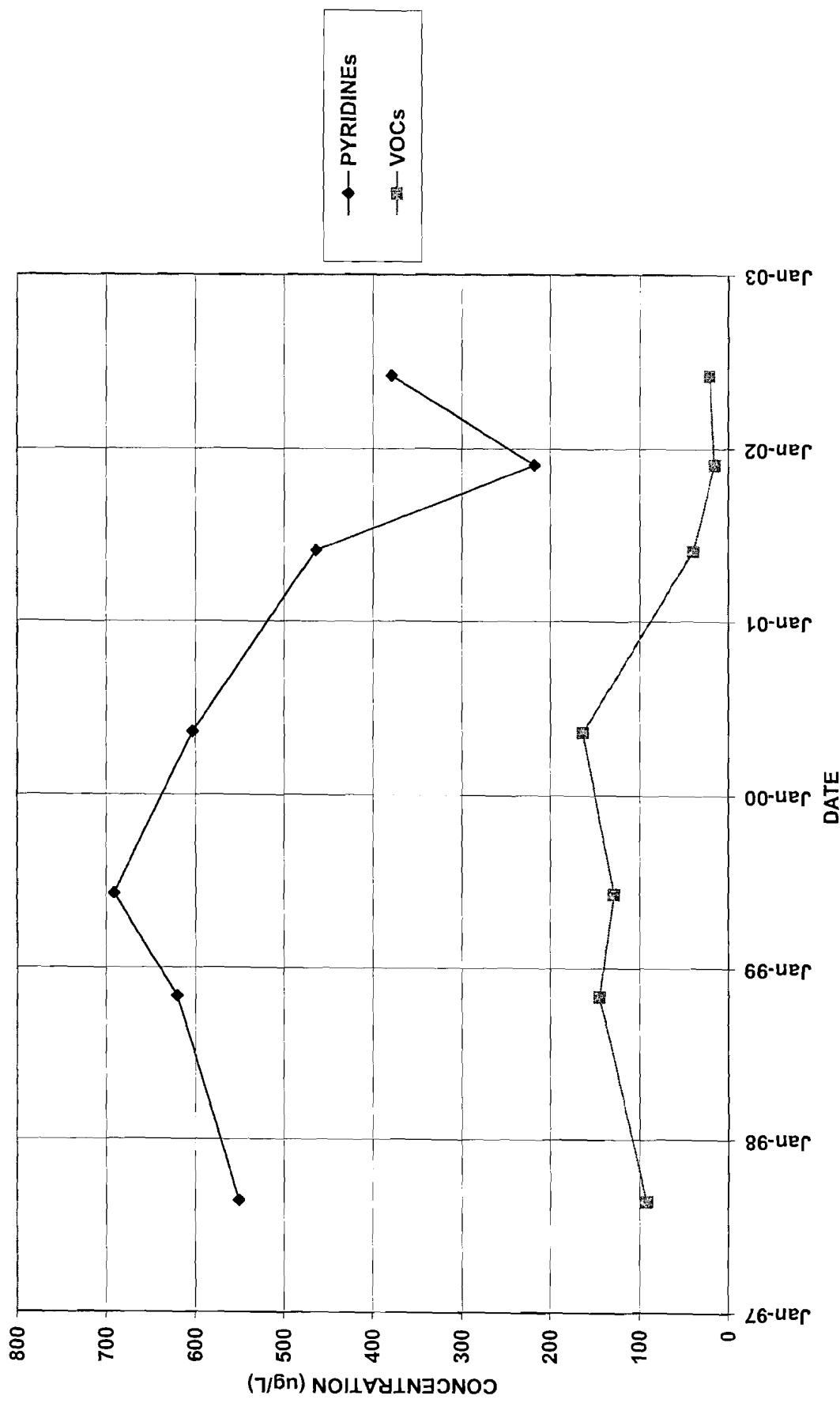
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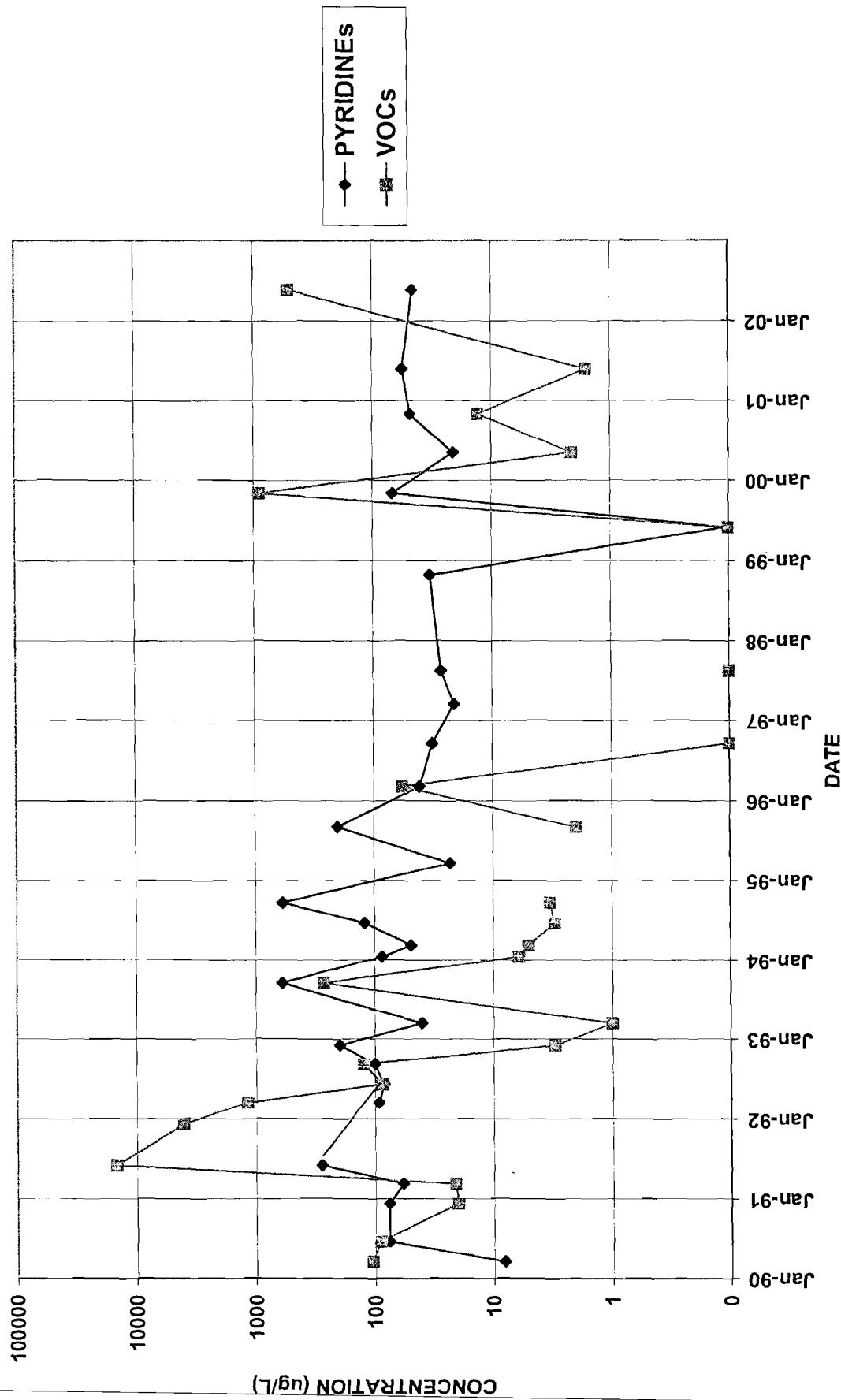




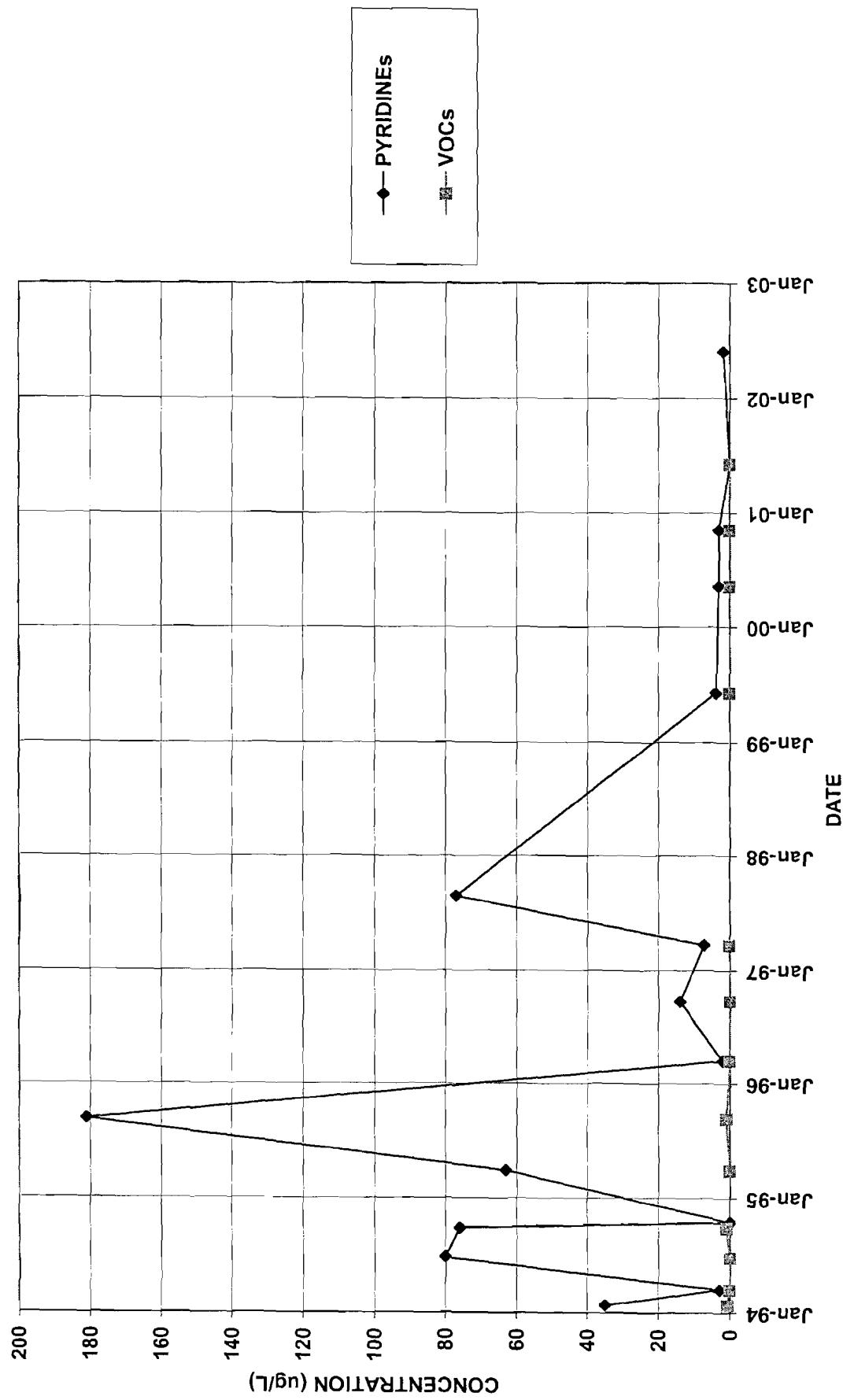
**BR-9**



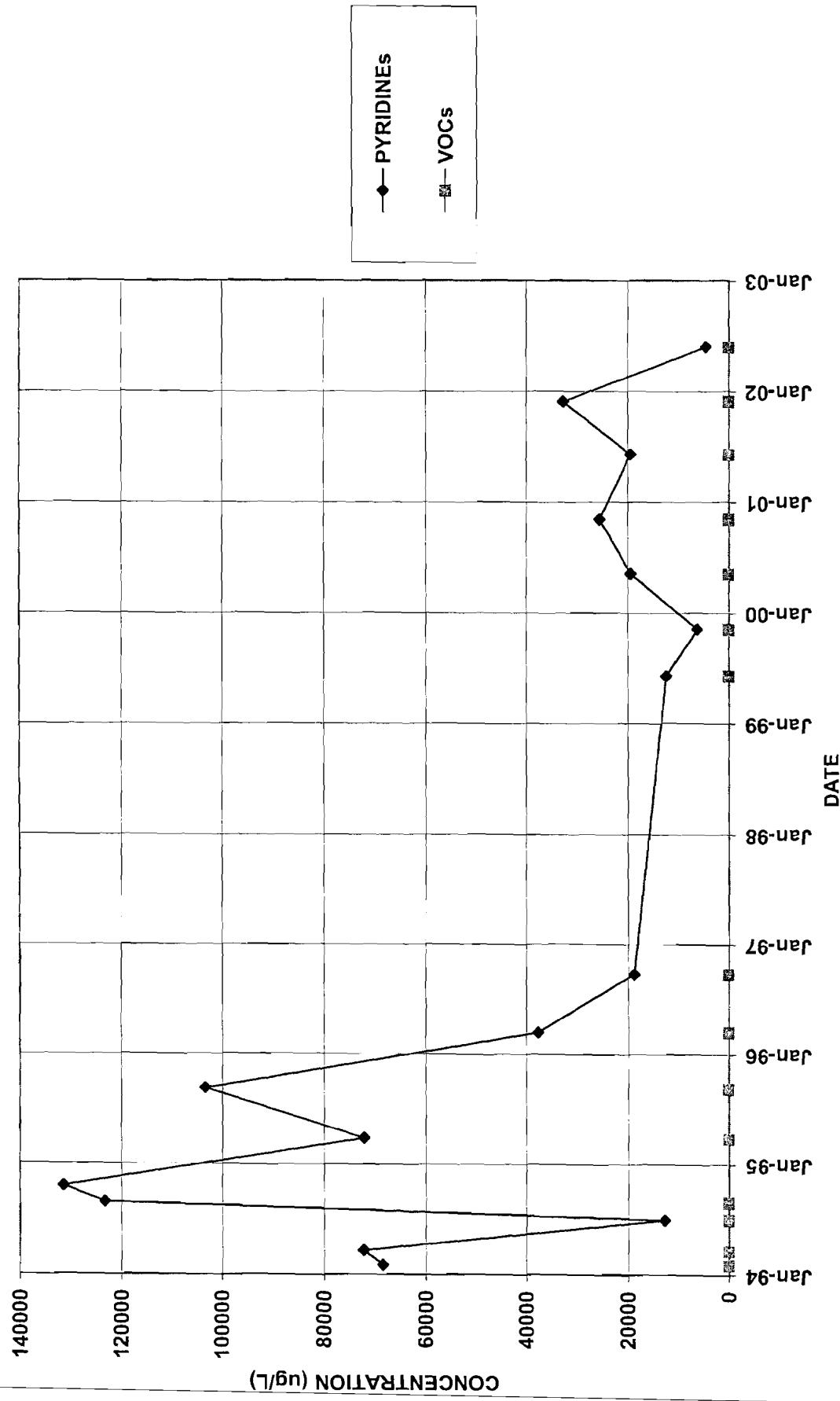
E-3



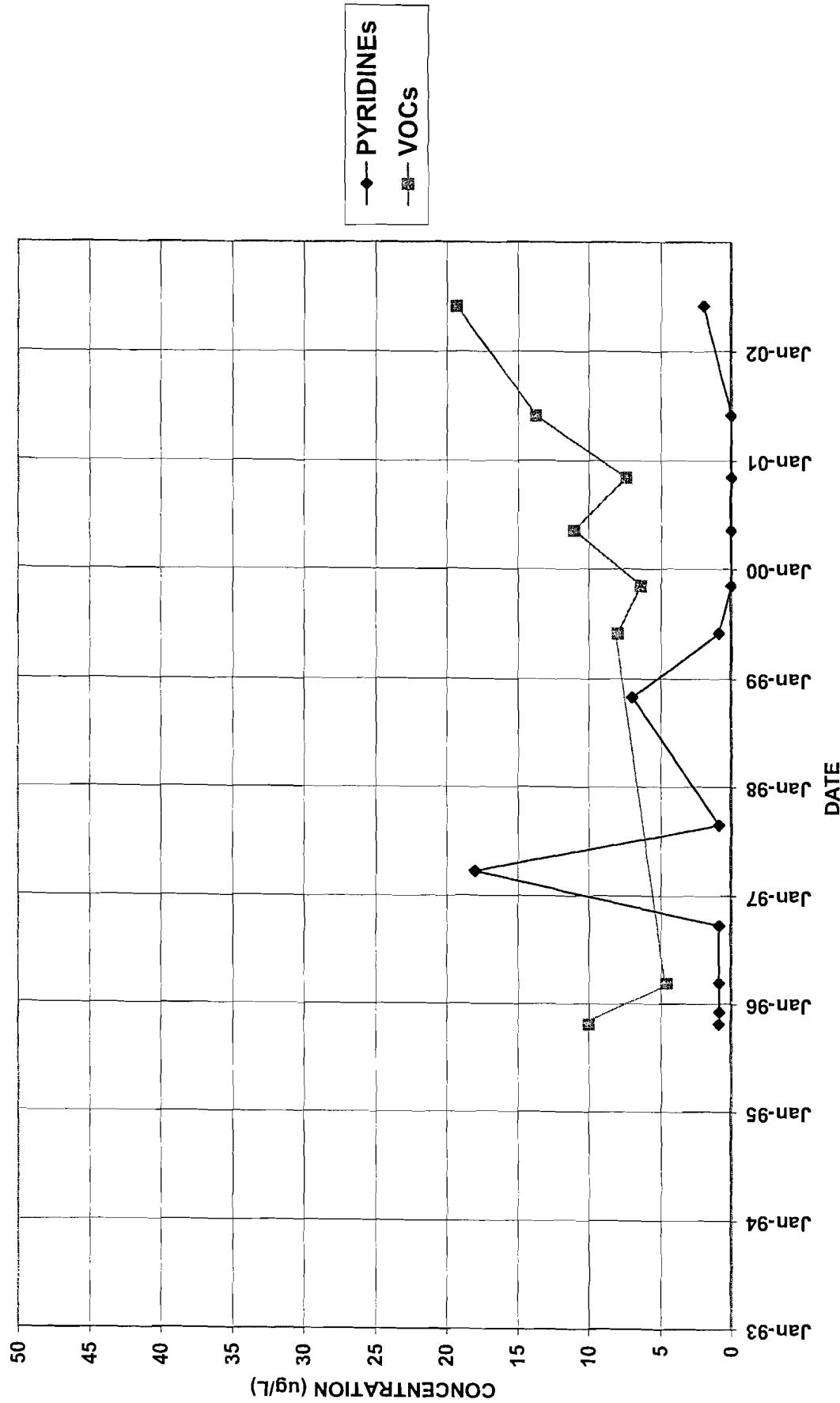
MW-104

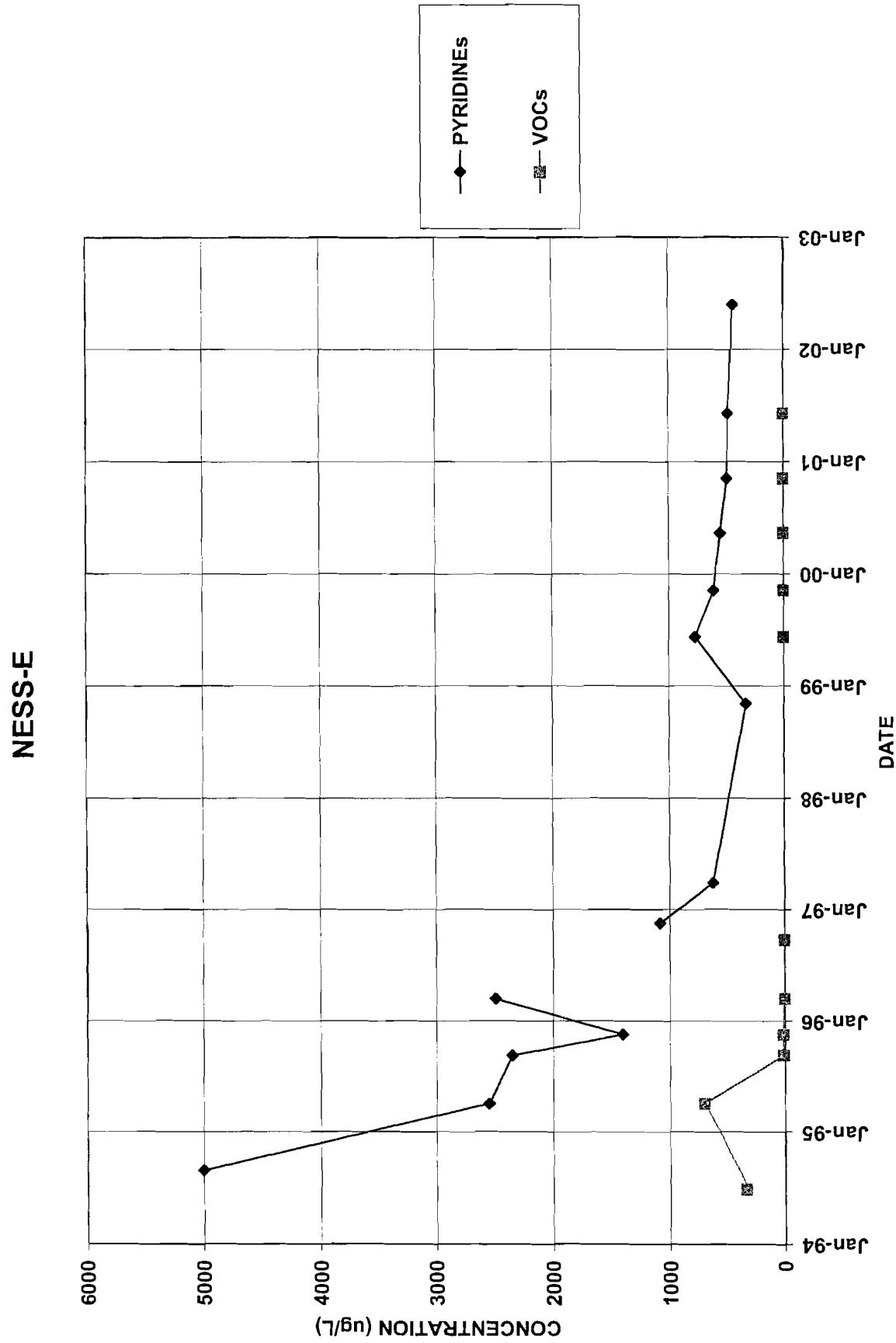


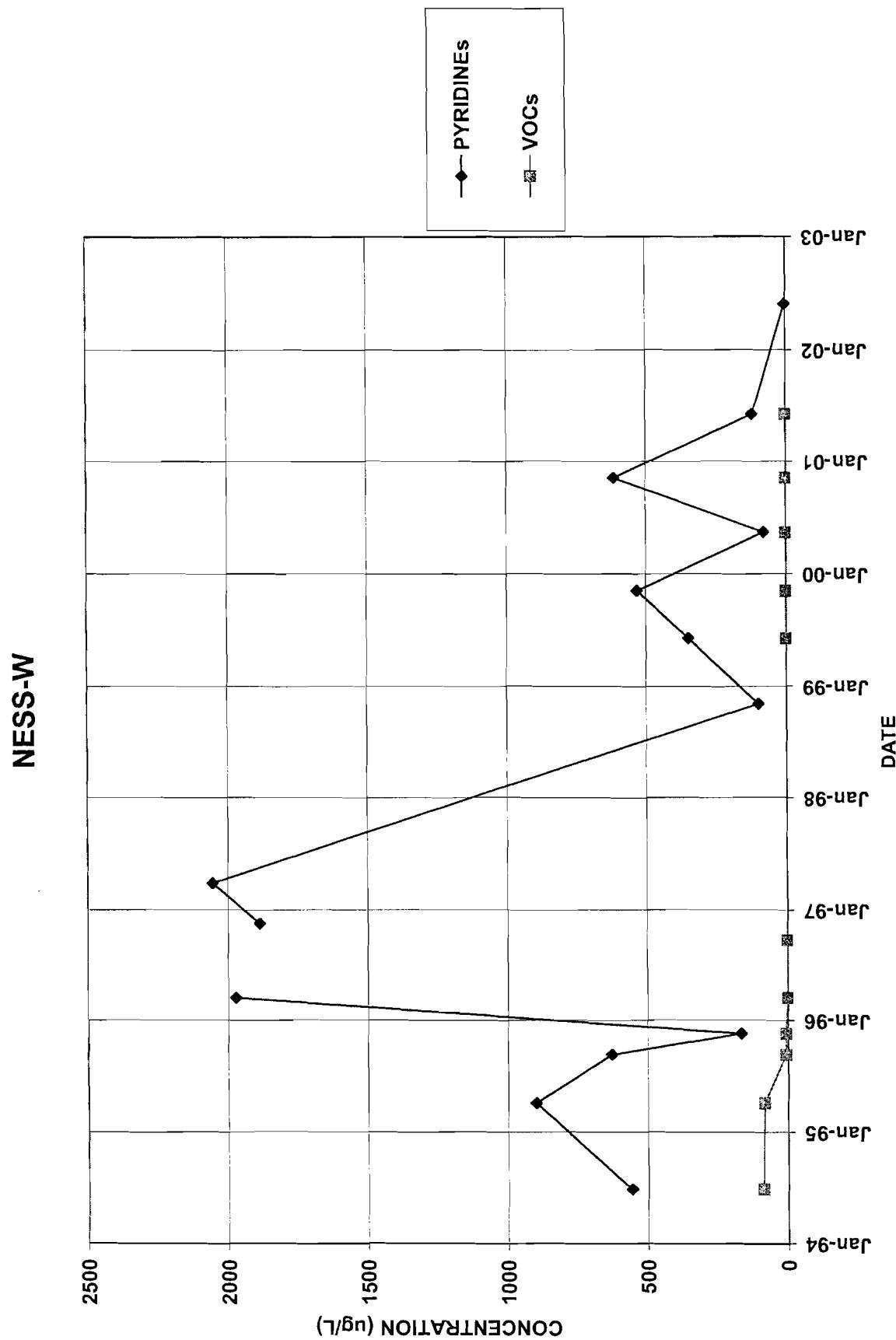
MW-106

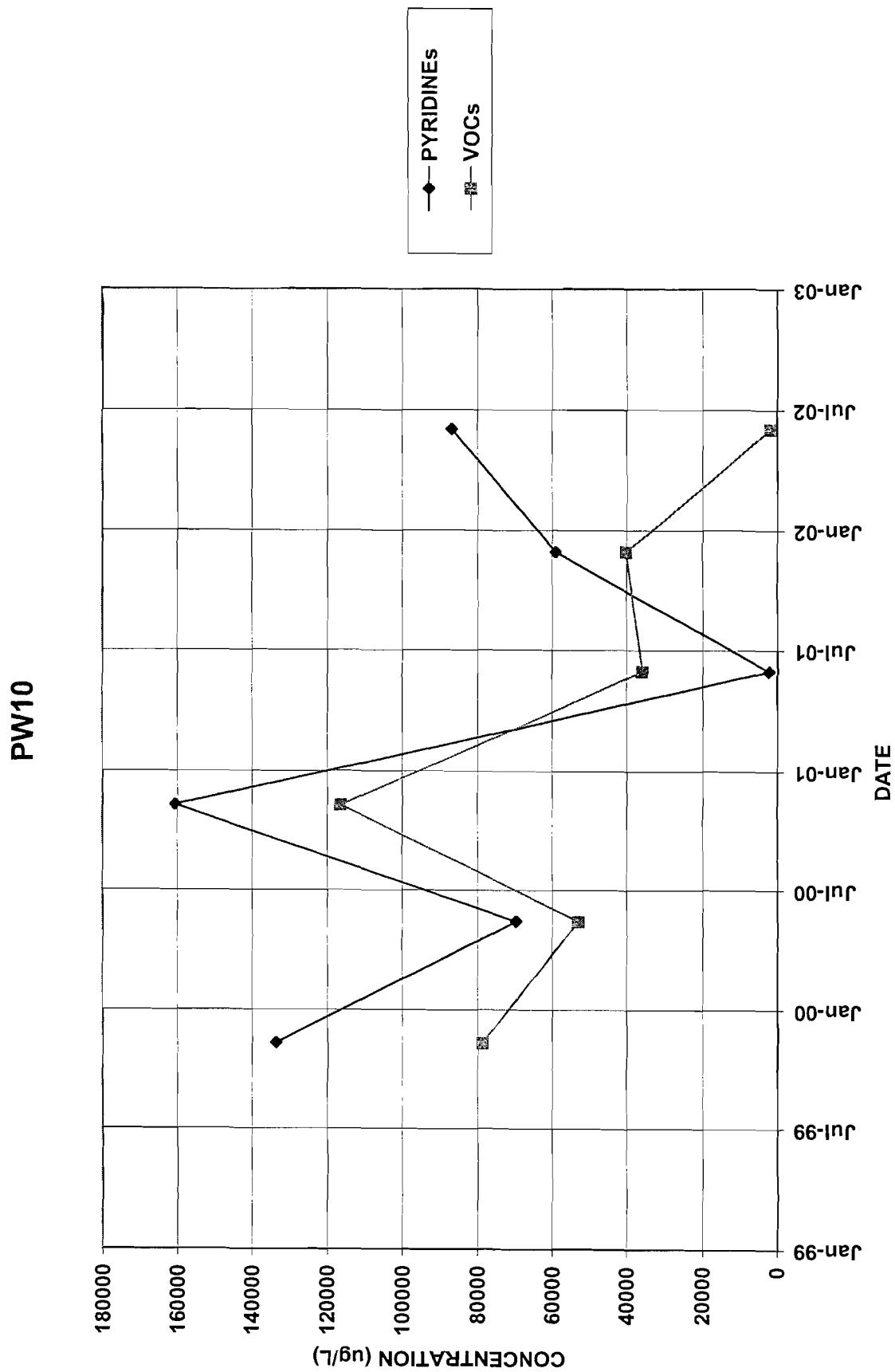


MW-114

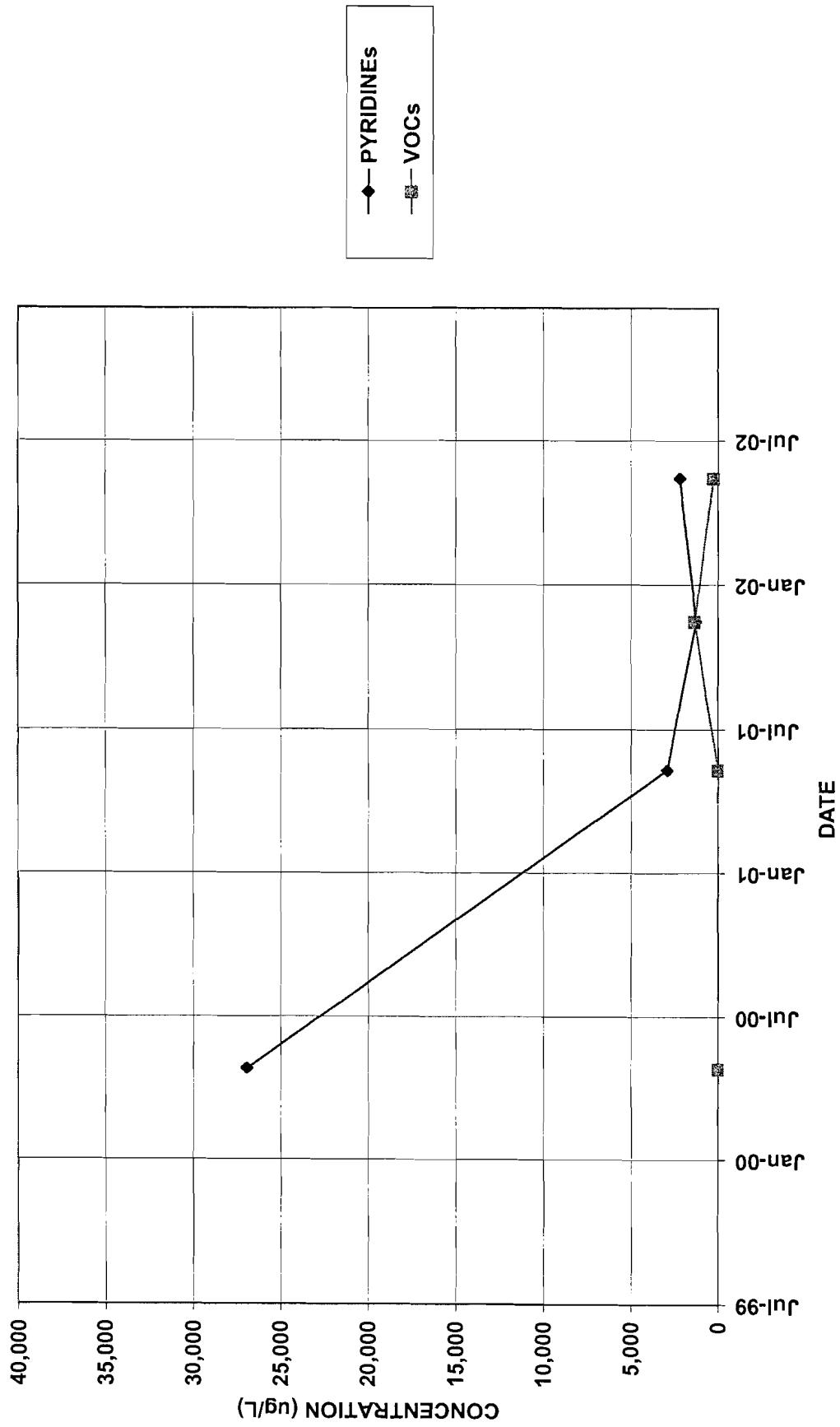




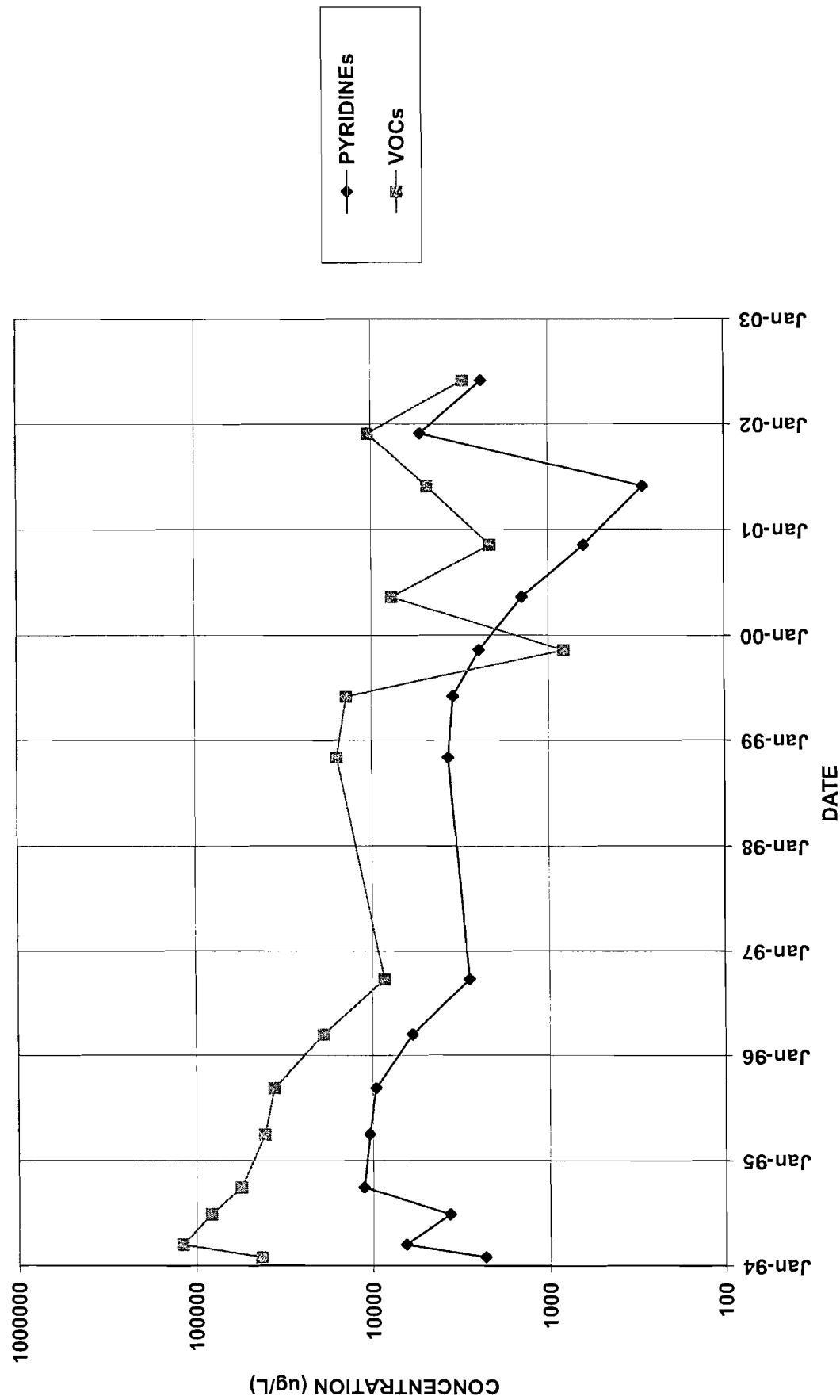




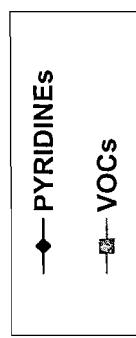
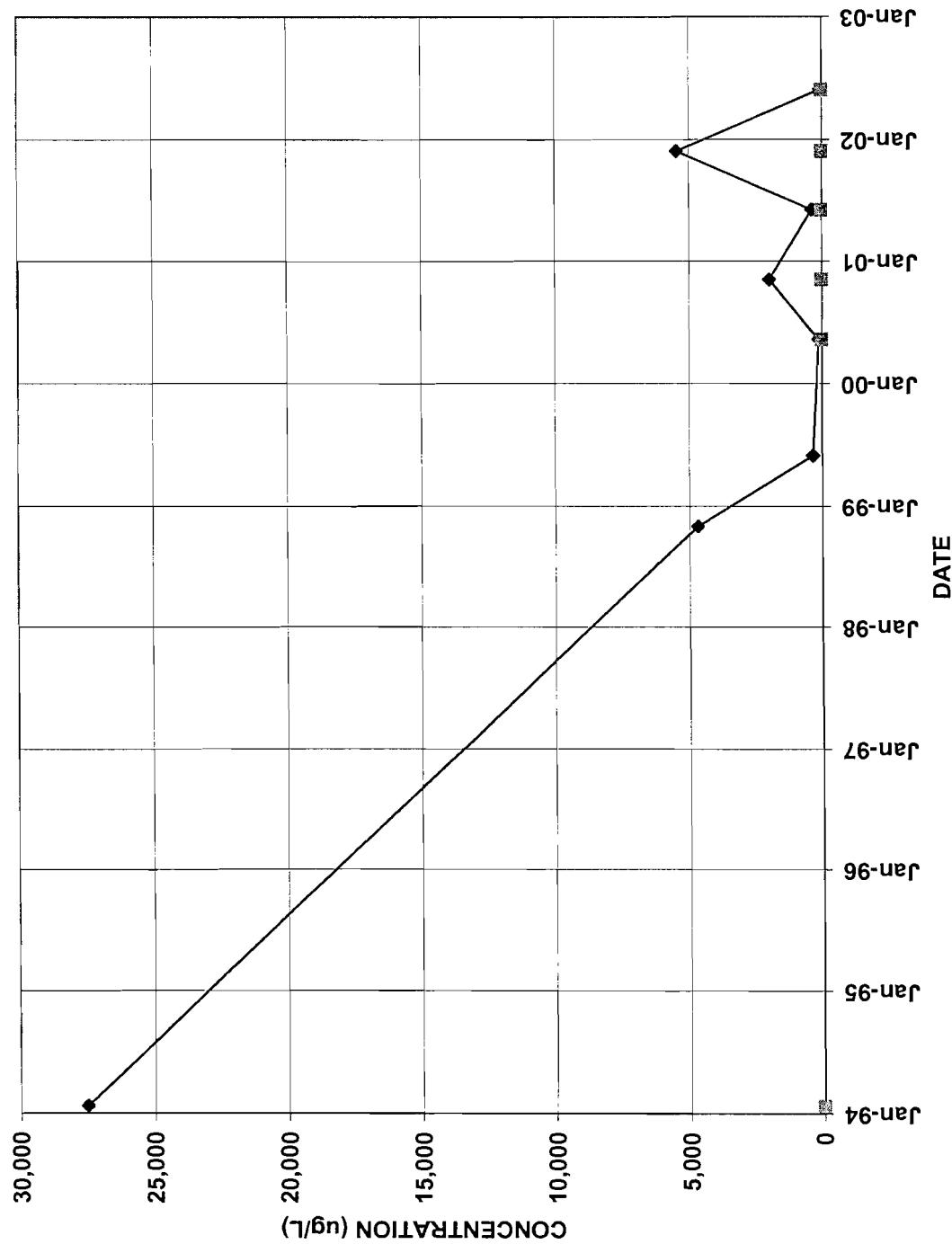
PW11



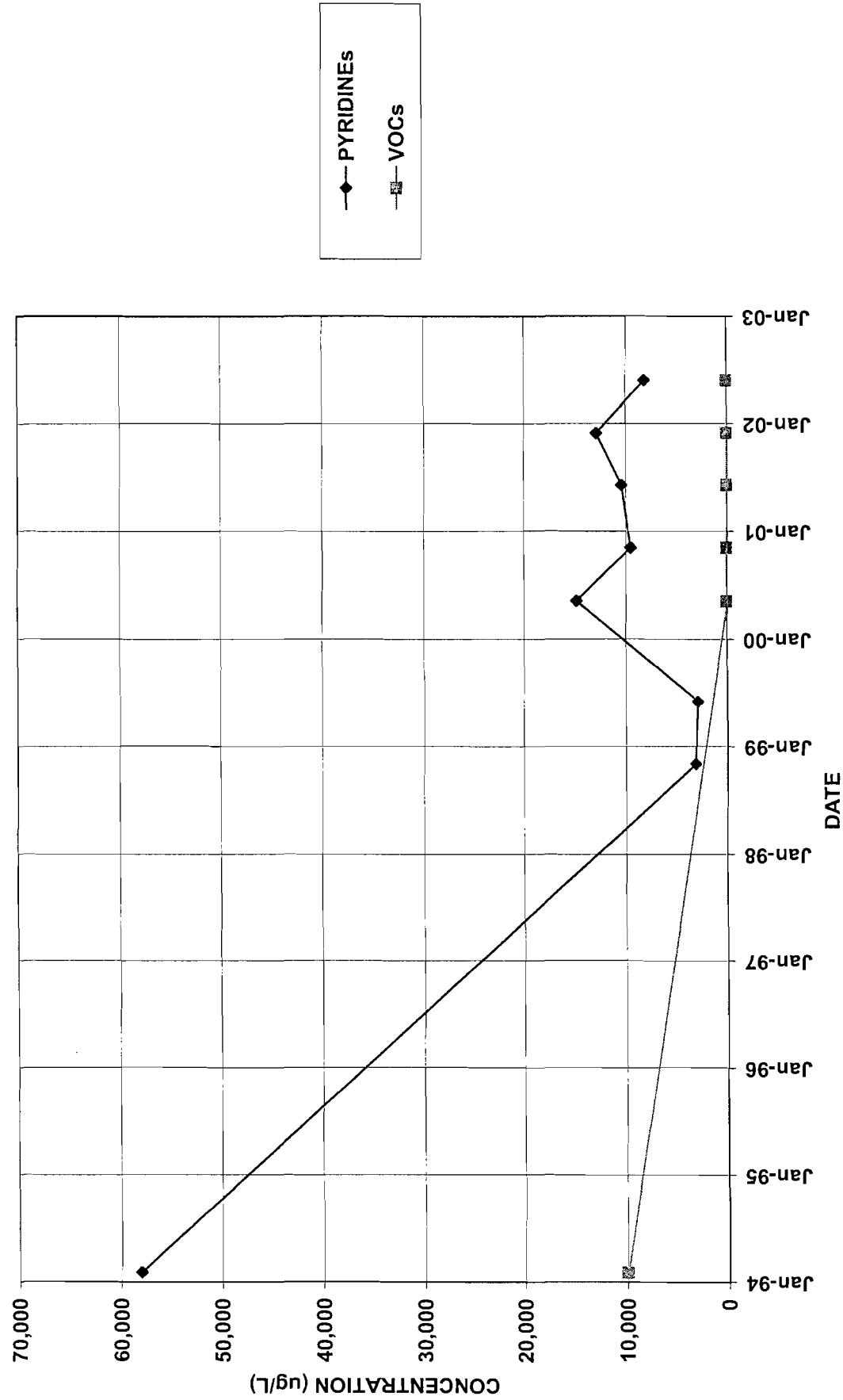
## PW12 (Formerly BR-101)



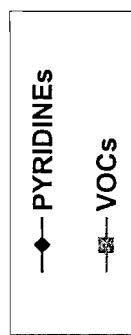
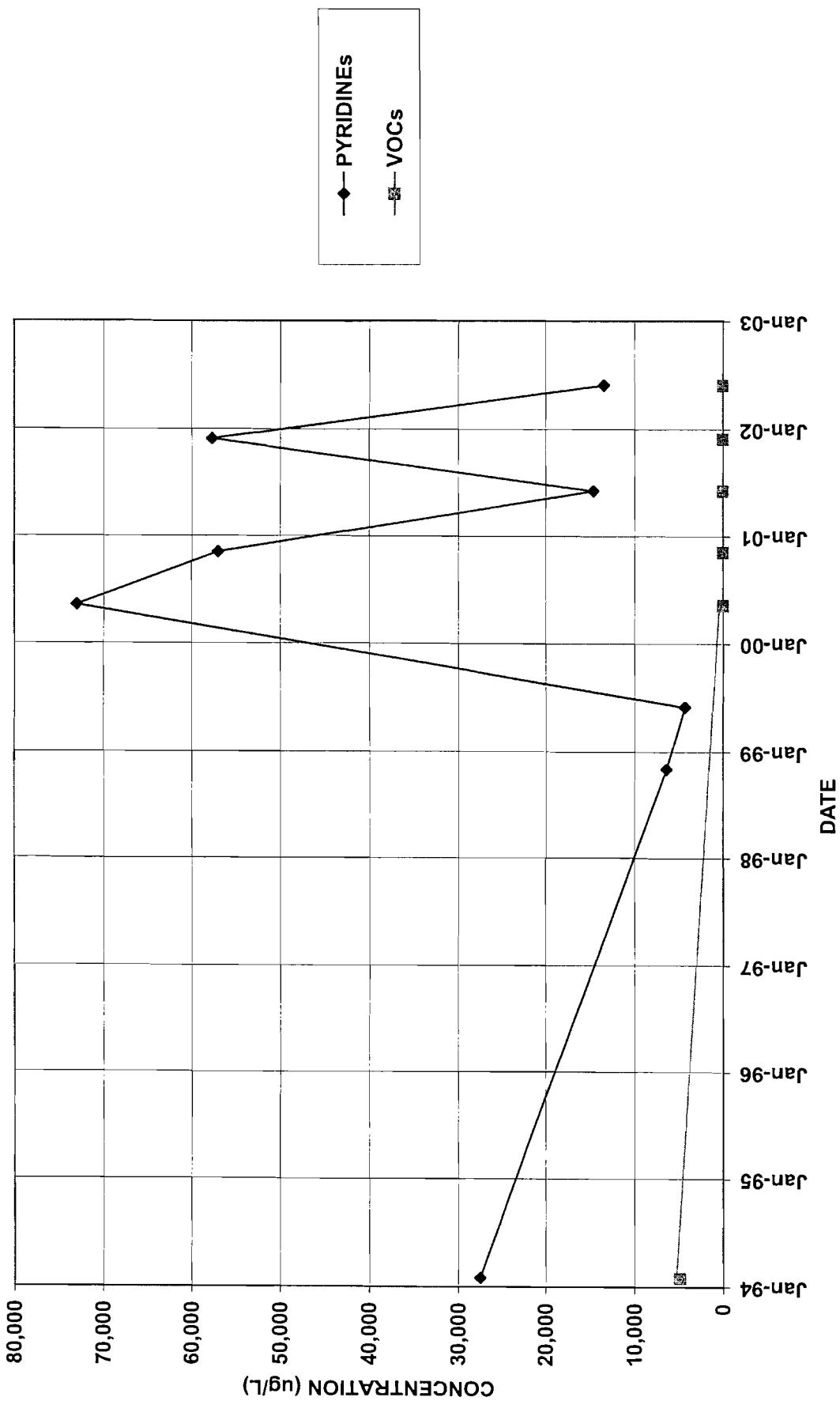
PZ-101



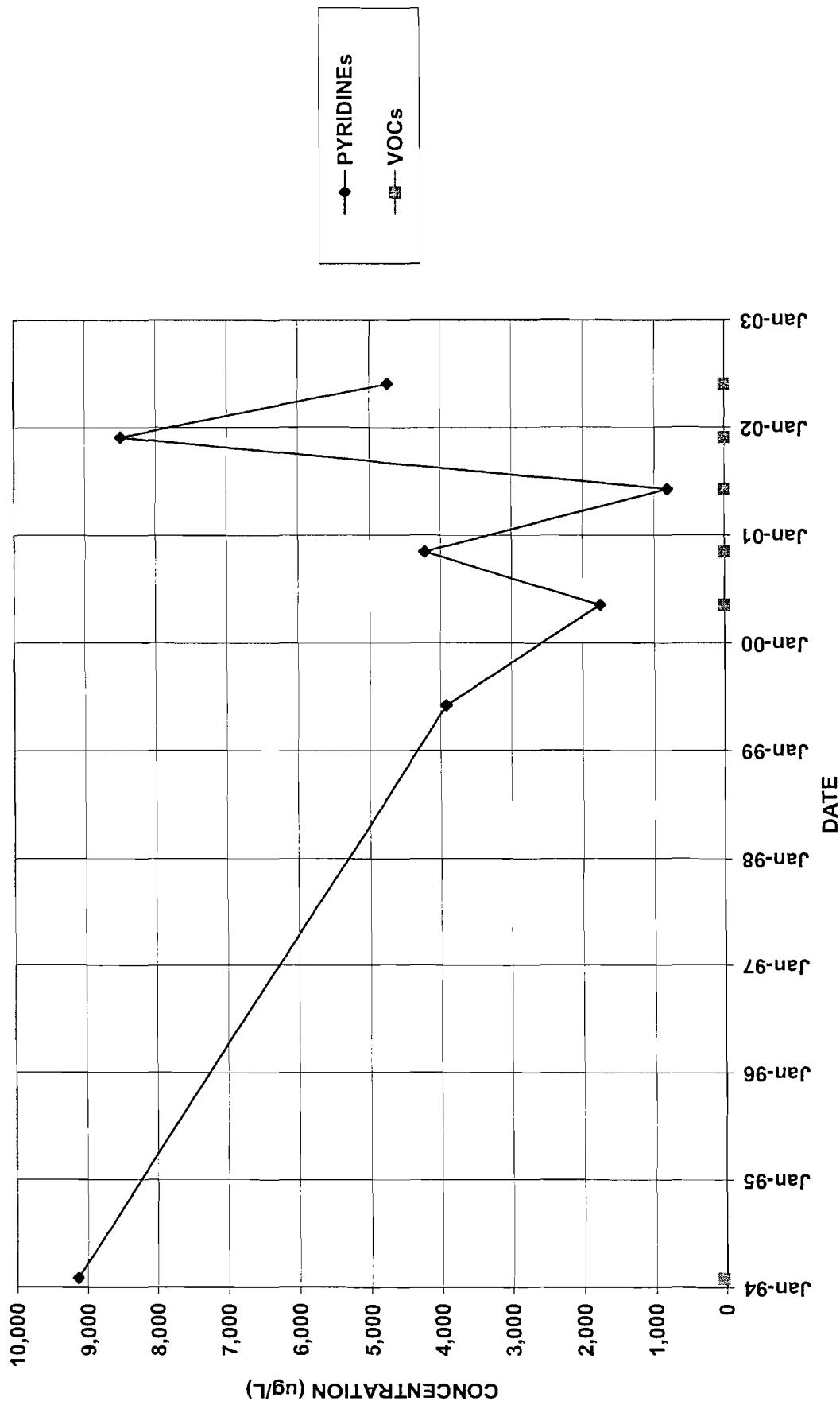
PZ-102



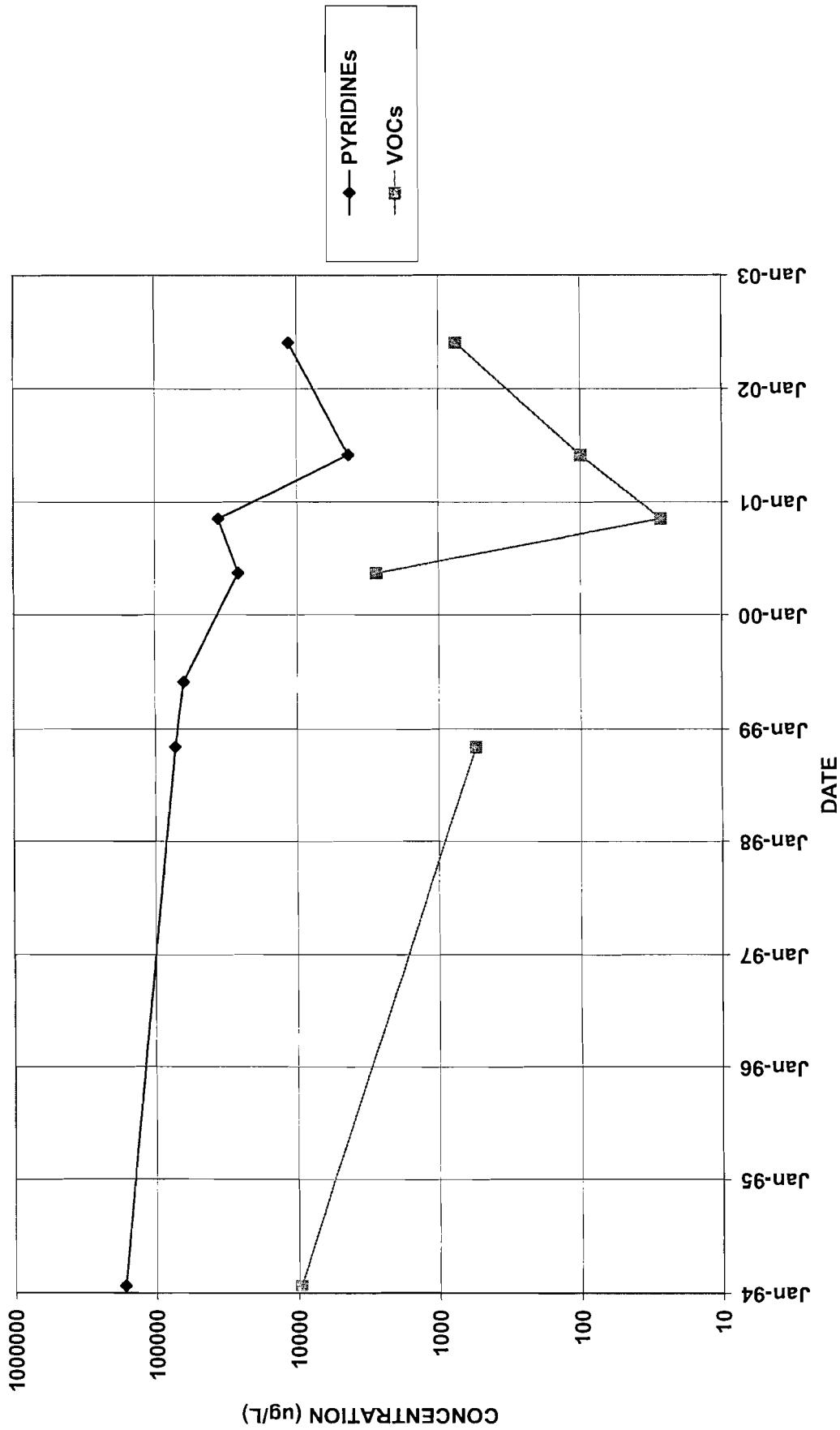
PZ-103



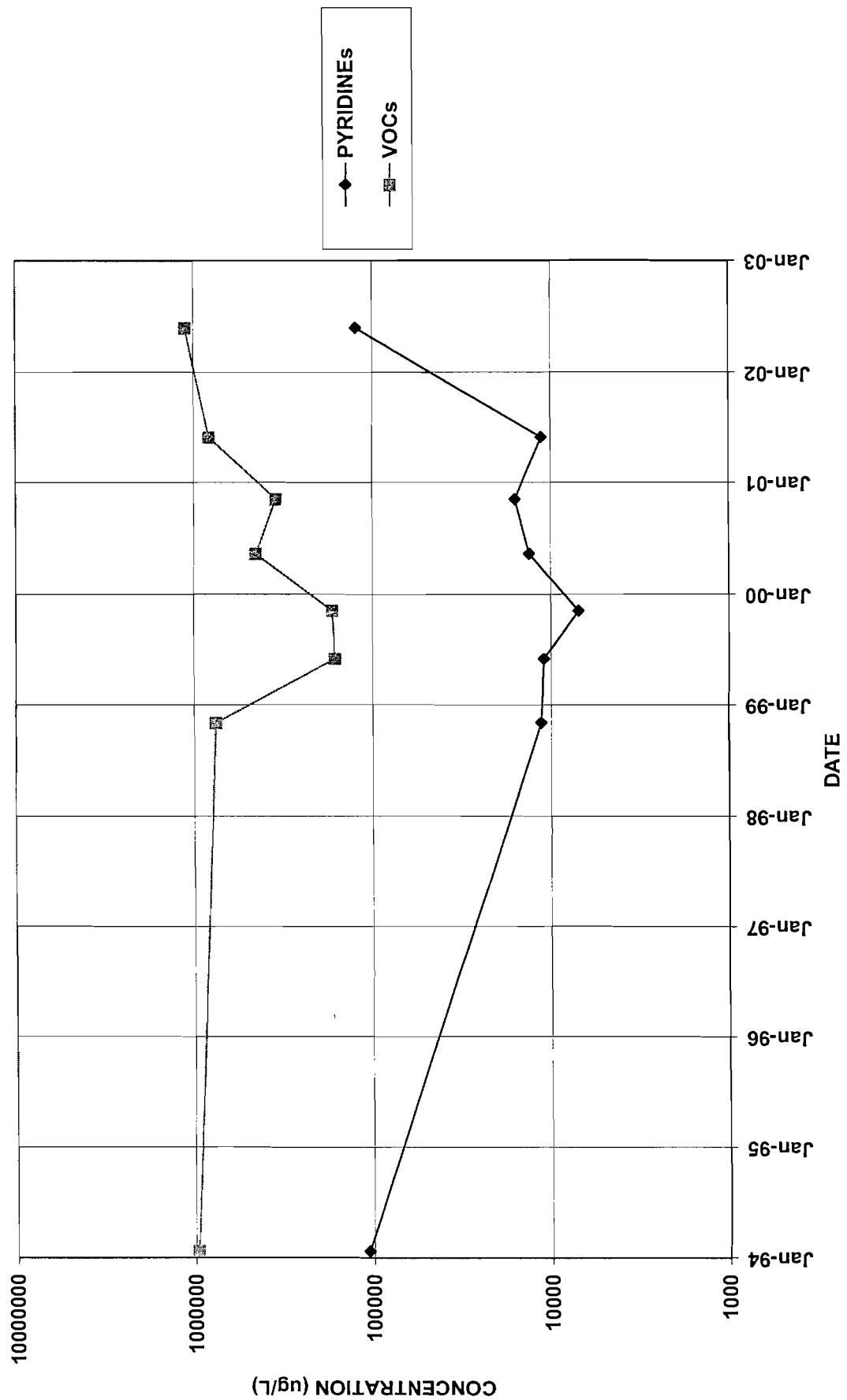
PZ-104



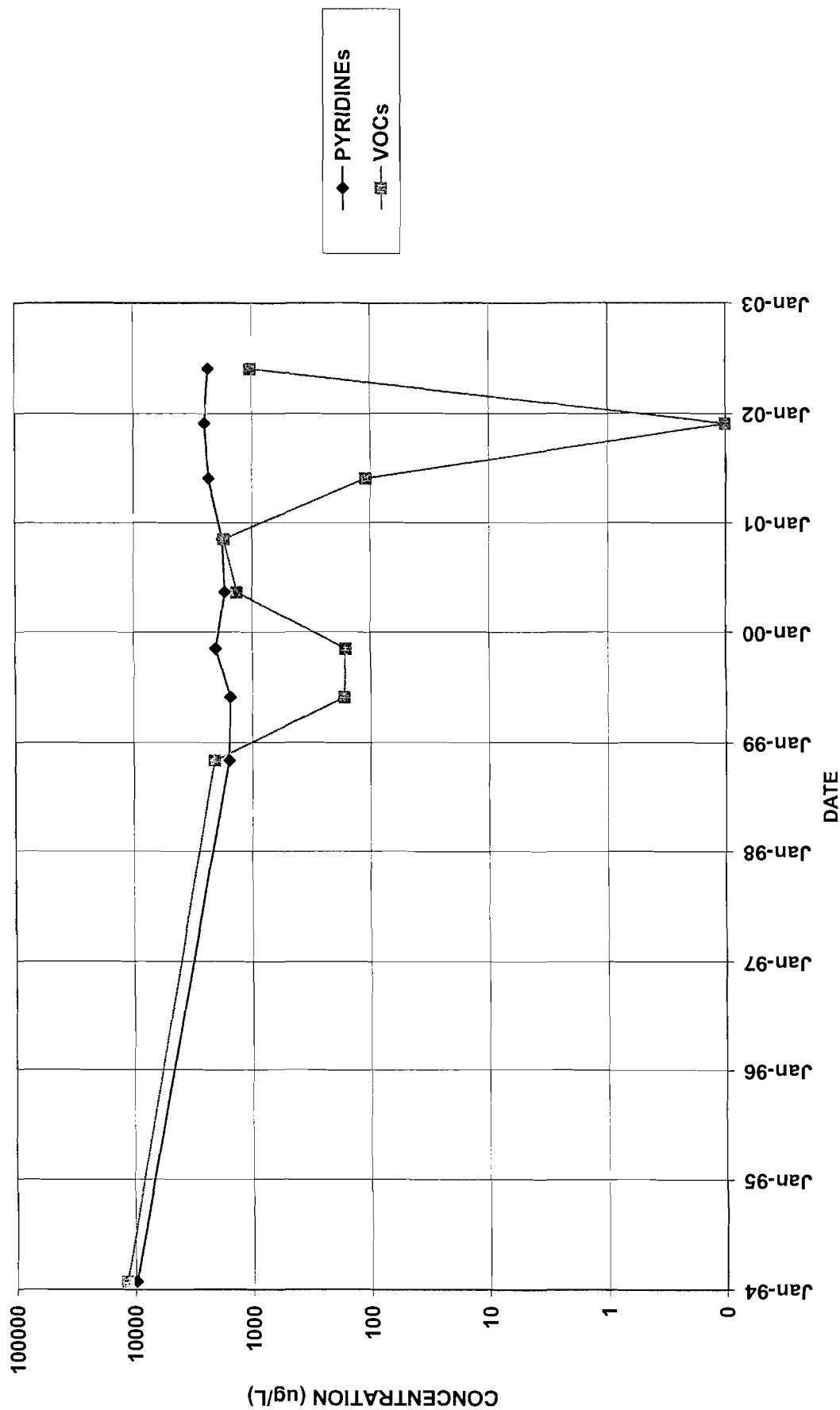
PZ-105



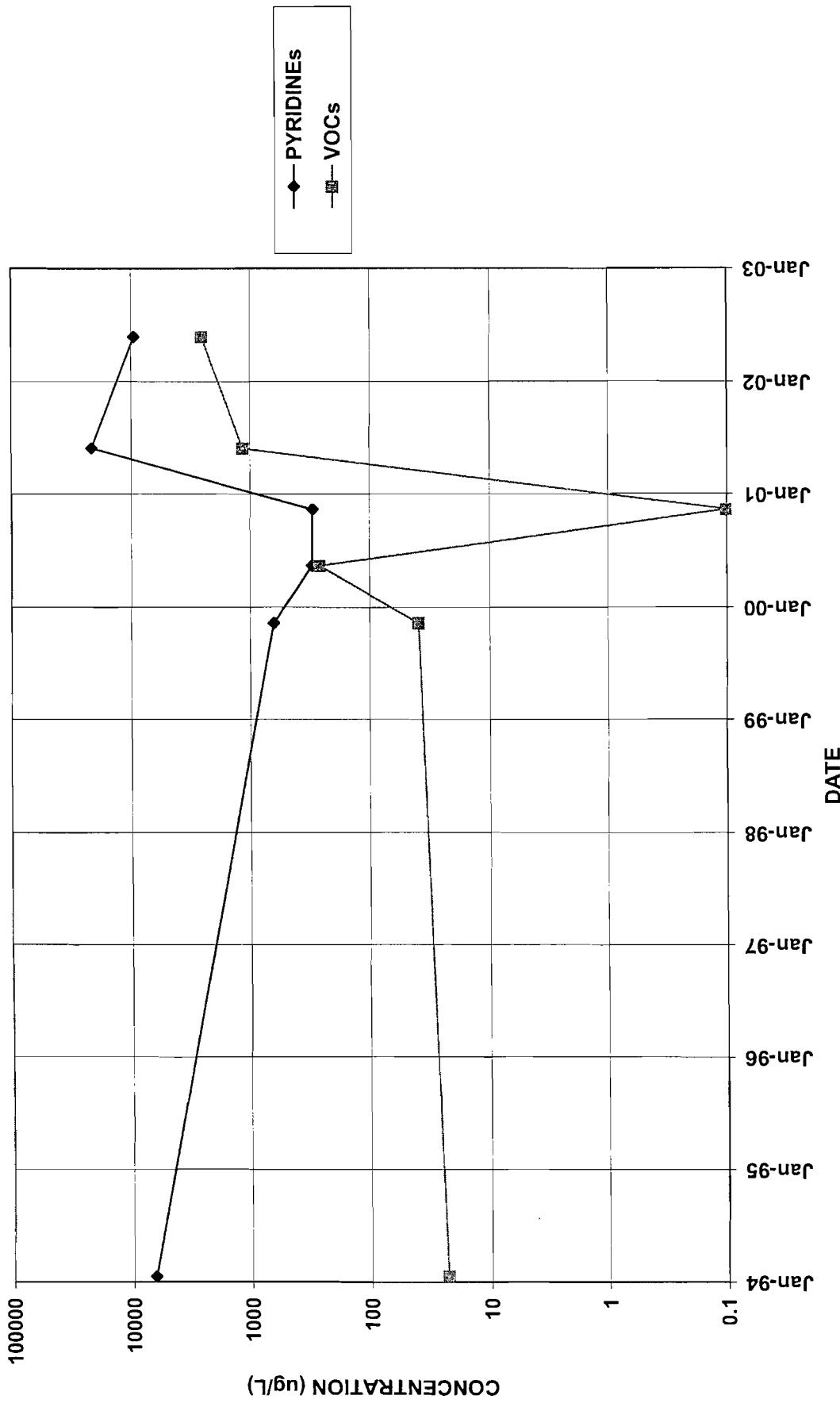
PZ-106



PZ-107



S-3



## QS-4 (QUARRY SEEP)

