SURFACE WATER AND GROUNDWATER MONITORING PROGRAM
FALL 2007 MONITORING REPORT

ARCH CHEMICALS
ROCHESTER PLANT SITE
ROCHESTER, NEW YORK

ARCH CHEMICALS, INC.
CHARLESTON, TENNESSEE

JANUARY 2008

SURFACE WATER AND GROUNDWATER MONITORING PROGRAM
FALL 2007 MONITORING REPORT

ARCH CHEMICALS
ROCHESTER PLANT SITE
ROCHESTER, NEW YORK

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF TABLES

EXECUTIVE SUMMARY

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

During this monitoring event, samples from a total of 28 groundwater monitoring or pumping wells and four locations associated with the Dolomite Products Quarry seep and outfall were collected and analyzed by TestAmerica in Amherst, New York.

As in prior reports, monitoring results were compared with previous average concentrations at each sampling location. Twenty of the 32 monitoring locations sampled for chloropyridines had contaminant concentrations that were at or below their respective 5-year prior averages. Twenty-one of the 27 monitoring locations sampled for volatile organic compounds had concentrations at or below their 5-year prior average. Contaminant contour plots are generally consistent with past observations.

Sampling locations associated with the quarry included the main quarry seep (QS-4), the quarry ditch where the quarry dewatering discharge enters the ditch (QD-1), the quarry ditch as it enters the Erie Barge Canal (QO-2), and the surface water in the canal approximately 100-feet downstream of the quarry ditch (QO-2S1). Sample locations QS-4, QO-2, and QO-2S1 were sampled on November 9, 2007, and were re-sampled (along with QD-1) on December 10, 2007, to accommodate a request by the NYSDEC. Chloropyridine concentrations in quarry seep QS-4 remain below the historical average for this location. QO-2 contained chloropyridines at an estimated 7 µg/L in the November 9 sample, but was non-detect in the December 10 sample. The canal location had no detectable chloropyridines in the November 9 sample, while an estimated result of 2 µg/L of 2-chloropyridine was reported in the December 10 sample.

During the period June 2007 through November 2007, the on-site groundwater extraction system pumped approximately 7 million gallons of groundwater to the on-site treatment system, containing an estimated 394 pounds of chloropyridines and 17 pounds of target volatile organic compounds.

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

Pumping well PW-10 is no longer operational, and Arch has installed a replacement well (PW-15) approximately 75 feet south of PW-10. A pump and controllers are currently being installed, and the new well will be activated by approximately February 1, 2008.

All accessible on-site monitoring wells were checked for the presence of dense non-aqueous phase liquids (DNAPL) and floating (or light) NAPL (LNAPL), using an interface probe. No DNAPL or LNAPL was observed in any of these wells, with the exception of pumping well PW-13. Arch has been tracking the accumulation of LNAPL in PW-13 since the well was installed in 2004. During this monitoring event, the measured thickness of LNAPL in PW-13 was 0.44 feet.

The next regular monitoring event will occur in May 2008 and will include groundwater, surface water, and seep sampling.

1.0 INTRODUCTION

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

The Fall 2007 sampling event included the collection and analysis of a total of 32 groundwater, surface water, and seep samples from off-site and on-site locations. Samples were collected between November 9 and December 10, 2007, for analysis of selected chloropyridines and volatile organic compounds (VOCs).

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

2.0 SAMPLE COLLECTION AND ANALYSIS

2.1 GROUNDWATER

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

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

Groundwater piezometric elevations were measured on November 9, 2007. Piezometric contour maps were constructed for each water-bearing zone (overburden, bedrock, and deep bedrock) and are presented in Figures 3, 4, and 5.

All accessible on-site monitoring wells were again checked for the presence of non-aqueous phase liquid (NAPL), using an interface probe. No dense NAPL (DNAPL) was observed in any of these wells. 0.44 feet of floating NAPL (LNAPL) was observed in pumping well PW-13, where it has been observed since the well's installation in 2004. The LNAPL has been previously analyzed as No. 2 fuel oil and there is no indication that it originates from the Arch facility. LNAPL was not observed in any of the other on-site wells.

2.2 SURFACE WATER

Surface water and quarry seep samples were collected as part of the on-going monitoring program for the Arch Rochester site. The location of the quarry and its outfall in relation to the site is shown on Figure 6. Samples of the quarry seep (QS-4), the surface ditch that receives the quarry discharge (QO-2, at the point where the ditch flows into the canal), and

the Barge Canal (QO-2S1) were collected by TestAmerica on November 9, 2007. Shortly after those samples were collected, the NYSDEC requested that Arch also collect a sample from QD-1, which is located in the surface ditch immediately adjacent to where the quarry dewatering system discharges into the ditch. In order to have a complete contemporaneous set of data from the quarry area, the three previous sample locations (QS-4, QO-2, and QO-2S1) were re-sampled at the same time as QD-1, on December 10, 2007. Location QD-1 was not previously part of the routine monitoring schedule, but has now been added to the program at the request of the NYSDEC. All quarry-related samples were analyzed for the Arch suite of selected chloropyridines. The quarry locations sampled during the Fall 2007 event are shown on Figure 7.

2.3 ANALYTICAL PROCEDURES

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

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

2.4 QUALITY CONTROL

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

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

* - *all criteria were met for this parameter*

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

Blank Contamination. Blank contamination was reported in the method and trip blanks for carbon disulfide (0.83 µg/L) and methylene chloride (0.81 µg/L). An action level was calculated at ten times the highest detection reported in the blanks for methylene chloride and five times the blank concentration for carbon disulfide. The action level was then multiplied by the dilution factor if applicable. The results for carbon disulfide were less than the action level in samples E-1 and PZ-107 and were qualified as non-detect (U). The results for methylene chloride were less than the action level in samples PZ-105, PZ-107, S-3, E-1, PZ-106, PW-12, BR-9, and PW-10 and were also qualified as non-detect (U).

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

3.0 ANALYTICAL RESULTS

3.1 GROUNDWATER

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

3.1.1 Chloropyridines

On-Site. Chloropyridines were detected above sample quantitation limits in all 18 on-site wells sampled in the Fall 2007 event. Concentrations of chloropyridines ranged from 15 micrograms per liter (µg/L) (sum of all chloropyridine and pyridine isomer concentrations) in monitoring well S-4 to 380,000 µg/L in new pumping well PW-15. Eleven of the on-site wells exhibited total chloropyridine concentrations that were below their respective means from monitoring events over the previous five years (see Table 4). Wells BR-7A, MW-127, PW-12, PW-13, PW-14, PZ-105 and PZ-106 contained chloropyridines at levels exceeding their prior 5-year means.

Off-Site. Chloropyridines were detected above sample quantitation limits in all 10 off-site wells that were sampled. Concentrations of total selected chloropyridines ranged from 12 µg/L (in MW-16 on the former General Circuits property) to 34,000 µg/L (in well PZ-103 on the west side of McKee Road). Six of the 10 off-site wells contained total chloropyridine concentrations that were below their respective 5-year prior means, while wells BR-106, MW-106, PZ-102, and PZ-103 exceeded their prior 5-year means.

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

3.1.2 Selected VOCs.

On-Site. Selected VOCs were detected in 16 of the 18 on-site wells sampled in the Fall 2007 event. Total concentrations of selected VOCs ranged from non-detect (in wells MW-127 and S-4) to 150,000 µg/L in PZ-106 for the sum of the principal site-related contaminants (carbon tetrachloride, chloroform, methylene chloride, tetrachloroethene, and trichloroethene). Only four of the 22 on-site wells (BR-127, BR-7A, E-1, and PW-13) contained concentrations of total VOCs above their 5-year prior means. In addition to the selected VOCs, other notable constituents detected in on-site wells include chlorobenzene

(in 14 out of 18 wells), toluene (13 of 18), benzene (11 of 18), vinyl chloride (11 of 18), 1,2-dichloroethene (11 of 18), carbon disulfide (8 of 18), ethylbenzene (5 of 18), and 1,1-dichloroethane (5 of 18).

Off-Site. Selected VOCs were detected in 4 of the 9 off-site wells sampled for VOCs in the Fall 2007 event. Total concentrations of selected VOCs ranged from non-detect (in MW-106, BR-106, BR-126, PZ-101, and PZ-104) to 12 µg/L (in PZ-103). Only one of the 9 off-site wells (PZ-102) had selected VOC concentrations above its prior 5-year mean. In addition to the selected VOCs, other notable constituents detected in off-site wells include benzene (in 9 out of 9 wells), chlorobenzene (8 of 9), 1,2-dichloroethene (7 of 9), carbon disulfide (5 of 9), toluene (4 of 9), 1,2-dichloroethane (3 of 9), and ethyl benzene (3 of 9).

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

3.2 SURFACE WATER

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

3.2.1 Quarry

One quarry seep was sampled in the Fall 2007 monitoring event. Quarry seep QS-4 was sampled twice (November 9 and December 10, 2007), and contained 231 µg/L and 241 µg/L total chloropyridines, respectively. These concentrations remain at or below historical averages.

3.2.2 Quarry Discharge Ditch

Two locations within the quarry discharge ditch were sampled and analyzed for chloropyridines. QD-1 was sampled once, at the point where the quarry's dewatering discharge enters the ditch. QO-2 was sampled twice, at the location where the ditch discharges to the canal. Total chloropyridines were detected in the sample from QD-1 at an estimated concentration of 2 µg/L. Chloropyridines were detected in the November 9 sample at QO-2 at an estimated concentration of 7 µg/L, but were not detected in the December 10 sample collected at this location.

3.2.3 Barge Canal

Two samples were collected from the Erie Barge Canal location (QO-2S1, approximately 100 feet downstream of QO-2). Chloropyridines were not detected in the November 9 sample; however, an estimated value of 2 µg/L of 2-chloropyridine was reported in the surface water sample collected on December 10. Chloropyridines are not typically detected at this sampling point. At this low level (well below the normal laboratory reporting limit), the December 10 result should be viewed with some uncertainty.

4.0 EXTRACTION SYSTEM PERFORMANCE AND MAINTENANCE

Table 6 is a summary of the system flow measurements for the on-site extraction wells from June 2007 through November 2007. The total volume pumped during the six-month period is approximately 7 million gallons.

Meter repairs were required on wells BR-5A, BR-7A, BR-9, PW-11, and PW-13. Pump replacement was required in well PW-14.

In November 2006, pumping well PW-10 partially collapsed while Arch was attempting to remove the pump for service. This well is no longer operational, and Arch has installed a replacement well (PW-15) approximately 75 feet south of PW-10. A pump and controllers are currently being installed, and the new well is expected to be activated by approximately February 1, 2008.

Table 7 provides a calculation of mass removal rates since the previous groundwater monitoring event (i.e., from June 2007 through November 2007). Arch estimates that approximately 17 pounds of target VOCs and 394 pounds of chloropyridine compounds were removed by the groundwater extraction system and treated by the plant's activated carbon adsorption units over that time period.

5.0 OTHER ISSUES

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

6.0 NEXT MONITORING EVENT

The next regular monitoring event will occur in May 2008 and will include groundwater, surface water, and seep sampling.

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

Figures

Legend

Outline of Arch Property Boundary

Monitoring Well

NOTES

1. Source - Topographic Quadrangle 7.5-Minute Series

N

0 250 500 1,000 Feet

Prepared by JJW | Checked by NMB

ERIE BARGE CANAL

I-390

FIRTH RIXSON

BUFFALO RD. BUSINESS CENTER

ARCH

MW-103/BR-103

MW-108/BR-108

PZ-102

BR-111/BR-111D

BR-106/MW-106

PZ-103

MW-16

AID TO HOSPITALS

ARM

MW-126/BR-126

MW-105/BR-105

BR-112/BR-112D

MW-104/BR-104

BUFFALO ROAD

12-6

MW-114/BR-114

CUMBERLAND FARMS PETROLEUM TERMINAL

NESS-W

NESS-E

OW-105

8-8

7-6

BR-113/BR-113D

LEXINGTON

11-8

GENERAL RAIL SIGNAL CO.

DOLOMITE PRODUCTS QUARRY

9-6

10-6

RW-1

13-4

Morey

OW-102A

OW-103

BR-122D

PFAUDLER

BR-117/BR-117D

BR-121D (Abandoned)

BR-118/BR-118D

BR-123D

BR-116/BR-116D

BR-120D (Abandoned)

BR-119D (Abandoned)

LETTINGTON DRIVE

BR-124D

Figure 1
Off-Site Groundwater Monitoring Well Locations

Arch Chemicals
Rochester, NY
MACTEC, Inc.

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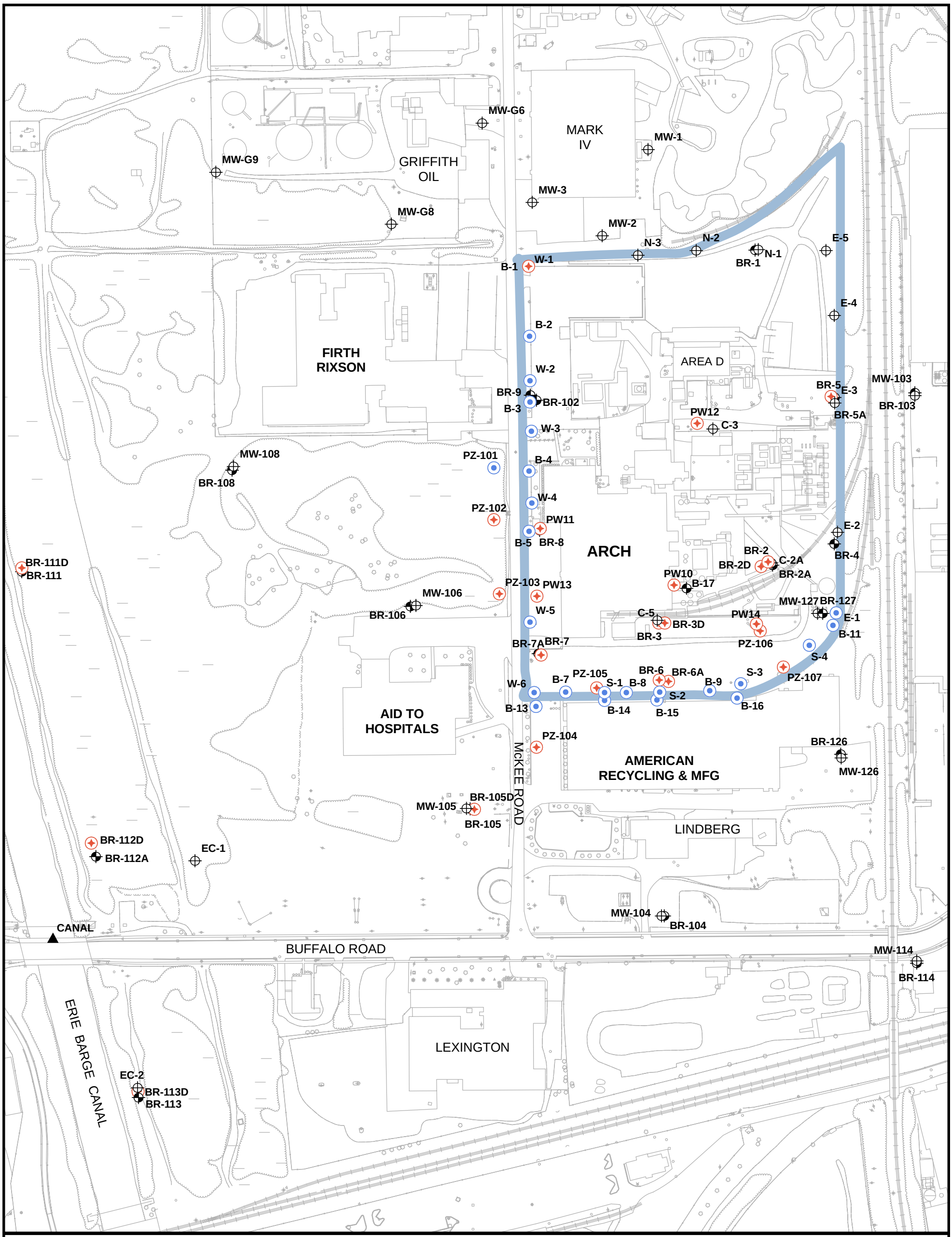

NOTES:

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

N

0 100 200 400 Feet

Legend

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

Figure 2
Onsite Monitoring Well Locations

Arch Chemicals
Rochester, NY
MACTEC, Inc.

Prepared by JJW | Checked by NMB

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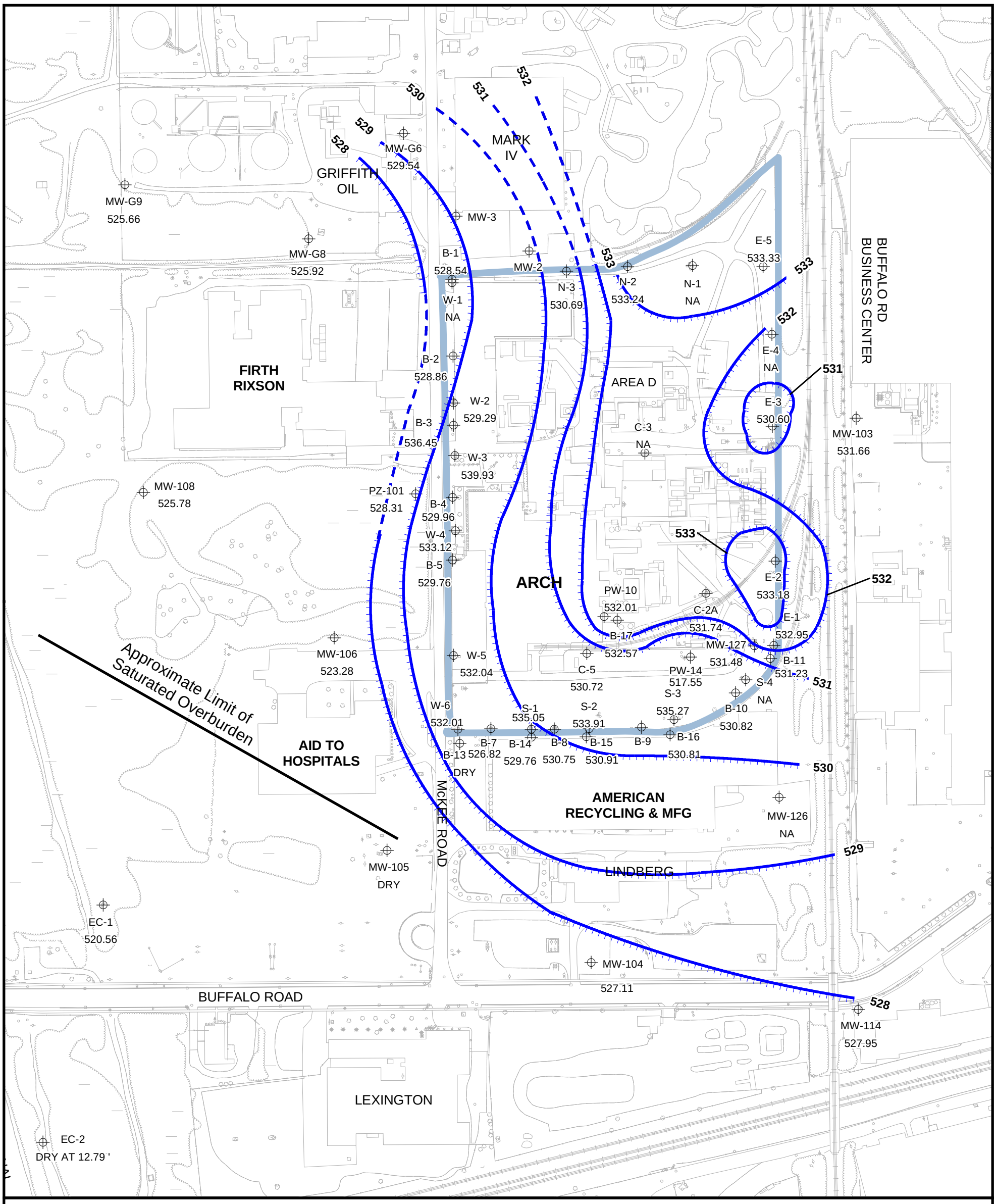

Legend

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

NOTES:

1. Water Levels Measured on November 9, 2007
2. NA = Not Available
3. Dashed Contours Reflect Uncertainty
4. Water levels in the following wells were interpreted to be anomalous and not used in contouring: W-3, W-4, W-5, W-6, S-1, S-2, S-3, B-3

N

0 100 200 400 Feet

Prepared by DBW | Checked by NMB

Figure 3
Fall 2007
Overburden Groundwater Interpreted Piezometric Contours

Arch Chemicals
Rochester, NY
MACTEC, Inc.

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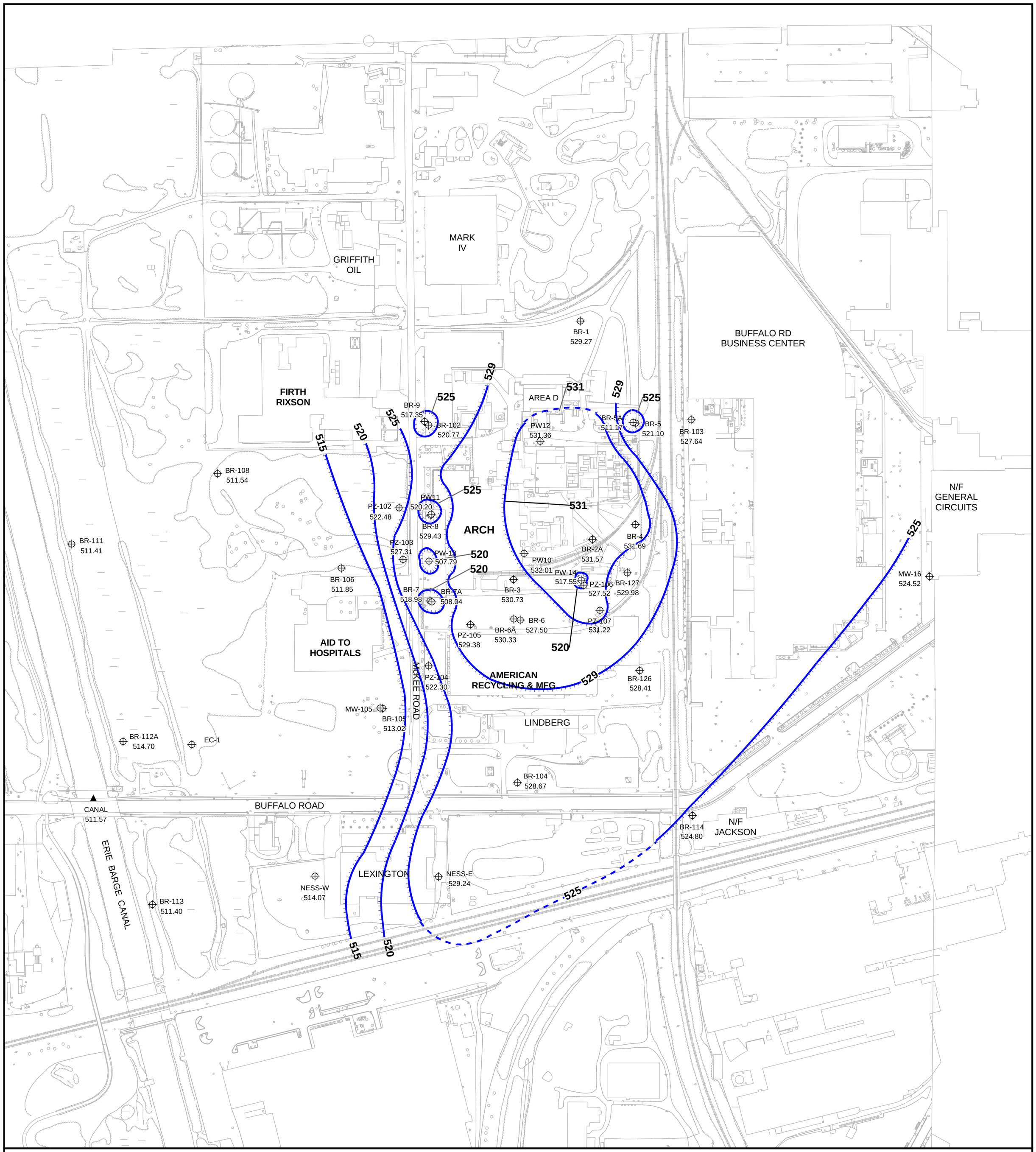

NOTES:

1. Water Levels Measured on November 9, 2007

Legend

- BR-112A (520.18) — Piezometric Elevation at Well or Piezometer (Feet MSL)
- CANAL (507.69) — Piezometric Elevation at Surface Water Measuring Point
- 530 — Bedrock Piezometric Elevation Contour (MSL)
- Interpreted Groundwater Flow Direction

0 100 200 400 Feet

N

Prepared by DBW | Checked by NMB

Figure 4
Fall 2007
Bedrock Groundwater
Interpreted Piezometric Contours

Arch Chemicals
Rochester, NY
MACTEC, Inc.

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Legend

- Bedrock Well ('D' Designates Deep Well)
- 500 — Outline of Arch Property Boundary
- Deep Bedrock Elevation Contour (MSL)
- Interpreted Groundwater Flow Direction
- BR-116D (509.03) — Piezometric Elevation at Deep Bedrock Well

NOTES
1. Water Levels Measured on November 9, 2007
2. Dashed Contours Reflect Uncertainty

N

0 250 500 1,000 Feet

Prepared by DBW | Checked by NMB

I-390
ERIE BARGE CANAL
BUFFALO ROAD
LETTINGTON DRIVE
DOLOMITE PRODUCTS QUARRY
CUMBERLAND FARMS PETROLEUM TERMINAL
FIRTH RIXSON
ARCH
BUFFALO RD. BUSINESS CENTER
AID TO HOSPITALS
ARM
LEXINGTON
GENERAL RAIL SIGNAL CO.
PFAUDLER

BR-9
BR-103
BR-108
BR-111D
BR-111
BR-2D
BR-3D 476.91
BR-106
BR-105
BR-105D 510.94
BR-112D 511.28
BR-112
BR-104
BR-114
BR-113
BR-113D 511.29
BR-122D 507.05
BR-117D 497.07
BR-117
BR-118
BR-118D 498.69
BR-121D Abandoned
BR-120D Abandoned
BR-119D Abandoned
BR-123D 507.87
BR-116D 509.09
BR-116
BR-124D 505.73

497 499 501 503 505 507 509 511

Figure 5
November 2007
Deep Bedrock Groundwater
Interpreted Piezometric Contours

Arch Chemicals
Rochester, NY
MACTEC, Inc.

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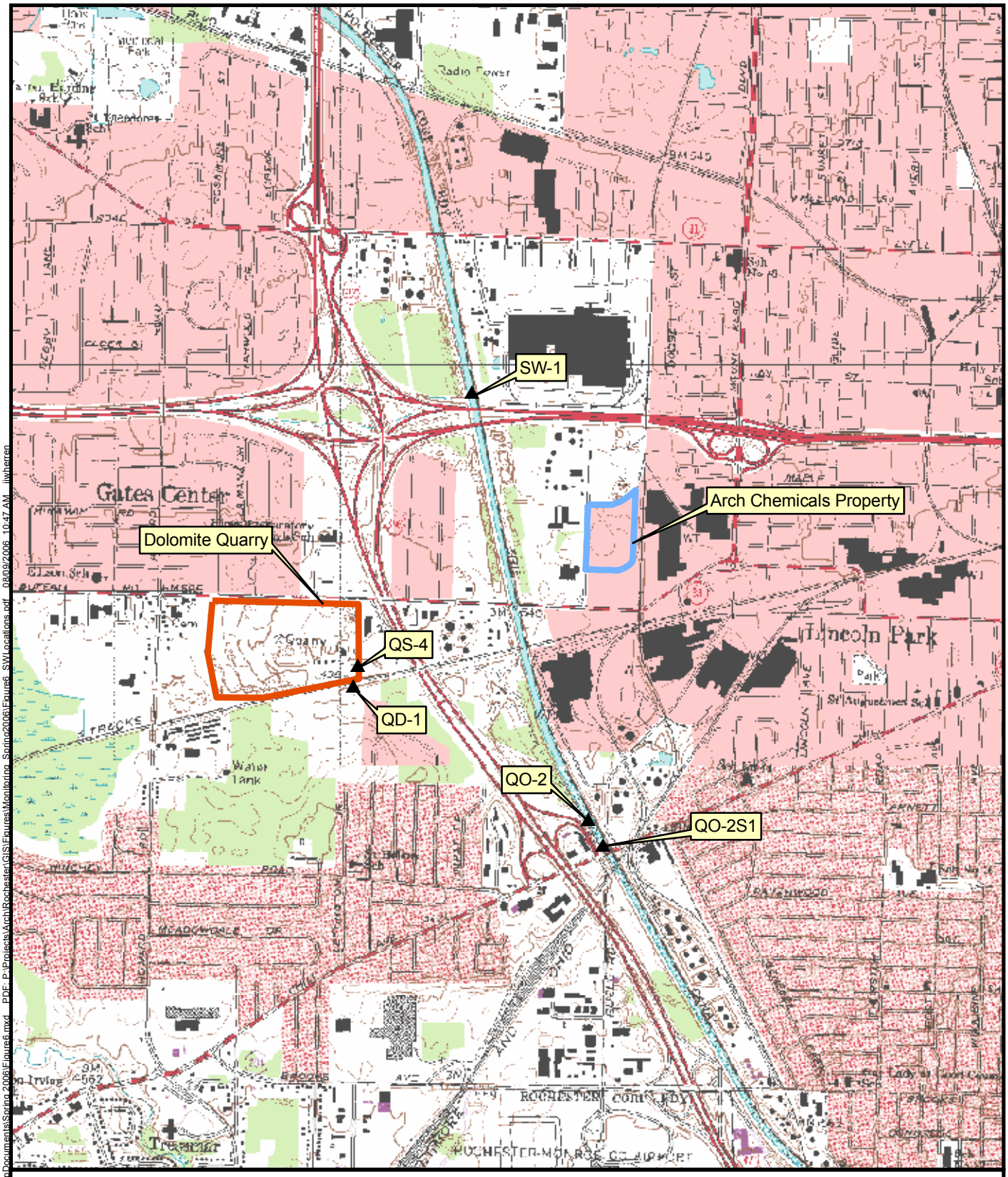

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1:24,000 scale digital topographic map
obtained from New York State GIS
Clearinghouse at: www.nysgis.state.ny.us

N

0 0.25 0.5 Miles

Legend

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

Figure 6
Sample Locations
Erie Barge Canal

Arch Chemicals
Rochester, New York
MACTEC, Inc.

Prepared by JJW | Checked by JEB

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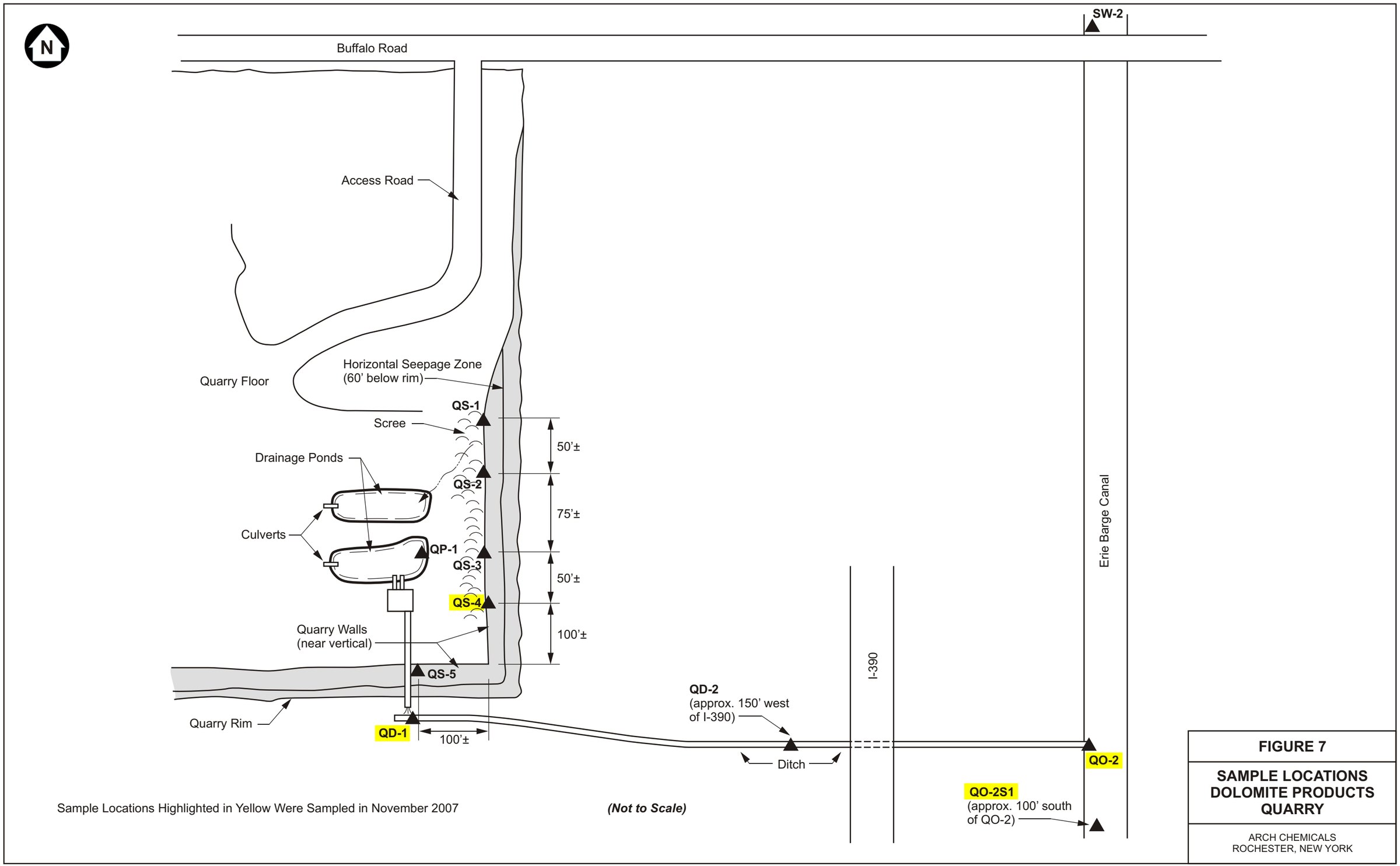
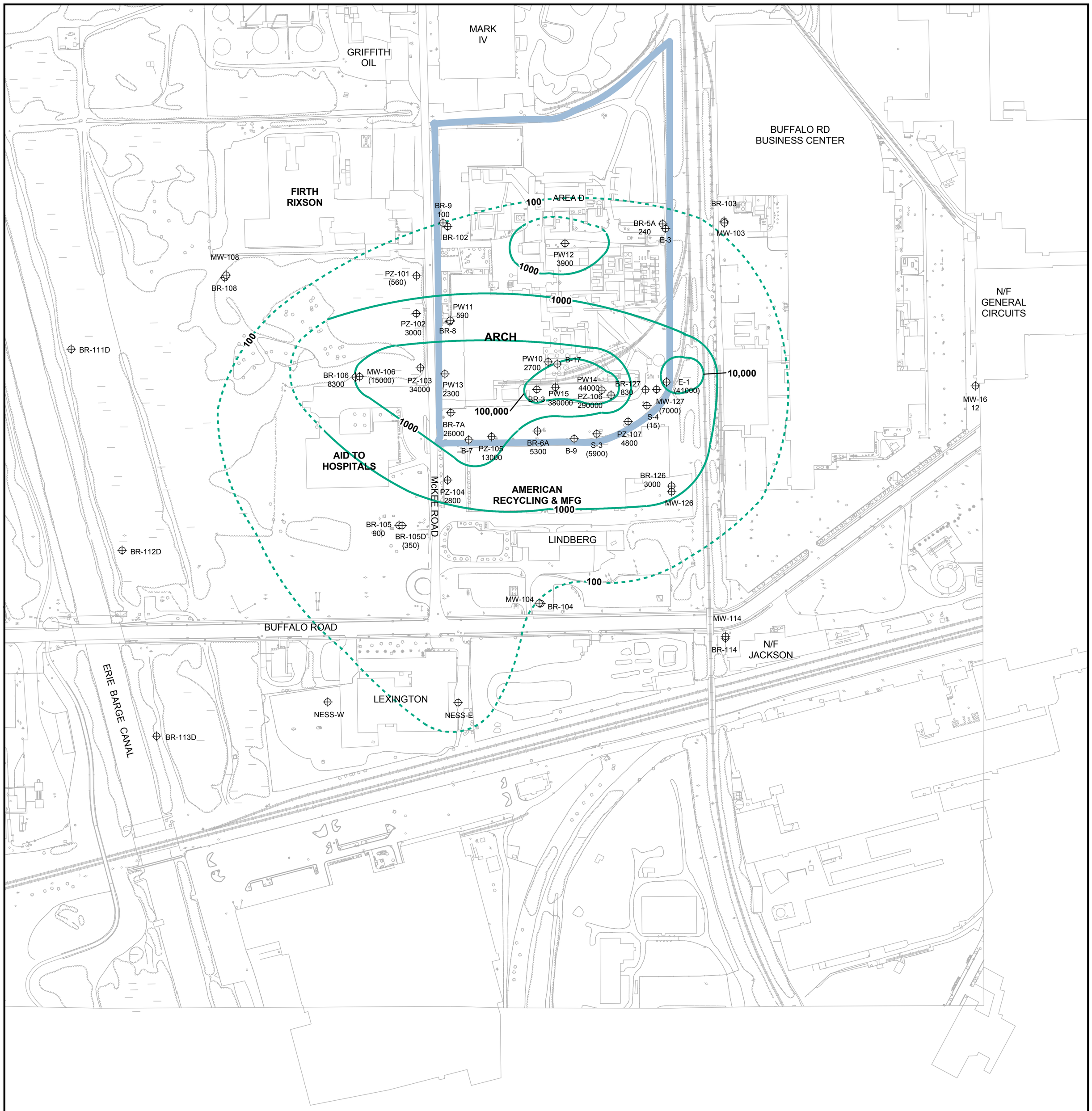


FIGURE 7

SAMPLE LOCATIONS
DOLOMITE PRODUCTS QUARRY

ARCH CHEMICALS
ROCHESTER, NEW YORK

W2004030a.cdr



Legend

- Outline of Arch Property Boundary
- 100 — Chloropyridine Concentration Contour
- BR-105 / 700 — Monitoring Location with Concentration
- {1000} Deep Bedrock Well
- (1000) Overburden Well
- 1000 Bedrock Well
- NS Not Sampled
- ND Not Detected

0 100 200 400 Feet

N

Prepared by DBW | Checked by NMB

NOTES:

1. Samples Collected November, 2007
2. Selected Chloropyridines consist of 2,6-Dichloropyridine, 3-Chloropyridine, and 3-Chloropyridine, 4-Chloropyridine, and P-Fluoroaniline.
3. Concentration contours represented for Bedrock Wells and selected Overburden and Deep Bedrock Wells.
4. Dashed concentration contours represent inferences from historical analytical results.

Figure 8
Fall 2007
Selected Chloropyridine Concentration Contours

Arch Chemicals
Rochester, NY
MACTEC, Inc.

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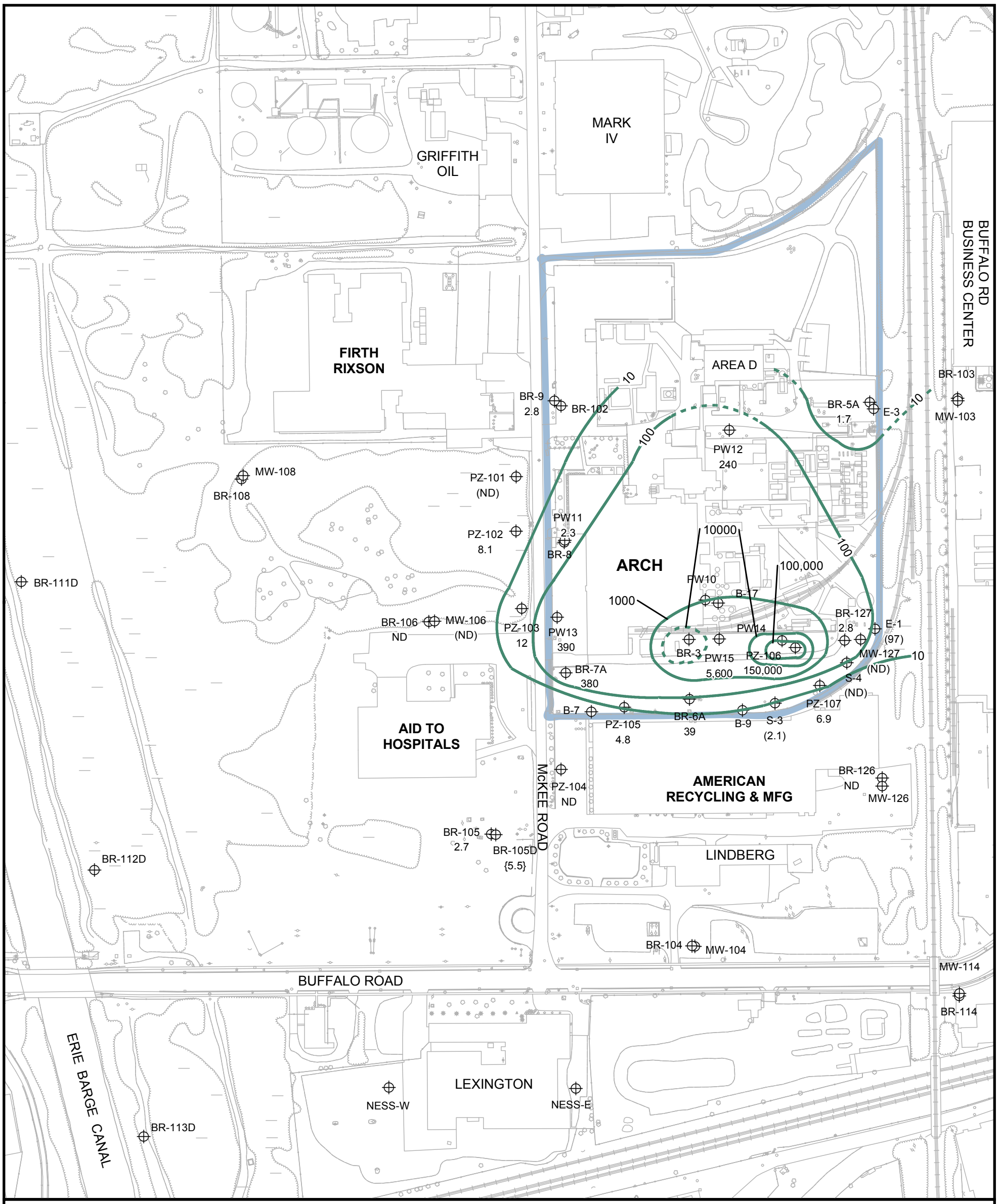

Legend

- Outline of Arch Property Boundary
- 100 — VOC Concentration Contour
- BR-113D {NS} — Monitoring Location with Concentration
- {1000} Deep Bedrock Well
- (1000) Overburden Well
- 1000 Bedrock Well
- NS Not Sampled
- ND Not Detected

NOTES:

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

0 100 200 Feet

N

Prepared by DBW | Checked by NMB

Figure 9
Fall 2007
Selected Volatile Organic Compound Concentration Contours

Arch Chemicals
Rochester, NY
MACTEC, Inc.

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Tables

TABLE 1
FALL 2007 GROUNDWATER SAMPLING AND ANALYTICAL PROGRAM

ARCH CHEMICALS, INC
ROCHESTER, NEW YORK

			ANALYSIS	PYRIDINES	VOCs
SITE / AREA	WELL / POINT	DATE	QC TYPE		
AID TO HOSPITALS	BR-106	11/14/2007	Sample	X	X
	MW-106	11/14/2007	Sample	X	X
	PZ-101	11/13/2007	Sample	X	X
	PZ-102	11/13/2007	Sample	X	X
	PZ-103	11/13/2007	Sample	X	X
AMERICAN RECYCLE MANUF. (58 MCKEE ROAD)	BR-126	11/13/2007	Sample	X	X
	PZ-104	11/13/2007	Sample	X	X
ARCH ROCHESTER	BR-127	11/13/2007	Duplicate	X	X
	BR-127	11/13/2007	Sample	X	X
	BR-5A	11/13/2007	Sample	X	X
	BR-6A	11/12/2007	Sample	X	X
	BR-7A	11/13/2007	Sample	X	X
	BR-9	11/13/2007	Sample	X	X
	E-1	11/12/2007	Sample	X	X
	MW-127	11/13/2007	Sample	X	X
	PW10	11/29/2007	Sample	X	X
	PW11	11/13/2007	Sample	X	X
	PW12	11/13/2007	Sample	X	X
	PW13	11/13/2007	Sample	X	X
	PW14	11/13/2007	Sample	X	X
	PW15	11/13/2007	Sample	X	X
	PZ-105	11/12/2007	Sample	X	X
	PZ-106	11/13/2007	Sample	X	X
	PZ-107	11/12/2007	Sample	X	X
	S-3	11/12/2007	Sample	X	X
	S-4	11/12/2007	Sample	X	X
DOLOMITE PRODUCTS, INC.	QD-1	12/10/2007	Sample	X	
	QS-4	11/9/2007	Sample	X	
	QS-4	12/10/2007	Sample	X	
ERIE BARGE CANAL(Samples in canal or property along canal)	QO-2	11/9/2007	Sample	X	
	QO-2	12/10/2007	Sample	X	
	QO-2S1	11/9/2007	Sample	X	
	QO-2S1	12/10/2007	Sample	X	
FORMER GENERAL CIRCUITS(Corner of Buffalo and Mt Read Blvd.)	MW-16	11/14/2007	Sample	X	
RG & E RIGHT OF WAY	BR-105	11/14/2007	Sample	X	X
	BR-105D	11/14/2007	Sample	X	X

TABLE 2
FALL 2007 GROUNDWATER MONITORING RESULTS
CHLOROPYRIDINES

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	BR-105		BR-105D		BR-106		BR-126		BR-127		BR-127		BR-5A		BR-6A		BR-7A		BR-9	
SAMPLE DATE:	11/14/07		11/14/07		11/14/07		11/13/07		11/13/07		11/13/07		11/13/07		11/12/07		11/13/07		11/13/07	
QC TYPE:	Sample		Sample		Sample		Sample		Duplicate		Sample		Sample		Sample		Sample		Sample	
BY SW-846 Method 8270C (µg/L)																				
2,6-Dichloropyridine	500	U	35	J	1200		530		140	J	500	U	33	J	630		4300		16	J
2-Chloropyridine	900		290		6800		2500		1100		830		170		4700		22000		87	
3-Chloropyridine	500	U	17	J	100		500	U	500	U	500	U	48	U	500	U	2500	U	48	U
4-Chloropyridine	500	U	100	U	100	U	500	U	500	U	500	U	48	U	500	U	2500	U	48	U
p-Fluoroaniline	500	U	12	J	190		500	U	500	U	500	U	18	J	500	U	2500	U	48	U
Pyridine	1200	U	250	U	250	U	1200	U	1200	U	1200	U	18	J	1200	U	6200	U	120	U

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

TABLE 2
FALL 2007 GROUNDWATER MONITORING RESULTS
CHLOROPYRIDINES

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	E-1		MW-106		MW-127		MW-16		PW10		PW11		PW12		PW13		PW14		PW15	
SAMPLE DATE:	11/12/07		11/14/07		11/13/07		11/14/07		11/29/07		11/13/07		11/13/07		11/13/07		11/13/07		11/13/07	
QC TYPE:	Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample	
BY SW-846 Method 8270C (µg/L)																				
2,6-Dichloropyridine	10000	U	3200		1200		6	J	600	J	98		1300		310	J	2400	J	100000	U
2-Chloropyridine	41000		11000		5700		6	J	2100		470		2300		2000		42000		380000	
3-Chloropyridine	10000	U	2500	U	130		10	U	2000	U	50	U	220	J	500	U	2500	U	100000	U
4-Chloropyridine	10000	U	2500	U	100	U	10	U	2000	U	50	U	1000	U	500	U	2500	U	100000	U
p-Fluoroaniline	10000	U	320	J	8	J	10	U	2000	U	18	J	110	J	500	U	2500	U	100000	U
Pyridine	25000	U	6200	U	250	U	24	U	5000	U	120	U	2500	U	1200	U	6200	U	250000	U

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

TABLE 2
FALL 2007 GROUNDWATER MONITORING RESULTS
CHLOROPYRIDINES

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	PZ-101		PZ-102		PZ-103		PZ-104		PZ-105		PZ-106		PZ-107		S-3		S-4	
SAMPLE DATE:	11/13/07		11/13/07		11/13/07		11/13/07		11/12/07		11/13/07		11/12/07		11/12/07		11/12/07	
QC TYPE:	Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample	
BY SW-846 Method 8270C (µg/L)																		
2,6-Dichloropyridine	78		520		4000		360	J	5000	U	10000		520	J	1100		11	
2-Chloropyridine	470		2400		29000		2400		13000		260000		4300		4800		4	J
3-Chloropyridine	48	U	500	U	630	J	500	U	5000	U	4000	J	1000	U	41	J	10	U
4-Chloropyridine	48	U	500	U	1200	U	500	U	5000	U	10000	U	1000	U	100	U	10	U
p-Fluoroaniline	13	J	59	J	730	J	500	U	5000	U	10000	U	1000	U	100	U	10	U
Pyridine	120	U	1200	U	3100	U	1200	U	12000	U	16000	J	2500	U	250	U	24	U

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

TABLE 3
FALL 2007 GROUNDWATER MONITORING RESULTS
VOLATILE ORGANIC COMPOUNDS

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	BR-105		BR-105D		BR-106		BR-126		BR-127		BR-127		BR-5A		BR-6A		BR-7A		BR-9	
SAMPLE DATE:	11/14/07		11/14/07		11/14/07		11/13/07		11/13/07		11/13/07		11/13/07		11/12/07		11/13/07		11/13/07	
QC TYPE:	Sample		Sample		Sample		Sample		Duplicate		Sample		Sample		Sample		Sample		Sample	
VOLATILE ORGANIC COMPOUNDS																				
BY SW-846 Method 8260/5ML (µg/L)																				
1,1,1-Trichloroethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	10	U	25	U
1,1,2,2-Tetrachloroethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	10	U	25	U
1,1,2-Trichloroethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	10	U	25	U
1,1-Dichloroethane	1.1	J	2.7	J	5	U	5	U	5	U	5	U	5	U	5	U	2.2	J	12	J
1,1-Dichloroethene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	10	U	25	U
1,2,4-Trimethylbenzene	5	U	0.57	J	5	U	5	U	5	U	5	U	5	U	5	U	10	U	25	U
1,2-Dichloroethane	5	U	5	U	2.3	J	5	U	5	U	5	U	5	U	5	U	10	U	25	U
1,2-Dichloroethene (total)	17		11		1.3	J	1.5	J	28		28		9.4	J	160		4.5	J	300	
1,2-Dichloropropane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	10	U	25	U
1,3,5-Trimethylbenzene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	10	U	25	U
2-Butanone	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U	50	U	120	U
2-Hexanone	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U	50	U	120	U
4-Methyl-2-pentanone	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U	50	U	120	U
Acetone	25	U	25	U	25	U	25	U	25	U	25	U	25	U	3	J	50	U	120	U
Benzene	1.4	J	5.8		26		3.6	J	0.54	J	0.54	J	7.6		1.2	J	14		49	
Bromodichloromethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	10	U	25	U
Bromoform	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	10	U	25	U
Bromomethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	10	U	25	U
Carbon disulfide	5	U	5	U	8.3		5	U	5	U	5	U	0.74	J	4.4	J	5.8	J	25	U
Carbon tetrachloride	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	12		25	U
Chlorobenzene	4.1	J	5	U	270		0.6	J	0.58	J	0.51	J	11		16		150		10	J
Chlorodibromomethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	10	U	25	U
Chloroethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	10	U	25	U
Chloroform	5	U	5.5		5	U	5	U	5	U	5	U	0.87	J	26		250		25	U
Chloromethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	10	U	25	U
cis-1,3-Dichloropropene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	10	U	25	U
Ethyl benzene	5	U	0.68	J	0.57	J	5	U	5	U	5	U	5	U	0.68	J	10	U	4.4	J
Methylene chloride	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	110		25	U
Styrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	10	U	25	U
Tetrachloroethene	1.6	J	5	U	5	U	5	U	5	U	5	U	5	U	8.3		9.3	J	25	U
Toluene	5	U	5	U	7.8		5	U	2.8	J	2.8	J	4	J	3.7	J	4.9	J	2.8	J
trans-1,3-Dichloropropene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	10	U	25	U
Trichloroethene	1.1	J	5	U	5	U	5	U	2.9	J	2.8	J	0.81	J	4.5	J	2.5	J	2.8	J
Vinyl acetate	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U	50	U	120	U
Vinyl chloride	15		5	U	5	U	5	U	8.7		8.5		3.1	J	2.3	J	4	J	160	
Xylenes, Total	15	U	15	U	2	J	15	U	15	U	15	U	15	U	1.4	J	30	U	75	U

Notes:

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

J = Estimated value.

Prepared/Date: NMB 01/15/08
Checked/Date: JEB 01/15/08

TABLE 3
FALL 2007 GROUNDWATER MONITORING RESULTS
VOLATILE ORGANIC COMPOUNDS

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	E-1		MW-106		MW-127		PW10		PW11		PW12		PW13		PW14		PW15		PZ-101	
SAMPLE DATE:	11/12/07		11/14/07		11/13/07		11/29/07		11/13/07		11/13/07		11/13/07		11/13/07		11/13/07		11/13/07	
QC TYPE:	Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample	
VOLATILE ORGANIC COMPOUNDS																				
BY SW-846 Method 8260/5ML (µg/L)																				
1,1,1-Trichloroethane	50	U	5	U	5	U	5	U	20	U	1000	U	10	U	250	U	400	U	5	U
1,1,2,2-Tetrachloroethane	50	U	5	U	5	U	5	U	20	U	1000	U	10	U	250	U	400	U	5	U
1,1,2-Trichloroethane	50	U	5	U	5	U	5	U	20	U	1000	U	10	U	250	U	400	U	5	U
1,1-Dichloroethane	50	U	5	U	5	U	5	U	9.5	J	1000	U	3.6	J	250	U	400	U	5	U
1,1-Dichloroethene	50	U	5	U	5	U	5	U	20	U	1000	U	10	U	250	U	400	U	5	U
1,2,4-Trimethylbenzene	50	U	5	U	5	U	5	U	20	U	1000	U	10	U	250	U	400	U	5	U
1,2-Dichloroethane	50	U	1.6	J	5	U	5	U	20	U	1000	U	10	U	250	U	400	U	5	U
1,2-Dichloroethene (total)	38	J	2.2	J	10	U	1.8	J	190		2000	U	4	J	500	U	800	U	0.76	J
1,2-Dichloropropane	50	U	5	U	5	U	5	U	20	U	1000	U	10	U	250	U	400	U	5	U
1,3,5-Trimethylbenzene	50	U	5	U	5	U	5	U	20	U	1000	U	10	U	250	U	400	U	5	U
2-Butanone	250	U	25	U	25	U	25	U	100	U	5000	U	50	U	1200	U	2000	U	25	U
2-Hexanone	250	U	25	U	25	U	25	U	100	U	5000	U	50	U	1200	U	2000	U	25	U
4-Methyl-2-pentanone	250	U	25	U	25	U	25	U	100	U	5000	U	50	U	1200	U	2000	U	25	U
Acetone	250	U	25	U	25	U	25	U	100	U	5000	U	50	U	1200	U	300	J	25	U
Benzene	8.8	J	46		0.65	J	0.79	J	33		1000	U	10		250	U	400	U	5.4	
Bromodichloromethane	50	U	5	U	5	U	5	U	20	U	1000	U	10	U	250	U	400	U	5	U
Bromoform	50	U	5	U	5	U	2.6	J	20	U	1000	U	10	U	84	J	400	U	5	U
Bromomethane	50	U	5	U	5	U	5	U	20	U	1000	U	10	U	250	U	400	U	5	U
Carbon disulfide	50	U	2.9	J	5	U	5	U	20	U	1000	U	1.4	J	1500		450		5	U
Carbon tetrachloride	50	U	5	U	5	U	96		20	U	1000	U	10	U	3700		260	J	5	U
Chlorobenzene	29	J	460		0.6	J	4.5	J	290		7500		64		250	U	64	J	52	
Chlorodibromomethane	50	U	5	U	5	U	5	U	20	U	1000	U	10	U	250	U	400	U	5	U
Chloroethane	50	U	5	U	5	U	5	U	20	U	1000	U	10	U	250	U	400	U	5	U
Chloroform	97		5	U	5	U	62		2.3	J	240	J	300		6600		4000		5	U
Chloromethane	50	U	5	U	5	U	5	U	20	U	1000	U	10	U	250	U	400	U	5	U
cis-1,3-Dichloropropene	50	U	5	U	5	U	5	U	20	U	1000	U	10	U	250	U	400	U	5	U
Ethyl benzene	50	U	0.84	J	5	U	1	J	3.5	J	820	J	10	U	250	U	400	U	5	U
Methylene chloride	50	U	5	U	5	U	5	U	20	U	1000	U	84		370		550		5	U
Styrene	50	U	5	U	5	U	5	U	20	U	1000	U	10	U	250	U	400	U	5	U
Tetrachloroethene	50	U	5	U	5	U	91		20	U	1000	U	8.8	J	300		690		5	U
Toluene	50	U	3.3	J	5	U	3.7	J	3.8	J	13000		3	J	91	J	180	J	5	U
trans-1,3-Dichloropropene	50	U	5	U	5	U	5	U	20	U	1000	U	10	U	250	U	400	U	5	U
Trichloroethene	50	U	5	U	5	U	27		20	U	1000	U	1.5	J	250	U	69	J	5	U
Vinyl acetate	250	U	25	U	25	U	25	U	100	U	5000	U	50	U	1200	U	2000	U	25	U
Vinyl chloride	22	J	5	U	5	U	1.8	J	96		1000	U	8.8	J	250	U	400	U	5	U
Xylenes, Total	150	U	2.6	J	15	U	6.8	J	60	U	4700		30	U	750	U	1200	U	15	U

Notes:

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

J = Estimated value.

TABLE 3
FALL 2007 GROUNDWATER MONITORING RESULTS
VOLATILE ORGANIC COMPOUNDS

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	PZ-102		PZ-103		PZ-104		PZ-105		PZ-106		PZ-107		S-3		S-4	
SAMPLE DATE:	11/13/07		11/13/07		11/13/07		11/12/07		11/13/07		11/12/07		11/12/07		11/12/07	
QC TYPE:	Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample	
VOLATILE ORGANIC COMPOUNDS																
BY SW-846 Method 8260/5ML (µg/L)																
1,1,1-Trichloroethane	20	U	50	U	5	U	20	U	10000	U	25	U	10	U	5	U
1,1,2,2-Tetrachloroethane	20	U	50	U	5	U	20	U	10000	U	25	U	10	U	5	U
1,1,2-Trichloroethane	20	U	50	U	5	U	20	U	10000	U	25	U	10	U	5	U
1,1-Dichloroethane	20	U	50	U	5	U	20	U	10000	U	25	U	1.4	J	5	U
1,1-Dichloroethene	20	U	50	U	5	U	20	U	10000	U	25	U	10	U	5	U
1,2,4-Trimethylbenzene	20	U	50	U	5	U	20	U	10000	U	25	U	10	U	5	U
1,2-Dichloroethane	20	U	9.6	J	5	U	20	U	10000	U	25	U	10	U	5	U
1,2-Dichloroethene (total)	40	U	100	U	1.1	J	40	U	20000	U	13	J	7.7	J	10	U
1,2-Dichloropropane	20	U	50	U	5	U	20	U	10000	U	25	U	10	U	5	U
1,3,5-Trimethylbenzene	20	U	50	U	5	U	20	U	10000	U	25	U	10	U	5	U
2-Butanone	100	U	250	U	25	U	100	U	50000	U	120	U	50	U	25	U
2-Hexanone	100	U	250	U	25	U	100	U	50000	U	120	U	50	U	25	U
4-Methyl-2-pentanone	100	U	250	U	25	U	100	U	50000	U	120	U	50	U	25	U
Acetone	100	U	250	U	25	U	100	U	50000	U	120	U	50	U	25	U
Benzene	20		80		2.2	J	9.4	J	10000	U	25	U	10	U	5	U
Bromodichloromethane	20	U	50	U	5	U	20	U	10000	U	25	U	10	U	5	U
Bromoform	20	U	50	U	5	U	20	U	1700	J	25	U	10	U	5	U
Bromomethane	20	U	50	U	5	U	20	U	10000	U	25	U	10	U	5	U
Carbon disulfide	2.6	J	46	J	0.54	J	19	J	37000		25	U	10	U	5	U
Carbon tetrachloride	20	U	50	U	5	U	20	U	39000		25	U	10	U	5	U
Chlorobenzene	340		1200		6.8		130		10000	U	25	U	15		5	U
Chlorodibromomethane	20	U	50	U	5	U	20	U	10000	U	25	U	10	U	5	U
Chloroethane	20	U	50	U	5	U	20	U	10000	U	25	U	10	U	5	U
Chloroform	4	J	50	U	5	U	4.8	J	110000		25	U	2.1	J	5	U
Chloromethane	20	U	50	U	5	U	20	U	10000	U	25	U	10	U	5	U
cis-1,3-Dichloropropene	20	U	50	U	5	U	20	U	10000	U	25	U	10	U	5	U
Ethyl benzene	20	U	50	U	5	U	20	U	10000	U	25	U	10	U	5	U
Methylene chloride	4.1	J	12	J	5	U	20	U	10000	U	25	U	10	U	5	U
Styrene	20	U	50	U	5	U	20	U	10000	U	25	U	10	U	5	U
Tetrachloroethene	20	U	50	U	5	U	20	U	1800	J	25	U	10	U	5	U
Toluene	7.4	J	63		5	U	2.4	J	10000	U	3	J	10	U	5	U
trans-1,3-Dichloropropene	20	U	50	U	5	U	20	U	10000	U	25	U	10	U	5	U
Trichloroethene	20	U	50	U	5	U	20	U	10000	U	6.9	J	10	U	5	U
Vinyl acetate	100	U	250	U	25	U	100	U	50000	U	120	U	50	U	25	U
Vinyl chloride	20	U	50	U	5	U	20	U	10000	U	8.8	J	4.2	J	5	U
Xylenes, Total	60	U	150	U	15	U	60	U	30000	U	75	U	30	U	15	U

Notes:

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

J = Estimated value.

TABLE 4
COMPARISON OF FALL 2007
CHLOROPYRIDINES AND VOLATILE ORGANICS CONCENTRATIONS
IN GROUNDWATER TO PREVIOUS RESULTS (ug/L)

ARCH ROCHESTER
SEMI-ANNUAL GROUNDWATER MONITORING REPORT

WELL	SELECTED CHLOROPYRIDINES				SELECTED VOCs			
	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	NOV-2007 RESULT	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	NOV-2007 RESULT
ON-SITE WELLS/LOCATIONS								
B-17	5	28,000,000	310,000		5	345,000	21,000	
B-7	5	9,100	2,700		2	256	28	
BR-127	6	4,700	2,600	830	6	3	2	**2.8**
BR-3	4	6,500,000	80,000		5	920,000	450,000	
BR-5A	10	1,700	590	240	10	9,400	69	1.7
BR-6A	10	144,500	21,000	5,300	10	26,000	4,400	39
BR-7A	10	510,000	12,000	**26,000**	10	3,000	290	**380**
BR-8	5	57,000	290		2	6,900	5.2	
BR-9	10	720	190	100	10	160	20	2.8
E-1	10	171,680	52,000	41,000	10	5,300	32	**97**
E-3	5	600	100		5	12,000	ND	
MW-127	6	15,000	6,300	**7,000**	3	180	30	ND
PW10	10	244,000	120,000	2,700	10	120,000	18,000	280
PW11	10	27,000	1,900	590	11	30,000	6,400	2.3
PW12	10	15,000	3,500	**3,900**	10	120,000	1,600	240
PW13	6	7,500	2,100	**2,300**	5	920	230	**390**
PW14	5	29,000	24,000	**44,000**	5	160,000	45,000	11,000
PW15	1	729,000	729,000	380,000	1	7,800	7800	5,600
PZ-105	7	190,000	8,300	**13,000**	4	9,700	790	4.8
PZ-106	7	124,000	32,000	**290,000**	7	1,359,000	660,000	150,000
PZ-107	10	11,000	5,900	4,800	10	12,000	170	6.9
S-3	10	21,000	7,700	5,900	10	2,500	83	2.1
S-4	10	3,200	150	15	2	870	2.3	ND
OFF-SITE WELLS/LOCATIONS								
BR-103	2	400	11		2	38	7.6	
BR-104	3	3,100	5.4		9	9	NA	
BR-105	9	24,000	1,000	900	10	310	4	2.7
BR-105D	10	10,000	1,500	350		230	5.5	5.5
BR-106	9	24,600	4,300	**8,300**	5	6,300	330	ND
BR-108	4	1,700	29			ND		
BR-112D	5	310	27			4.3		
BR-113D	5	490	36			2.8		
BR-114	5	521	240		3	12	0.35	
BR-116	1	12	ND			84		
BR-116D	3	710	19			120		
BR-117D	5	80	13			1.9		
BR-118D	4	330	89			6.6		
BR-122D	4	650	140			ND		
BR-123D	5	860	110			4		
BR-126	4	NA	5100	3,000	4	230	140	ND
MW-103	2	82	19		2	750	17	
MW-104	4	180	4			1		

TABLE 4
COMPARISON OF FALL 2007
CHLOROPYRIDINES AND VOLATILE ORGANICS CONCENTRATIONS
IN GROUNDWATER TO PREVIOUS RESULTS (ug/L)

ARCH ROCHESTER
SEMI-ANNUAL GROUNDWATER MONITORING REPORT

WELL	SELECTED CHLOROPYRIDINES				SELECTED VOCs			
	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	NOV-2007 RESULT	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	NOV-2007 RESULT
MW-106	10	130,000	7,000	**15,000**	6	453	46	ND
MW-114	1	18	ND		5	19	17	
MW-126	1	NA	63		1	ND	ND	
MW-16	5	360	150	12	1	8	8	
NESS-E	5	5,000	260			700		
NESS-W	4	2,100	130			89		
PZ-101	10	27,000	620	560	4	6.1	1	ND
PZ-102	10	58,000	2,000	**3,000**	5	10,000	2.7	**8.1**
PZ-103	10	73,000	5,400	**34,000**	6	44,300	7,200	12
PZ-104	10	9,100	3,100	2,800	4	40	1.3	ND
QD-1	3	ND	2	2	1	ND	ND	
QO-2*	5	380	2.7	ND	1	ND	ND	
QO-2S1*	2	27	0.05	**2**	1	ND	ND	
QS-4*	13	3,400	260	240	1	ND	ND	

Note:

1) Number of samples and mean reflect 5-year sampling period from November 2002 through June 2007. Historic maximum based on all available results from March 1990 through June 2007.
2) Chloropyridines represented by: 2-Chloropyridine, 2,6-Dichloropyridine, and 3-Chloropyridine, 4-Chloropyridine, p-Fluoroaniline, and Pyridine.
3) Selected VOCs represented by Carbon Tetrachloride, Chloroform, Methylene Chloride, Tetrachloroethene, and Trichloroethene.
4) **Bold and shade** - November 2007 exceeds 5-year mean.
5) NA = Not analyzed or not applicable
   ND = Not detected
   BLANK = Not sampled

* Results for December 2007 for QO-2, QOS1, and QS-4.

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

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION	QS-4		QS-4		QD-1		QO-2		QO-2		QO-2S1		QO-2S1	
DATE	11/9/2007		12/10/2007		12/10/2007		11/9/2007		12/10/2007		11/9/2007		12/10/2007	
SAMPLE ID	Sample		Sample		Sample		Sample		Sample		Sample		Sample	
SELECTED CHLOROPYRIDINES BY SW-846 Method 8270C (µg/L)														
2,6-Dichloropyridine	41	J	40		9	U	3	J	9	U	10	U	10	U
2-Chloropyridine	190		200		2	J	4	J	9	U	10	U	2	J
3-Chloropyridine	47	U	9	U	9	U	9	U	9	U	10	U	10	U
4-Chloropyridine	47	U	9	U	9	U	9	U	9	U	10	U	10	U
p-Fluoroaniline	47	U	1	J	9	U	9	U	9	U	10	U	10	U
Pyridine	120	U	24	U	24	U	24	U	24	U	24	U	24	U

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

TABLE 6
EXTRACTION WELL WEEKLY FLOW MEASUREMENTS - JUNE 2007 THROUGH NOVEMBER 2007

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

Week Ending	BR-5A [Gal./Wk.]	BR-7A [Gal./Wk.]	BR-9 [Gal./Wk.]	PW-11 [Gal./Wk.]	PW-13 [Gal./Wk.]	PW-14 [Gal./Wk.]	Total [Gal.]
Jun '07							
06/06/07	5,040 *	54,705	89,924	19,777 *	50,400 *	5	219,851
06/13/07	3,914 *	74,727	127,782	43,154	50,400 *	454	300,431
06/20/07	11,495 *	63,046	127,278	46,981	24,009 *	461	273,270
06/27/07	54,460 *	75,585	123,072	32,066 *	55,534	12,912	353,629
						Total [Gal.]	1,147,181
Jul '07							
07/04/07	52,275	70,442	105,838	20,160 *	60,425	10,238	319,378
07/11/07	49,765 *	52,019 *	61,476	20,160 *	58,344 *	2,275	244,039
07/18/07	51,773 *	49,440 *	47,785 *	20,160 *	62,988	1,084	233,230
07/25/07	56,648 *	26,448	45,603 *	20,160 *	63,439	2,568	214,866
						Total [Gal.]	1,011,513
Aug '07							
08/01/07	50,400	56,172	42,506	20,160 *	73,439 *	4,173	246,850
08/08/07	52,124	68,676	79,416	20,160 *	65,158	2,970	288,504
08/15/07	50,760	60,187	90,810	21,152 *	52,210	11,509	286,628
08/22/07	52,932	63,465	90,296	20,623 *	56,795	6,184	290,295
08/29/07	50,605	61,166	89,173	19,474	56,519	7,436	284,373
						Total [Gal.]	1,396,650
Sep '07							
09/05/07	15,086	60,530	83,267	10,569	53,710	8,343	231,505
09/12/07	42,350	59,128	86,665	32,127	57,124	7,300	284,694
09/19/07	30,066	49,728	72,462	29,507	57,557	5,876	245,196
09/26/07	52,453	39,141	109,491	38,777	65,998	7,500	313,360
						Total [Gal.]	1,074,755
Oct '07							
10/03/07	37,121	54,137	97,733	17,639	65,167	5,946	277,743
10/10/07	24,580	57,361	91,154	15,158	62,792	6,387	257,432
10/17/07	51,017	51,455	93,697	10,561	72,799	7,776 *	287,305
10/24/07	41,037	55,624	95,960	15,531	56,475	11,363	275,990
10/31/07	43,211	55,158	81,943	16,444	51,277	11,359	259,392
						Total [Gal.]	1,352,498
Nov '07							
11/07/07	51,781	88,450	78,102	1,959	43,617	13,985	277,894
11/14/07	48,997	85,555	90,770	4,160	32,785	14,102	276,369
11/21/07	47,318	76,964	85,920	2,315	38,585	11,279	262,381
11/28/07	46,505	60,612	58,146	20,161	14,506	9,674	209,604
						Total [Gal.]	748,354
Total 6 Mo. Removal (Gal.)	1,073,713	1,569,921	2,246,269	539,095	1,402,052	183,159	7,014,209

Notes:
1) * - Flow rate is estimated due to a meter failure

TABLE 7

MASS REMOVAL SUMMARY
PERIOD: JUNE 2007 - NOVEMBER 2007

ARCH ROCHESTER
FALL 2007 GROUNDWATER MONITORING REPORT

Well	Total Vol. Pumped (gallons)	Avg. VOC Conc. (ppm)	Avg. PYR. Conc. (ppm)	VOCs Removed (pounds)	PYR. Removed (pounds)
BR-5A	1,074,000	0.004	0.26	0.03	2.3
BR-7A	1,570,000	0.237	22.7	3.1	296
BR-9	2,246,000	0.011	0.21	0.21	3.9
PW-11	539,000	0.006	1.1	0.0	4.8
PW-13	1,402,000	0.197	2.0	2.3	24
PW-14	183,000	7.5	41	11	63
Totals:	7,014,000			17	394

Note: VOC and pyridine concentrations used in this table are an average of the analytical results from the Spring 2007 and Fall 2007 sampling events for each well

TABLE 8
2008 SAMPLING SCHEDULE
ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

ARCH ROCHESTER						**2008**					
MONITORING PROGRAM						**SPRING**		**FALL**		**TOTAL**	
	Well	***zone***	***area***	***Frequency/Parameters***	***Purpose***	***Pyridines***	***VOCs***	***Pyridines***	***VOCs***	***Pyridines***	***VOCs***
OFF-SITE	MW-103	OB	KODAK EAST	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
MONITORING	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-126	OB	ALH	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	BR-126	BR	ALH	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	MW-16	BR	Gen'l Circuits	annual monitoring, PYR	trend monitoring			1		1	0
ON-SITE	PZ-107	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
MONITORING	PZ-106	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	PZ-105	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	BR-127	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	BR-3	BR	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	BR-8	BR	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	BR-9	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	BR-5A	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	BR-6A	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	BR-7A	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	B-17	OB	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	B-7	OB	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	S-3	OB	ON-SITE	semi-annual monitoring, VOCs & PYR	continue until replaced by trench	1	1	1	1	2	2
	S-4	OB	ON-SITE	semi-annual monitoring, VOCs & PYR	continue until replaced by trench	1	1	1	1	2	2
	E-1	OB	ON-SITE	semi-annual monitoring, VOCs & PYR	continue until replaced by trench	1	1	1	1	2	2
	E-3	OB	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	MW-127	OB	ON-SITE	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	PW10	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	PW11	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	PW12	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	PW13	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	PW14	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	PW15	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
QUARRY/CANAL	QS-4	quarry seep	QUARRY	semi-annual monitoring, PYR	trend monitoring	1		1		2	0
MONITORING	QD-1	quarry ditch	DITCH	semi-annual monitoring, PYR	trend monitoring	1		1		2	0
	QO-2	quarry outfall	DITCH	semi-annual monitoring, PYR	trend monitoring	1		1		2	0
	QO-2S1	canal at outfall	CANAL	semi-annual monitoring, PYR	surface water monitoring	1		1		2	0
TOTAL SAMPLES						54	37	33	28	87	65

Revised: 12/10/07

Prepared by: NMB Checked by: JEB

Appendix A

Groundwater Field Sampling Data Sheets

rec'd 12/18/07 JPC

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

FIELD REPORT

REMEDIAL INVESTIGATION SAMPLING
ARCH CHEMICAL
ROCHESTER, NEW YORK

FALL 2007 Event

Prepared For:

MacTec, Inc.
511 Congress Street
Portland, Maine 04101

Attention: Mr. Nelson Breton

Prepared By:

TEST AMERICA LABORATORIES, INC.
Audubon Business Center
10 Hazelwood Drive
Amherst, New York 14228-2298

NY5A5762

Written By: Roger Senf

Reviewed By:

Date: 12-13-07

1.0 INTRODUCTION

This report describes the sampling of the following points:

- Twenty-eight (28) groundwater samples (MW-126 not located)
- One (1) barge canal sample
- One (2) quarry outfall samples
- One (1) quarry seep/pond sample

These activities were in support of the Phase II Remediation Investigation being conducted at the Arch Chemical facility in Rochester, New York. The samples were collected from November 9- December 10, 2007 by Test America Laboratories, Inc. (TAL) personnel.

2.0 METHODOLOGIES

2.1 Water Level Measurements

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

2.2 Well Purging

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

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

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

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

2.3 Surface Water Samples

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

3.0 SAMPLING

3.1 Monitoring Wells

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

3.2 Canal Sampling

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

3.3 Seep Sampling

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

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

4.0 SAMPLE CONTAINERS

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

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

5.0 FIELD MEASUREMENTS

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

6.0 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

6.1 Trip Blanks

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

6.2 Equipment Rinse Blank

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

7.0 CHAIN OF CUSTODY

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

Sampling Summary Table
MacTec, Inc.
NOVEMBER 2007
RI SAMPLING/ROCHESTER NY FACILITY

Sample Point	—Water Level— Date	Time	Water Level (ft)*	Water Elevation (ft)**	Bottom Of Well (ft)*	Field Measurements Date	Time	pH (STD) (Units)	Spec. Cond. (umhos)	Temp (°C)	Turb. (NTU)	Other Field Measurements	
BR-105	11/14/2007	1255	23.98	N/A	N/A	11/14/2007	1320	7.01	1570	13.4	9.74	EH(mv)= -253	DO(ppm)= 1.54
	Comments: CLEAR												
BR-105D	11/14/2007	1207	24.58	N/A	N/A	11/14/2007	1235	7.11	21250	13.1	1.30	EH(mv)= -309	DO(ppm)= 0.74
	Comments: CLEAR												
BR-106	11/14/2007	1107	23.93	N/A	N/A	11/14/2007	1130	7.17	4250	12.7	12.70	EH(mv)= -243	DO(ppm)= 0.77
	Comments: CLEAR												
BR-126	11/13/2007	1051	15.07	N/A	N/A	11/13/2007	1125	7.24	1273	14.4	32.30	EH(mv)= -193	DO(ppm)= 0.99
	Comments: SL.TURBID												
BR-127	11/13/2007	1025	4.94	N/A	N/A	11/13/2007	1050	7.97	2380	14.4	5.62	EH(mv)= -224	DO(ppm)= 0.93
	Comments: CLEAR BLACK SPECKS												
BR-127	11/13/2007	1025	4.94	N/A	N/A	11/13/2007	1052	7.98	2377	14.4	5.51	EH(mv)= -225	DO(ppm)= 0.90
	Comments: CLEAR BLACK SPECKS/FIELD DUP												
BR-5A	11/13/2007	1315	25.91	N/A	N/A	11/13/2007	1317	8.69	1827	16.2	38.90	EH(mv)= -95	
	Comments: SL. TURBID												
BR-6A	11/12/2007	1133	10.68	N/A	N/A	11/12/2007	1155	8.23	N/A	N/A	N/A		
BR-7A	11/13/2007	1400	31.08	N/A	N/A	11/13/2007	1404	7.57	2549	15.6	17.60	EH(mv)= -171	
	Comments: CLEAR GREY SPECKS												
BR-9	11/13/2007	1355	24.82	N/A	N/A	11/13/2007	1357	7.59	2299	14.7	8.69	EH(mv)= -112	
	Comments: CLEAR												
E-1	11/12/2007	1348	1.98	N/A	N/A	11/12/2007	1415	8.86	9027	9.7	15.61	EH(mv)= -273	DO(ppm)= 0.86
	Comments: GREY/ ODER												
MW-106	11/14/2007	1030	12.02	N/A	N/A	11/14/2007	1055	6.94	5652	14.8	13.40	EH(mv)= -203	DO(ppm)= 1.17
	Comments: CLEAR												
MW-127	11/13/2007	1057	5.52	N/A	N/A	11/13/2007	1130	7.70	4476	14.0	2.37	EH(mv)= -155	DO(ppm)= 0.93
	Comments: CLEAR												
MW-16	11/14/2007	1335	12.42	N/A	N/A	11/14/2007	1400	6.95	3071	16.7	2.76	EH(mv)= -191	DO(ppm)= 0.88
	Comments: CLEAR												
PW-10	11/29/2007	1313	7.21	N/A	N/A	11/29/2007	1345	7.17	4420	14.7	58.20	EH(mv)= 24	DO(ppm)= 0.80
	Comments: AMBER TINT												
PW-11	11/13/2007	1030	18.08	N/A	N/A	11/13/2007	1033	7.06	2966	14.5	22.10	EH(mv)= -144	
	Comments: CLEAR												

SG - Specific Gravity
EH - Redox
DO - Dissolved Oxygen

* From Top of Riser
** Elevation Above Sea Level

Sampling Summary Table
MacTec, Inc.
NOVEMBER 2007
RI SAMPLING/ROCHESTER NY FACILITY

Sample Point	Water Level Date	Water Level Time	Water Level (ft)*	Water Elevation (ft)**	Bottom Of Well (ft)*	Field Measurements Date	Field Measurements Time	pH (STD) (Units)	Spec. Cond. (umhos)	Temp (°C)	Turb. (NTU)	Other Field Measurements
PW-12(BR-101)	11/13/2007	1323	6.29	N/A	N/A	11/13/2007	1345	7.46	3192	16.0	8.64	EH(mv)= -116 DO(ppm)= 0.95
	Comments: CLEAR											
PW-13	11/13/2007	1415	28.34	N/A	N/A	11/13/2007	1417	7.54	2851	14.3	2.85	EH(mv)= -185
	Comments: CLEAR											
PW-14	11/13/2007	1300	21.48	N/A	N/A	11/13/2007	1302	8.85	5822	14.6	32.90	EH(mv)= -185
	Comments: AMBER SL TURBID											
PW-15	11/13/2007	1148	7.40	N/A	N/A	11/13/2007	1215	10.41	11490	14.5	3.20	EH(mv)= -304 DO(ppm)= 0.94
	Comments: CLEAR AMBER											
PZ-101	11/13/2007	1401	14.75	N/A	N/A	11/13/2007	1430	7.38	6086	12.8	5.03	EH(mv)= -153 DO(ppm)= 1.17
	Comments: CLEAR											
PZ-102	11/13/2007	1310	19.10	N/A	N/A	11/13/2007	1335	7.45	5231	13.6	2.63	EH(mv)= -204 DO(ppm)= 0.88
	Comments: CLEAR											
PZ-103	11/13/2007	1223	12.99	N/A	N/A	11/13/2007	1250	7.06	5029	15.3	2.05	EH(mv)= -244 DO(ppm)= 1.01
	Comments: CLEAR											
PZ-104	11/13/2007	1142	14.60	N/A	N/A	11/13/2007	1205	7.08	1516	16.7	2.26	EH(mv)= -218 DO(ppm)= 0.96
	Comments: CLEAR											
PZ-105	11/12/2007	1047	8.04	N/A	N/A	11/12/2007	1110	7.65	3020	15.3	50.00	EH(mv)= -89 DO(ppm)= 1.15
	Comments: CLEAR											
PZ-106	11/13/2007	1227	10.01	N/A	N/A	11/13/2007	1250	7.54	9861	14.3	33.00	EH(mv)= -163 DO(ppm)= 0.90
	Comments: YELLOW TINT											
PZ-107	11/12/2007	1242	7.28	N/A	N/A	11/12/2007	1305	7.68	2234	14.6	1.98	EH(mv)= -209 DO(ppm)= 0.84
	Comments: CLEAR											
QD-1	12/10/2007	1245	0.00	N/A	N/A	12/10/2007	1250	7.36	1511	8.7	N/A	
	Comments: CLEAR											
QO-2	11/09/2007	1600	0.00	N/A	N/A	11/09/2007	1610	7.97	2336	11.0	N/A	
	Comments: CLEAR											
QO-2	12/10/2007	1215	0.00	N/A	N/A	12/10/2007	1218	7.20	1982	8.0	N/A	
	Comments: CLEAR											
QO-2S1	11/09/2007	1625	0.00	N/A	N/A	11/09/2007	1630	7.90	515	10.3	N/A	
	Comments: CLEAR											
QO-2S1	12/10/2007	1210	0.00	N/A	N/A	12/10/2007	1213	7.32	583	2.7	N/A	
	Comments: CLEAR											

SG - Specific Gravity
EH - Redox
DO - Dissolved Oxygen

* From Top of Riser
** Elevation Above Sea Level

Sampling Summary Table
MacTec, Inc.
NOVEMBER 2007
RI SAMPLING/ROCHESTER NY FACILITY

Sample Point	Water Level Date	Water Level Time	Water Level (ft)*	Water Elevation (ft)**	Bottom Of Well (ft)*	Field Measurements Date	Field Measurements Time	pH (STD) (Units)	Spec. Cond. (umhos)	Temp (°C)	Turb. (NTU)	Other Field Measurements	
QS-4	11/09/2007	1540	0.00	N/A	N/A	11/09/2007	1550	8.09	1611	10.7	N/A		
	Comments: CLEAR												
QS-4	12/10/2007	1125	0.00	N/A	N/A	12/10/2007	1130	7.10	1382	9.2	N/A		
	Comments: CLEAR												
S-3	11/12/2007	1211	2.70	N/A	N/A	11/12/2007	1235	7.69	2386	10.8	3.92	EH(mv)= -3	DO(ppm)= 1.06
	Comments: CLEAR BLACK TINT												
S-4	11/12/2007	1313	0.81	N/A	N/A	11/12/2007	1340	7.68	843	12.4	15.72	EH(mv)= -60	DO(ppm)= 1.16
	Comments: CLEAR												

SG - Specific Gravity
EH - Redox
DO - Dissolved Oxygen

* From Top of Riser
** Elevation Above Sea Level

SEMI-ANNUAL GROUNDWATER ELEVATION REPORT
ARCH CHEMICAL ROCHESTER, N.Y.

SAMPLE POINT	DATE	DEPTH TO WATER	CASING ELEVATION	GW ELEVATION	TIME	Comments
B-1	11/09/07	9.21		-9.21	1138	NO L-NAPL ; NO D-NAPL
B-10		7.98		-7.98	1131	NO L-NAPL ; NO D-NAPL
B-11		4.77		-4.77	1203	NO L-NAPL
B-13		DRY		#VALUE!	1329	
B-14		8.19		-8.19	1330	
B-15		4.38		-4.38	1333	
B-16		5.40		-5.40	1335	
B-17		6.17		-6.17	1317	NO L-NAPL ; NO D-NAPL
B-2		10.16		-10.16	1159	NO L-NAPL ; NO D-NAPL
B-3		5.36		-5.36	1150	NO L-NAPL ; NO D-NAPL
B-4		12.91		-12.91	1205	NO L-NAPL ; NO D-NAPL
B-5		10.45		-10.45	1209	NO L-NAPL ; NO D-NAPL
B-7		14.29		-14.29	1217	NO L-NAPL ; NO D-NAPL
B-8		8.13		-8.13	1136	NO L-NAPL ; NO D-NAPL
BR-1		8.01		-8.01	1051	NO L-NAPL ; NO D-NAPL
BR-102		18.66		-18.66	1149	
BR-103		5.55		-5.55	1300	
MW-103		1.59		-1.59	1302	
BR-104		8.89		-8.89	1310	
MW-104		10.43		-10.43	1312	
BR-105		23.88		-23.88	1304	
BR-105D		25.55		-25.55	1305	
MW-105		DRY		#VALUE!	1306	
BR-106		23.89		-23.89	1245	
MW-106		12.16		-12.16	1246	
BR-108		29.04		-29.04	1255	
MW-108		14.91		-14.91	1256	
BR-111		29.01		-29.01	1342	
BR-111D		29.30		-29.30	1344	
BR-112A		33.02		-33.02	1340	
BR-112D		36.63		-36.63	1337	
BR-113		31.62		-31.62	1315	

SEMI-ANNUAL GROUNDWATER ELEVATION REPORT
ARCH CHEMICAL ROCHESTER, N.Y.

SAMPLE POINT	DATE	DEPTH TO WATER	CASING ELEVATION	GW ELEVATION	TIME	Comments
BR-113D	11/09/07	31.64		-31.64	1317	
BR-114		14.97		-14.97	1305	
MW-114		11.74		-11.74	1307	
BR-116		30.01		-30.01	1247	
BR-116D		36.13		-36.13	1245	
BR-117		21.37		-21.37	1152	
BR-117D		50.09		-50.09	1150	
BR-118		26.17		-26.17	1140	
BR-118D		49.24		-49.24	1142	
BR-122D		45.29		-45.29	1220	
BR-123D		45.75		-45.75	1215	
BR-124D		31.72		-31.72	1210	
BR-126		9.49		-9.49	1320	
MW-126						NOT LOCATED
BR-127		4.82			1109	NO L-NAPL ; NO D-NAPL
MW-127		5.39			1110	NO L-NAPL ; NO D-NAPL
BR-2		7.80		-7.80	1115	NO L-NAPL ; NO D-NAPL
BR-2A		8.79		-8.79	1114	NO L-NAPL ; NO D-NAPL
BR-2D		0.05		-0.05	1117	NO L-NAPL ; NO D-NAPL
BR-3		7.54		-7.54	1122	NO L-NAPL
BR-3D		60.76		-60.76	1121	NO L-NAPL ; NO D-NAPL
BR-4		7.34		-7.34	1112	NO L-NAPL
BR-5		15.20			1039	NO L-NAPL ; NO D-NAPL
BR-5A		25.18		-25.18	1100	0.00 GPM
BR-6		10.25		-10.25	1134	NO L-NAPL ; NO D-NAPL
BR-6A		10.57		-10.57	1135	
BR-7		20.12		-20.12	1220	
BR-7A		31.08		-31.08	1221	NO L-NAPL ; NO D-NAPL
BR-8		10.29		-10.29	1210	NO L-NAPL ; NO D-NAPL
BR-9		24.82		-24.82	1152	0.00 GPM
C-2A		7.92		-7.92	1116	NO L-NAPL ; NO D-NAPL
C-3				0.00	1130	BURIED

SEMI-ANNUAL GROUNDWATER ELEVATION REPORT
ARCH CHEMICAL ROCHESTER, N.Y.

SAMPLE POINT	DATE	DEPTH TO WATER	CASING ELEVATION	GW ELEVATION	TIME	Comments
	11/09/07			0.00		
C-5		8.91		-8.91	1152	NO L-NAPL ; NO D-NAPL
E-1		2.06		-2.06	1204	NO L-NAPL
E-2		5.14		-5.14	1210	NO L-NAPL ; NO D-NAPL
E-3		5.99		-5.99	1226	NO L-NAPL ; NO D-NAPL
E-4				0.00	1241	OBSTRUCTED AT 2.60
E-5		5.98		-5.98	1233	NO L-NAPL ; NO D-NAPL
EC-1		19.43		-19.43	1357	
EC-2				0.00	1318	DRY AT 12.79 '
ERIE CANAL		33.22		-33.22	1350	
MW-16		12.27		-12.27	1253	
MW-3						NOT LOCATED
MW-G6		5.11		-5.11	1405	
MW-G7						NOT LOCATED
MW-G8		8.33		-8.33	1408	
MW-G9		10.94		-10.94	1413	
N-1				0.00	1050	OBSTRUCTED
N-2		4.09		-4.09	1047	NO L-NAPL ; NO D-NAPL
N-3		6.69		-6.69	1159	NO L-NAPL
NESS-E		11.07		-11.07	950	
NESS-W		28.97		-28.97	954	
PW-10		6.75		-6.75	1217	NO L-NAPL
PW-11		17.97		-17.97	1211	NO L-NAPL
PW-12		6.13		-6.13	1105	
PW-13		28.34		-28.34	1227	L-NAPL=0.44; NO D NAPL
PW-14		19.48		-19.48	1125	NO L-NAPL
PW-15		7.23		-7.23	1119	NO L-NAPL; NO D-NAPL
PZ-101		14.64		-14.64	1240	
PZ-102		18.41		-18.41	1242	
PZ-103		12.89		-12.89	1243	
PZ-104		14.55		-14.55	1308	
PZ-105		7.55		-7.55	1139	NO L-NAPL ; NO D-NAPL

SEMI-ANNUAL GROUNDWATER ELEVATION REPORT
ARCH CHEMICAL ROCHESTER, N.Y.

SAMPLE POINT	DATE	DEPTH TO WATER	CASING ELEVATION	GW ELEVATION	TIME	Comments
PZ-106	11/09/07	9.72		-9.72	1126	NO L-NAPL ; NO D-NAPL
PZ-107		7.17		-7.17	1132	NO L-NAPL ; NO D-NAPL
PZ-109		7.34		-7.34	1120	NO L-NAPL; NO D-NAPL
S-1		2.44		-2.44	1137	NO L-NAPL ; NO D-NAPL
S-2		3.24		-3.24	1135	NO L-NAPL
S-3		1.92		-1.92	1133	NO L-NAPL ; NO D-NAPL
S-4		0.70		-0.70	1130	
W-1				0.00	1236	OBSTRUCTED
W-2		11.03		-11.03	1155	NO L-NAPL ; NO D-NAPL
W-3		2.71		-2.71	1203	NO L-NAPL ; NO D-NAPL
W-4		7.98		-7.98	1208	NO L-NAPL ; NO D-NAPL
W-5		6.49		-6.49	1224	NO L-NAPL ; NO D-NAPL
W-6		6.98		-6.98	1219	NO L-NAPL ; NO D-NAPL

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BA-105

Field Personnel: P.L., TP.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-14-07 / 1255

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

Prot. Casing/riser height: ____

Cond of prot. Casing/riser: ( ) Unlocked ( ) Good ( ) Loose (X) 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: 11-14-07 / 1300

Date / Time Completed: 11-14-07 / 1320

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 23.98

Elevation. G/W MSL: ____

Well Total Depth, Feet: ____

Method of Well Purge: peristaltic pump Bladder pump

One (1) Riser Volume, Gal: ____

Dedicated: Y / (N)

Total Volume Purged, Gal: ____

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 DO
	wl / ml/m							
1305	23.99 / 70		13.5	7.09	2027	41.4	-244	1.63
1310	↓ / ↓		13.4	7.04	1587	22.7	-249	1.60
1315			13.4	7.01	1577	12.30	-252	1.57
1320			13.4	7.01	1570	9.74	-253	1.54

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID BA-105

Date/Time 11-14-07 / 1325 Water Level @ Sampling, Feet: _____

Method of Sampling: _____ Dedicated: Y / N

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

SAMPLING DATA:

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

INSTRUMENT CHECK DATA:

Turbidity Serial #: _____ NTU std. = _____ NTU _____ NTU std. = _____ NTU

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: _____

Sample Characteristics: _____

COMMENTS AND OBSERVATIONS: _____

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

Date: 11/14/07 By: [signature] Company: TAC

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR-105D

Field Personnel: P.L., J.P.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-14-07 / 1207

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: 11-14-07 1215

Date / Time Completed: 11-14-07 1235

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 24.58

Elevation. G/W MSL: ____

Well Total Depth, Feet: ____

Method of Well Purge: ~~Peristaltic~~ BLADDER Level PUMP

One (1) Riser Volume, Gal: ____

Dedicated: Y / (N)

Total Volume Purged, Gal: ____

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 DO
	WL	MP/W							
1220	24.77	100		14.1	7.08	20,680	2.14	-289	0.84
1225				13.6	7.09	21,180	1.73	-306	0.80
1230				13.2	7.11	21,200	1.39	-308	0.77
1235				13.1	7.11	21,250	1.30	-309	0.74

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID BR-105D

Date/Time 11-14-07 1240 Water Level @ Sampling, Feet: _____

Method of Sampling: _____ Dedicated: Y / N

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

SAMPLING DATA:

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

INSTRUMENT CHECK DATA:

Turbidity Serial #: _____ NTU std. = _____ NTU _____ NTU std. = _____ NTU
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: LT RAIN 50°

Sample Characteristics: _____

COMMENTS AND OBSERVATIONS: _____

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

Date: 11/14/07 By: _____ Company: TAL

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR-106

Field Personnel: P.L., J.P.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-14-07 / 1107

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

Prot. Casing/riser height: ____

Cond of prot. Casing/riser: ( ) Unlocked ( ) Good ( ) Loose (X) 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: 11-14-07 / 1110

Date / Time Completed: 11-14-07 / 1120

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 23.93

Elevation. G/W MSL: ____

Well Total Depth, Feet: ____

Method of Well Purge: PERISTALTIC BLADDER PUMP

One (1) Riser Volume, Gal: ____

Dedicated: Y / (N)

Total Volume Purged, Gal: ____

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 DO
	hr	ml/mn							
1115	23.95	150		12.8	7.37	4295	16.80	-233	0.91
1120				12.9	7.27	4264	14.3	-239	0.84
1125				12.7	7.20	4255	13.0	-241	0.80
1130				12.7	7.17	4250	12.7	-243	0.77

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID BA-10C

Date/Time 11-14-07 / 1135 Water Level @ Sampling, Feet: _____

Method of Sampling: _____ Dedicated: Y / N

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

SAMPLING DATA:

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

INSTRUMENT CHECK DATA:

Turbidity Serial #: _____ NTU std. = _____ NTU _____ NTU std. = _____ NTU

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: _____

Sample Characteristics: _____

COMMENTS AND OBSERVATIONS: _____

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

Date: 11/14/07 By: _____ Company: _____

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR-126

Field Personnel: P.L., J.P.

Sample Matrix: G/W

* Flush mount and road box destroyed

MONITORTING WELL INSPECTION:

Date/Time 11-13-07 / 1051

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: 11-13-07 / 1055

Date / Time Completed: 11-13-07 / 1125

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 15.07

Elevation. G/W MSL:

Well Total Depth, Feet: 45.45

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 Brown Finish Sl. Cloudy

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz) ml/min	Purge Rate (gpm/htz) WL	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1100	200	15.13		14.3	7.76	884	194.0	-197	1.24
1105		15.14		14.4	7.44	1071	66.3	-198	1.08
1110				14.3	7.31	1209	48.5	-198	1.03
1115				14.4	7.27	1269	34.8	-196	1.00
1120				14.4	7.26	1261	33.2	-197	1.02
1125	+	⊥		14.4	7.24	1273	32.3	-193	0.99

Sampled @ 1125 on 11-13-07

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID _____

Date/Time _____ / _____ Water Level @ Sampling, Feet: _____

Method of Sampling: _____ Dedicated: Y / N

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

SAMPLING DATA:

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

INSTRUMENT CHECK DATA:

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: _____

Sample Characteristics: _____

COMMENTS AND OBSERVATIONS: _____

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

Date: ___ / ___ / ___ By: _____ Company: _____

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BA-127

Field Personnel: A.L., T.P.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-13-07 / 1025

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

Prot. Casing/riser height: ____

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

If prot.casing; depth to riser below: ____

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

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

PURGE INFORMATION:

Date / Time Initiated: 11-13-07 / 1070

Date / Time Completed: 11-13-07 / 1050

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

Riser Diameter, Inches: 6.0

Initial Water Level, Feet: 4.94

Elevation. G/W MSL: ____

Well Total Depth, Feet: 50.63

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 Clr BLACK SPECKS Finish Clr BLACK SPECKS

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	WL	mL/m							
1035	5.10	200		15.4	7.68	2481	7.10	-215	1.06
1040	↓	↓		14.7	7.80	2390	5.85	-220	0.99
1045				14.5	7.90	2386	5.80	-221	0.96
1050	↓	↓		14.4	7.97	2380	5.62	-224	0.93

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID BR-127

Date/Time 11-13-07 1055 Water Level @ Sampling, Feet: 5.10

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 (ORP)	Other (DO)
1050	14.4	7.97	2380	5.62	-224	0.93
1052	14.4	7.98	2377	5.51	-225	0.90

INSTRUMENT CHECK DATA:

Turbidity Serial #: 3925 NTU std. = ____ NTU 20 NTU std. = 20 NTU

Solutions: ____

pH Serial #: 614162 4.0 std.= 4.00 7.0 std.= 7.00 10.0 std. = ____

Solutions: 4 - KQI 7 - KRJ

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

Solutions: J

GENERAL INFORMATION:

Weather conditions @ time of sampling: Sun 50°

Sample Characteristics: Clear Black Specks

COMMENTS AND OBSERVATIONS: Field Dup

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

Date: 11/13/07 By: [signature] Company: Test America

LeachField Form
Revision 0
March 15,2002

FIELD OBSERVATIONS

Facility: Alex

Sample Point ID: SM-54

Field Personnel: PL, JS

Sample Matrix: G/W

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 11-13-07 / 1315

Water Level @ Sampling, Feet: 25.91

Method of Sampling: Stainless Steel

Dedicated: (Y) / N

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

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other ( )
1317	16.2	8.69	1027	389	-95	

INSTRUMENT CHECK DATA:

Turbidity Serial #: _____ NTU std. = _____ NTU _____ NTU std. = _____ NTU

Solutions: _____

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

Solutions: _____

Conductivity Serial #: _____ _____ umhos/cm= _____ _____ umhos/cm= _____

Solutions: _____

GENERAL INFORMATION:

Weather conditions @ time of sampling: SUN 55°

Sample Characteristics: SL TURB.

COMMENTS AND OBSERVATIONS:

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

Date: 11/13/07 By: _____ Company: Tyst America

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BA-6A

Field Personnel: P.L., T.P.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-12-07 / 1133

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

Former Pump in well

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: 11-12-07 / 1135

Date / Time Completed: 11-12-07 / 1155

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

Riser Diameter, Inches: 6.0

Initial Water Level, Feet: 10.68

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: Clear

Start Yellow Tint Finish Yellow Tint

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1140	WL 10.74	200 ml/min		16.3	8.27	1118	3.60	-170	1.33
1145	↓	↓		16.2	8.27	1100	3.48	-166	1.30
1150				15.9	8.25	1099	3.40	-160	1.25
1155				15.8	8.23	1088	3.37	-158	1.21

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID BR-6A

Date/Time 11-12-07 1200 Water Level @ Sampling, Feet: 10.74

Method of Sampling: Peristaltic Dedicated: (Y) / N

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

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
1155	15.8	8.23	1088	3.37	-158	1.21

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 48°

Sample Characteristics: Clear Yellow tint

COMMENTS AND OBSERVATIONS:

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

Date: 11/12/07 By: [signature] Company: TAC

LeachField Form
Revision 0
March 15,2002

FIELD OBSERVATIONS

Facility: Arch Sample Point ID: BA-7A

Field Personnel: PL Sample Matrix: G/W

( ) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 11-13-07 1400 Water Level @ Sampling, Feet: 31.08

Method of Sampling: Sample 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 ( )
1404	15.6	7.57	2549	~~1.76~~	-171	
				17.6		

INSTRUMENT CHECK DATA:

Turbidity Serial #: _____ NTU std. = _____ NTU _____ NTU std. = _____ NTU

Solutions: _____

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

Solutions: _____

Conductivity Serial #: _____ _____ umhos/cm= _____ _____ umhos/cm= _____

Solutions: _____

GENERAL INFORMATION:

Weather conditions @ time of sampling: Sun 55°

Sample Characteristics: Clear Gas Smell

COMMENTS AND OBSERVATIONS:

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

Date: 11/13/07 By: [signature] Company: Test America

LeachField Form
Revision 0
March 15,2002

FIELD OBSERVATIONS

Facility: Alcoa Sample Point ID: BR-9

Field Personnel: PL, JS Sample Matrix: G/W

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 11-13-07 1355 Water Level @ Sampling, Feet: 24.82

Method of Sampling: Sample 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 (ORP)	Other ( )
1357	14.7	7.59	2299	8.69	-112	

INSTRUMENT CHECK DATA:

Turbidity Serial #: _____ NTU std. = _____ NTU _____ NTU std. = _____ NTU

Solutions: _____

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

Solutions: _____

Conductivity Serial #: _____ _____ umhos/cm= _____ _____ umhos/cm= _____

Solutions: _____

GENERAL INFORMATION:

Weather conditions @ time of sampling: Sun 55°

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

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

Date: 11/13/07 By: [signature] Company: TestAmerica

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: E-1

Field Personnel: P.L., T.P.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-12-07 / 1348

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

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: 11-12-07 / 1355

Date / Time Completed: 11-12-07 / 1415

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

Riser Diameter, Inches: VAULT

Initial Water Level, Feet: 1.98

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 Grey open Finish Grey open

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	WL	ML/M							
1400	1.98	200		11.6	8.10	10,900	60.0	-261	0.97
1405				9.9	8.57	9267	29.6	-269	0.95
1410				9.8	8.72	9166	19.01	-270	0.90
1415				9.7	8.86	9027	15.61	-273	0.86

Field Form
Revision 0
03/14/02

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID E-1

Date/Time 11-12-07 / 1420 Water Level @ Sampling, Feet: 1.78

Method of Sampling: Peristaltic Dedicated: (Y) / N

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

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
1415	9.7	8.86	9027	15.61	-273	0.86

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 50°

Sample Characteristics: Gray / odor

COMMENTS AND OBSERVATIONS:

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

Date: 11/12/07 By: _____ Company: TAL

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: MW 106

Field Personnel: A.L., T.P.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-14-07 / 1030

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

Prot. Casing/riser height:

Cond of prot. Casing/riser: ( ) Unlocked ( ) Good ( ) Loose (X) 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: 11-14-07 / 1035

Date / Time Completed: 11-14-07 / 1055

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

Riser Diameter, Inches:

Initial Water Level, Feet: 12.02

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: Low Flw

Start SL TURBID Finish Clear GRAY SAND

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	mL	mL/m							
1040	1215	100		15.9	6.71	5529	14.2	-195	1.56
1045	↓	↓		14.9	6.85	5600	14.0	-200	1.41
1050				14.8	6.90	5637	13.8	-203	1.21
1055	↓	↓		14.8	6.94	5652	13.4	-203	1.17

Standard AF 1100
11-14-07

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID _____

Date/Time _____ / _____ Water Level @ Sampling, Feet: _____

Method of Sampling: _____ Dedicated: Y / N

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

SAMPLING DATA:

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

INSTRUMENT CHECK DATA:

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: _____

Sample Characteristics: _____

COMMENTS AND OBSERVATIONS: _____

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

Date: _____ / / _____ By: _____ Company: _____

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: MW-127

Field Personnel: A.L., T.P.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-13-07 / 1057

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

Prot. Casing/riser height: ____

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

If prot.casing; depth to riser below: ____

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

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

PURGE INFORMATION:

Date / Time Initiated: 11-13-07 / 1110

Date / Time Completed: 11-13-07 / 1130

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 5.52

Elevation. G/W MSL: ____

Well Total Depth, Feet: 11.25

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 Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	WL	mL/m							
1115	6.20	50		13.3	7.62	4512	6.94	-143	1.07
1120	6.28	↓		13.8	7.67	4490	3.88	-150	0.97
1125	6.35	↓		14.0	7.70	4481	2.42	-154	0.95
1130	6.41	↓		14.0	7.70	4476	2.37	-153	0.93

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID MW-127

Date/Time 11-13-07 / 1135 Water Level @ Sampling, Feet: 6.41

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 (ORP)	Other (DO)
1130	14.0	7.70	4476	2.77	-155	0.93

INSTRUMENT CHECK DATA:

Turbidity Serial #: _____ NTU std. = _____ NTU _____ NTU std. = _____ NTU
Solutions: _____

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

Conductivity Serial #: _____ _____ umhos/cm= _____ _____ umhos/cm= _____
Solutions: _____

GENERAL INFORMATION:

Weather conditions @ time of sampling: SUN 50°

Sample Characteristics: CLEAR

COMMENTS AND OBSERVATIONS:

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

Date: 11/13/07 By: _____ Company: TOST ARCHER

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: MW-16

Field Personnel: A.L., J.P.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-14-07 / 1335

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

Prot. Casing/riser height: ____

Cond of prot. Casing/riser: ( ) Unlocked ( ) Good ( ) Loose (X) 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: 11-14-07 / 1340

Date / Time Completed: 11-14-07 / 1400

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 12.42

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 c/c Finish c/c

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	we	pump							
1345	1245	100		16.7	6.95	3076	6.52	-193	0.97
1350	↓	↓		16.9	6.94	3069	5.31	-193	0.94
1355				16.8	6.94	3070	3.80	-192	0.90
1400	↓	↓		16.7	6.95	3071	2.76	-191	0.88

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID _____

Date/Time _____ / _____ Water Level @ Sampling, Feet: _____

Method of Sampling: _____ Dedicated: Y / N

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

SAMPLING DATA:

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

INSTRUMENT CHECK DATA:

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: _____

Sample Characteristics: _____

COMMENTS AND OBSERVATIONS: _____

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

Date: / / By: _____ Company: _____

FIELD OBSERVATIONS

Facility: ARCIT

Sample Point ID: PW-10

Field Personnel: P. Litth

Sample Matrix: GW

MONITORTING WELL INSPECTION:

Date/Time 11-29-07 / 1313

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

Prot. Casing/riser height: ____

Cond of prot. Casing/riser: ( ) Unlocked ( ) Good ( ) Loose (X) 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: 11-29-07 / 1320

Date / Time Completed: 11-29-07 / 1340

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

Riser Diameter, Inches: 6.0

Initial Water Level, Feet: 7.21

Elevation. G/W MSL: ____

Well Total Depth, Feet: ____

Method of Well Purge: Peristaltic

One (1) Riser Volume, Gal: ____

Dedicated: (Y) / N

Total Volume Purged, Gal: ____

Purged To Dryness Y / (N)

Purge Observations: ____

Start Amber SC T-BID Finish Amber SC 7-BID

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	WL	ml/m							
1325	7.22	200		14.7	7.11	4472	79.6	40	0.96
1330	↓	↓		14.8	7.14	4456	75.4	35	0.93
1335	↓	↓		14.8	7.14	4439	65.8	28	0.89
1340	↓	↓		14.8	7.17	4421	60.7	26	0.86
1345	↓	↓		14.7	7.17	4420	58.2	24	0.80

Sampled AT ~~1340~~ 1345 11-29-07

[signature]

Field Form
Revision 0
03/14/02

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID _____

Date/Time _____ / _____ Water Level @ Sampling, Feet: _____

Method of Sampling: _____ Dedicated: Y / N

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

SAMPLING DATA:

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

INSTRUMENT CHECK DATA:

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: _____

Sample Characteristics: _____

COMMENTS AND OBSERVATIONS: _____

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

Date: / / By: _____ Company: _____

LeachField Form
Revision 0
March 15,2002

FIELD OBSERVATIONS

Facility: Arcut

Sample Point ID: Pw-11

Field Personnel: PL, TP

Sample Matrix: G/w

( ) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 11-13-07 / 1030

Water Level @ Sampling, Feet: 18.08

Method of Sampling: Peristaltic

Dedicated: (Y) / N

Multi-phased/ layered: ( ) Yes (X) No

If YES: ( ) light ( ) heavy

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (orp)	Other ( )
1033	14.5	7.06	2966	22.1	-144	

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 50°

Sample Characteristics: Clear w. black specks

COMMENTS AND OBSERVATIONS:

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

Date: 11/13/07 By: [signature] Company: Test America

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: PW-12

Field Personnel: P.L., T.P.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-12-01 / 1323

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: 11-13-01 / 1325

Date / Time Completed: 11-13-01 / 1345

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

Riser Diameter, Inches: 6-0

Initial Water Level, Feet: 6.29

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 Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	ml	min							
1330	6.34	200		15.8	7.91	3147	26.4	-128	1.17
1335	↓	↓		16.0	7.49	3180	12.0	-120	1.01
1340				16.0	7.48	3189	10.47	-118	0.97
1345	↓	↓		16.0	7.46	3192	8.64	-116	0.85

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID PW-12

Date/Time 11-13-07 1350 Water Level @ Sampling, Feet: 6.34

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 (ORP)	Other (DO)
1345	16.0	7.46	3182	8.64	-116	0.85

INSTRUMENT CHECK DATA:

Turbidity Serial #: _____ NTU std. = _____ NTU _____ NTU std. = _____ NTU

Solutions: _____

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

Solutions: _____

Conductivity Serial #: _____ _____ umhos/cm= _____ _____ umhos/cm= _____

Solutions: _____

GENERAL INFORMATION:

Weather conditions @ time of sampling: Sun 55°

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS: _____

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

Date: 11/13/07 By: _____ Company: Test America

LeachField Form
Revision 0
March 15,2002

FIELD OBSERVATIONS

Facility: Alcoa Sample Point ID: PW-13

Field Personnel: PL, JB Sample Matrix: G/W

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 11-13-07 / 1415 Water Level @ Sampling, Feet: 28.34

Method of Sampling: Sample 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 (ORP)	Other ( )
1417	14.3	7.54	2851	2.85	-185	

INSTRUMENT CHECK DATA:

Turbidity Serial #: _____ NTU std. = _____ NTU _____ NTU std. = _____ NTU

Solutions: _____

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

Solutions: _____

Conductivity Serial #: _____ _____ umhos/cm= _____ _____ umhos/cm= _____

Solutions: _____

GENERAL INFORMATION:

Weather conditions @ time of sampling: Sun 55°

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

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

Date: 11/13/07 By: [signature] Company: Test America

LeachField Form
Revision 0
March 15,2002

FIELD OBSERVATIONS

Facility: Alcx

Sample Point ID: PW-14

Field Personnel: PL, JJ

Sample Matrix: G/W

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 11-13-07 1300

Water Level @ Sampling, Feet: 21.48

Method of Sampling: SAMPLE PORT

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 ( )
1302	14.6	8.85	5822	32.9	-185	

INSTRUMENT CHECK DATA:

Turbidity Serial #: _____ NTU std. = _____ NTU _____ NTU std. = _____ NTU

Solutions: _____

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

Solutions: _____

Conductivity Serial #: _____ _____ umhos/cm= _____ _____ umhos/cm= _____

Solutions: _____

GENERAL INFORMATION:

Weather conditions @ time of sampling: SUN 54°

Sample Characteristics: AMBER SL TURB

COMMENTS AND OBSERVATIONS:

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

Date: 11/13/07 By: [signature] Company: TESTAMERICA

FIELD OBSERVATIONS

Facility: ARCO

Sample Point ID: PW-15

Field Personnel: P.L., J.P.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-13-07 / 1148

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

Prot. Casing/riser height:

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

If prot.casing; depth to riser below:

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

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

PURGE INFORMATION:

Date / Time Initiated: 11-13-07 / 1150

Date / Time Completed: 11-13-07 / 1215

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

Riser Diameter, Inches: 6.0

Initial Water Level, Feet: 7.40

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 Clear Amber Finish clear Amber

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	avl / meter							
1155	7.45 / 200		14.5	8.94	10,950	4.45	-289	1.11
1200	↓ / ↓		14.7	9.88	11,250	3.35	-291	1.06
1205			14.5	10.15	11,300	3.30	-295	1.01
1210			14.5	10.29	11,400	3.27	-300	0.98
1215			14.5	10.41	11,490	3.20	-304	0.94

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID MW-15

Date/Time 11-17-07 1220 Water Level @ Sampling, Feet: 7.45

Method of Sampling: Peristaltic Dedicated: (Y) N

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

SAMPLING DATA:

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

INSTRUMENT CHECK DATA:

Turbidity Serial #: _____ NTU std. = _____ NTU _____ NTU std. = _____ NTU

Solutions: _____

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

Solutions: _____

Conductivity Serial #: _____ _____ umhos/cm= _____ _____ umhos/cm= _____

Solutions: _____

GENERAL INFORMATION:

Weather conditions @ time of sampling: Sun 53°

Sample Characteristics: Amber

COMMENTS AND OBSERVATIONS:

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

Date: 11/17/07 By: [signature] Company: Titan-ICA

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: PZ-101

Field Personnel: A.L., T.P.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-13-07 / 1401

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: 11-13-07 / 1405

Date / Time Completed: 11-13-07 / 1430

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 14.75

Elevation. G/W MSL:

Well Total Depth, Feet: 21.69

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 Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz) M.J. MM	Purge Rate (gpm/htz) W.V	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1410	150	15.17		13.0	7.54	5386	8.75	-152	1.63
1415	"	15.21		13.0	7.44	5463	6.71	-152	1.24
1420	"	15.23		12.9	7.34	6152	5.07	-155	1.20
1425	"	"		12.9	7.37	6114	5.18	-154	1.19
1430	"	"		12.8	7.38	6086	5.03	-153	1.17

Sampled @ 1430 on 11-13-07

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID _____

Date/Time _____ / _____ Water Level @ Sampling, Feet: _____

Method of Sampling: _____ Dedicated: Y / N

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

SAMPLING DATA:

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

INSTRUMENT CHECK DATA:

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: _____

Sample Characteristics: _____

COMMENTS AND OBSERVATIONS: _____

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

Date: / / By: _____ Company: _____

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: PZ-102

Field Personnel: P.L., T.P.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-13-07 / 1310

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

Prot. Casing/riser height: ____

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

If prot.casing; depth to riser below: ____

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

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

PURGE INFORMATION:

Date / Time Initiated: 11-13-07 / 1313

Date / Time Completed: 11-13-07 / 1335

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

Riser Diameter, Inches: 20

Initial Water Level, Feet: 19.10

Elevation. G/W MSL: ____

Well Total Depth, Feet: 32.60

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 Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz) ml/min	Purge Rate (gpm/htz) wt-	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1320	150	19.37		14.0	7.55	5413	3.58	-185	0.93
1325	"	19.40		13.7	7.43	5206	2.80	-192	0.91
1330	"	"		13.6	7.42	5239	2.85	-201	0.89
1335	"	"		13.6	7.45	5231	2.63	-204	0.88

Sampled @ 1335 on 11-13-07

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID _____

Date/Time _____ / _____ Water Level @ Sampling, Feet: _____

Method of Sampling: _____ Dedicated: Y / N

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

SAMPLING DATA:

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

INSTRUMENT CHECK DATA:

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: _____

Sample Characteristics: _____

COMMENTS AND OBSERVATIONS: _____

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

Date: / / By: _____ Company: _____

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: PZ-103

Field Personnel: P.L., T.P.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-13-07 / 1223

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

Prot. Casing/riser height: ____

Cond of prot. Casing/riser: ( ) Unlocked ( ) Good ( ) Loose ( ) Flush Mount (X) Damaged Locking Tab broken on lid

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: 11-13-07 / 1227

Date / Time Completed: 11-13-07 / 1250

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 12.99

Elevation. G/W MSL: ____

Well Total Depth, Feet: 32.52

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 Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz) ml/min	Purge Rate (gpm/htz) WL	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1235	150	13.73		15.4	6.97	5621	2.01	-233	1.19
1240		13.75		15.3	7.09	4973	2.22	-240	1.03
1245				15.2	7.04	5007	2.17	-242	1.01
1250				15.3	7.06	5029	2.05	-244	1.01

Sample @ 1250 on 11-13-07

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID _____

Date/Time _____ / _____ Water Level @ Sampling, Feet: _____

Method of Sampling: _____ Dedicated: Y / N

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

SAMPLING DATA:

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

INSTRUMENT CHECK DATA:

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: _____

Sample Characteristics: _____

COMMENTS AND OBSERVATIONS: _____

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

Date: / / By: _____ Company: _____

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: PZ-104

Field Personnel: P.L., J.P.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-13-07 / 1142

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

Prot. Casing/riser height: —

Cond of prot. Casing/riser: ( ) Unlocked ( ) Good ( ) Loose (X) 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: 11-13-07 / 1145

Date / Time Completed: 11-13-07 / 1205

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 14.60

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 Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz) ml/min	Purge Rate (gpm/htz) W.L.	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1150	200	14.67		16.7	7.12	1511	4.13	-217	1.11
1155				16.7	7.10	1510	2.24	-217	0.98
1200				16.8	7.07	1511	2.38	-221	0.95
1205				16.7	7.08	1516	2.26	-218	0.96

Sampled @ 1205 on 11-13-07

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID _____

Date/Time _____ / _____ Water Level @ Sampling, Feet: _____

Method of Sampling: _____ Dedicated: Y / N

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

SAMPLING DATA:

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

INSTRUMENT CHECK DATA:

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: _____

Sample Characteristics: _____

COMMENTS AND OBSERVATIONS: _____

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

Date: / / By: _____ Company: _____

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: P2-105

Field Personnel: P.L., TP.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-12-07 / 1047

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

Prot. Casing/riser height: ____

Cond of prot. Casing/riser: ( ) Unlocked ( ) Good ( ) Loose (X) 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: 11-12-07 / 1050

Date / Time Completed: 11-12-07 / 1110

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 8.04

Elevation. G/W MSL: ____

Well Total Depth, Feet: 32.86

Method of Well Purge: Peristaltic Pump

One (1) Riser Volume, Gal: ____

Dedicated: (Y) / N

Total Volume Purged, Gal: ____

Purged To Dryness Y / (N)

Purge Observations: ____

Start Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz) WL	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1055	8.10	75		16.9	7.41	3169	41.7	-130	1.26
1100	8.15	↓		15.9	7.52	3025	53.9	-92	1.20
1105	8.21	↓		15.5	7.60	3020	52.7	-90	1.18
1110	8.29	↓		15.7	7.65	3020	50.0	-89	1.15

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID P2-105

Date/Time 11-2-07 1115 Water Level @ Sampling, Feet: _____

Method of Sampling: Peristaltic Dedicated: Y / N

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

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
1110	15.3	7.65	3020	50.0	-89	1.15

INSTRUMENT CHECK DATA:

Turbidity Serial #: 3825 NTU std. = _____NTU _____NTU std. = _____NTU

Solutions: _____

pH Serial #: 614162 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 48

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

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

Date: 11/2/07 By: _____ Company: TAL

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: P2-106

Field Personnel: A.L., T.P.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-13-07 / 1227

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

Prot. Casing/riser height: ____

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

If prot.casing; depth to riser below: ____

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

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

PURGE INFORMATION:

Date / Time Initiated: 11-13-07 / 1230

Date / Time Completed: 11-13-07 / 1250

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 10.01

Elevation. G/W MSL: ____

Well Total Depth, Feet: 27.90

Method of Well Purge: Peristaltic pump

One (1) Riser Volume, Gal: ____

Dedicated: (Y) / N

Total Volume Purged, Gal: ____

Purged To Dryness Y / (N)

Purge Observations: ____

Start Yellow Tint clear Finish Yellow Tint clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz) WL	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1235	10.47	100		14.2	7.73	9649	40.1	-158	1.00
1240	11.25	↓		14.3	7.68	9820	35.2	-160	0.97
1245	11.51			14.4	7.60	9854	35.1	-162	0.94
1250	11.90	↓		14.3	7.54	9861	33.0	-163	0.90

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID MZ-106

Date/Time 11-13-07 1 1255 Water Level @ Sampling, Feet: 11.80

Method of Sampling: Peristaltic Dedicated: (Y) / N

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

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
1250	14.3	7.54	9861	33.0	-163	0.80

INSTRUMENT CHECK DATA:

Turbidity Serial #: _____ NTU std. = _____ NTU _____ NTU std. = _____ NTU

Solutions: _____

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

Solutions: _____

Conductivity Serial #: _____ _____ umhos/cm= _____ _____ umhos/cm= _____

Solutions: _____

GENERAL INFORMATION:

Weather conditions @ time of sampling: Sun 55°

Sample Characteristics: Yellow Tint Clear

COMMENTS AND OBSERVATIONS:

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

Date: 11/13/07 By: [signature] Company: Tetra Tech

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: P2-107

Field Personnel: P.L., T.P.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-12-07 / 1242

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

Prot. Casing/riser height: ____

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

If prot.casing; depth to riser below: ____

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

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

PURGE INFORMATION:

Date / Time Initiated: 11-12-07 / 1245

Date / Time Completed: 11-12-07 / 1305

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 7.28

Elevation. G/W MSL: ____

Well Total Depth, Feet: 27.90

Method of Well Purge: Peristaltic pump

One (1) Riser Volume, Gal: ____

Dedicated: (Y) / N

Total Volume Purged, Gal: ____

Purged To Dryness Y / (N)

Purge Observations: ____

Start Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	WL	ML/MN							
1250	7.41	200		13.7	7.54	2268	2.01	-191	1.01
1255	↓	↓		14.2	7.58	2250	2.00	-203	0.98
1300				14.5	7.62	2241	2.00	-207	0.90
1305				14.6	7.68	2234	1.98	-209	0.84

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID MW-107

Date/Time 11-12-07 1310 Water Level @ Sampling, Feet: 7.41

Method of Sampling: Peristaltic Dedicated: (Y) (N)

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

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
1305	14.6	7.68	2274	1.98	-209	0.84

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 50°

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

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

Date: 11/12/07 By: _____ Company: TAL

LeachField Form
Revision 0
March 15,2002

FIELD OBSERVATIONS

Facility: Arch Chemical Sample Point ID: QD-1

Field Personnel: R. Little Sample Matrix: SW

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 12-10-07 1 1245 Water Level @ Sampling, Feet: _____

Method of Sampling: Manual Grab 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 ( )	Other ( )
1250	8.7	7.36	1511			

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 30°

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

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

Date: 12/10/07 By: _____ Company: TAC

LeachField Form
Revision 0
March 15,2002

FIELD OBSERVATIONS

Facility: ARCH **Sample Point ID:** GO-2

Field Personnel: R. SENF **Sample Matrix:** OUTFALL

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 11-09-07 1600 **Water Level @ Sampling, Feet:** N/A

Method of Sampling: MANUAL GRAB **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 ( )	Other ( )
1610	11.0	7.97	2336			

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, 40°F

Sample Characteristics: CLEAR

COMMENTS AND OBSERVATIONS:

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

Date: 11 10 07 By: _____ Company: TAL

LeachField Form
Revision 0
March 15,2002

FIELD OBSERVATIONS

Facility: Arch Chemical **Sample Point ID:** RO-2

Field Personnel: R. Little **Sample Matrix:** OUTFALL

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 12-10-07 1215 **Water Level @ Sampling, Feet:** _____

Method of Sampling: Manual Grab **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 ( )	Other ( )
1218	8.0	7.20	1982			

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 70°

Sample Characteristics: clear

COMMENTS AND OBSERVATIONS:

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

Date: 12/10/07 By: _____ Company: TAL

LeachField Form
Revision 0
March 15,2002

FIELD OBSERVATIONS

Facility: ARCH **Sample Point ID:** GO-251

Field Personnel: R. STENF **Sample Matrix:** CANAC

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 11-09-07 1625 **Water Level @ Sampling, Feet:** N/A

Method of Sampling: DIPPER **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 ( )	Other ( )
1630	10.3	7.90	515			

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, 40°F

Sample Characteristics: CLEAR

COMMENTS AND OBSERVATIONS: _____

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

Date: 11/09/07 **By:** _____ **Company:** TAL

LeachField Form
Revision 0
March 15,2002

FIELD OBSERVATIONS

Facility: ARCH Chemical **Sample Point ID:** LO-251

Field Personnel: P. Little **Sample Matrix:** Chemical

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 12-10-07 1210 **Water Level @ Sampling, Feet:** _____

Method of Sampling: Dipper **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 ( )	Other ( )
1213	2.7	7.32	583			

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 30°

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

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

Date: 12/10/07 By: _____ Company: TAL

LeachField Form
Revision 0
March 15,2002

FIELD OBSERVATIONS

Facility: ARCH Sample Point ID: QS-4

Field Personnel: R. SRUF Sample Matrix: SARP

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 11-09-07 / 1540 Water Level @ Sampling, Feet: N/A

Method of Sampling: MANUAL GRAB 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 ( )	Other ( )
1550	10.7	8.09	1611			

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, 40°F

Sample Characteristics: CLEAR

COMMENTS AND OBSERVATIONS:

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

Date: 11/9/07 By: [signature] Company: TAC

LeachField Form
Revision 0
March 15,2002

FIELD OBSERVATIONS

Facility: ARCH Chemical Sample Point ID: QS-4

Field Personnel: D. Little Sample Matrix: SEEP

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 12-10-07 1125 Water Level @ Sampling, Feet: —

Method of Sampling: MANUAL GRAB 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 ( )	Other ( )
1130	9.2	7.10	1383			

INSTRUMENT CHECK DATA:

Turbidity Serial #: _____ NTU std. = _____ NTU _____ NTU std. = _____ NTU

Solutions: _____

pH Serial #: 614162 4.0 std.= 4.00 7.0 std.= 7.00 10.0 std. = _____

Solutions: 4-KQI 7-KQI

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

Solutions: 3715

GENERAL INFORMATION:

Weather conditions @ time of sampling: Cloudy 30°

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

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

Date: 12/10/07 By: [signature] Company: TAC

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID S-3

Date/Time 11-12-09 1 124 Water Level @ Sampling, Feet: 2.88

Method of Sampling: Peristaltic Dedicated: Y (N)

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

SAMPLING DATA:

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

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 48°

Sample Characteristics: clear Black tint

COMMENTS AND OBSERVATIONS: _____

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

Date: 11/12/09 By: _____ Company: TAL

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: S-3

Field Personnel: A.L., T.P.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-12-07 / 1211

Cond of seal: ( ) Good ( ) Cracked VAULT
( ) 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: 11-12-07 / 1215

Date / Time Completed: 11-12-07 / 1235

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

Riser Diameter, Inches: VAULT

Initial Water Level, Feet: 2.20

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) BLACK TINT

Purge Observations:

Start clear Finish clear BLACK TINT

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz) WL	Purge Rate (gpm/htz) MW	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1220	270	200		11.1	7.53	2368	9.47	-10	1.20
1225	↓	↓		11.0	7.53	2380	6.11	-8	1.16
1230				11.0	7.60	2387	5.10	-5	1.11
1235	↓	↓		10.8	7.69	2386	3.92	-3	1.06

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: S-4

Field Personnel: P.L., T.P.

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 11-12-07 1313

Cond of seal: ( ) Good ( ) Cracked VAULT
( ) 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: 11-12-07 1316

Date / Time Completed: 11-12-07 1380

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

Riser Diameter, Inches: VAULT

Initial Water Level, Feet: .81

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: BLACK SPECKS

Start Clear Finish Clear Specks

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	WL	pump							
1320	.81	200		12.8	7.96	887	70.0	-74	1.39
1325				12.5	7.77	853	60.9	-69	1.34
1330				12.5	7.69	850	55.6	-64	1.29
1335				12.4	7.68	848	20.2	-63	1.20
1340				12.4	7.68	843	15.72	-60	1.16

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID S-4

Date/Time 11-12-07 1345 Water Level @ Sampling, Feet: 81.

Method of Sampling: Peristaltic Dedicated: (Y) N

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

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other (DO)
1340	12.4	7.68	843	15.72	-60	1.16

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 50°

Sample Characteristics: Clear Slight

COMMENTS AND OBSERVATIONS:

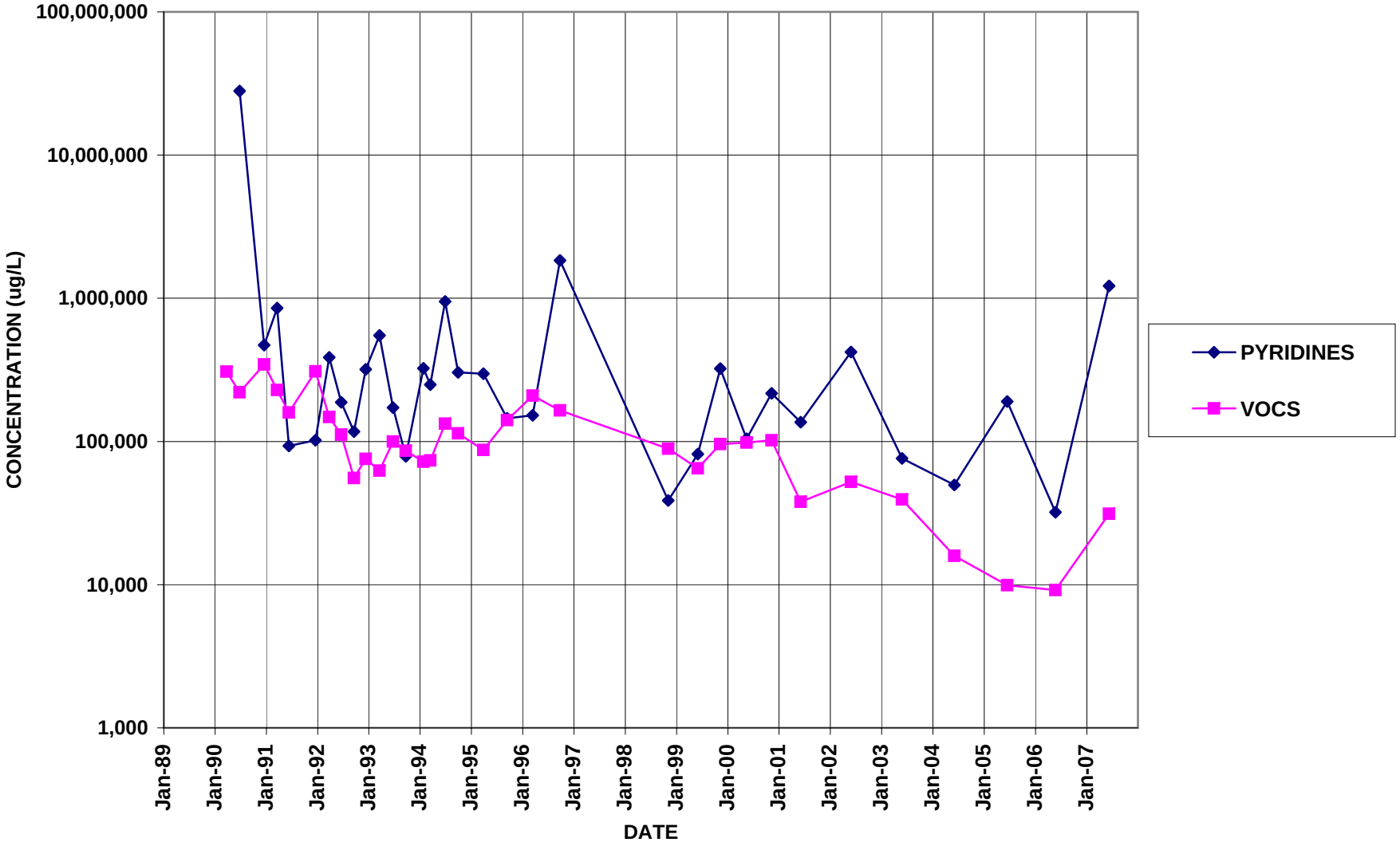
I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocals.

Date: 11/12/07 By: [signature] Company: TAC

Appendix B

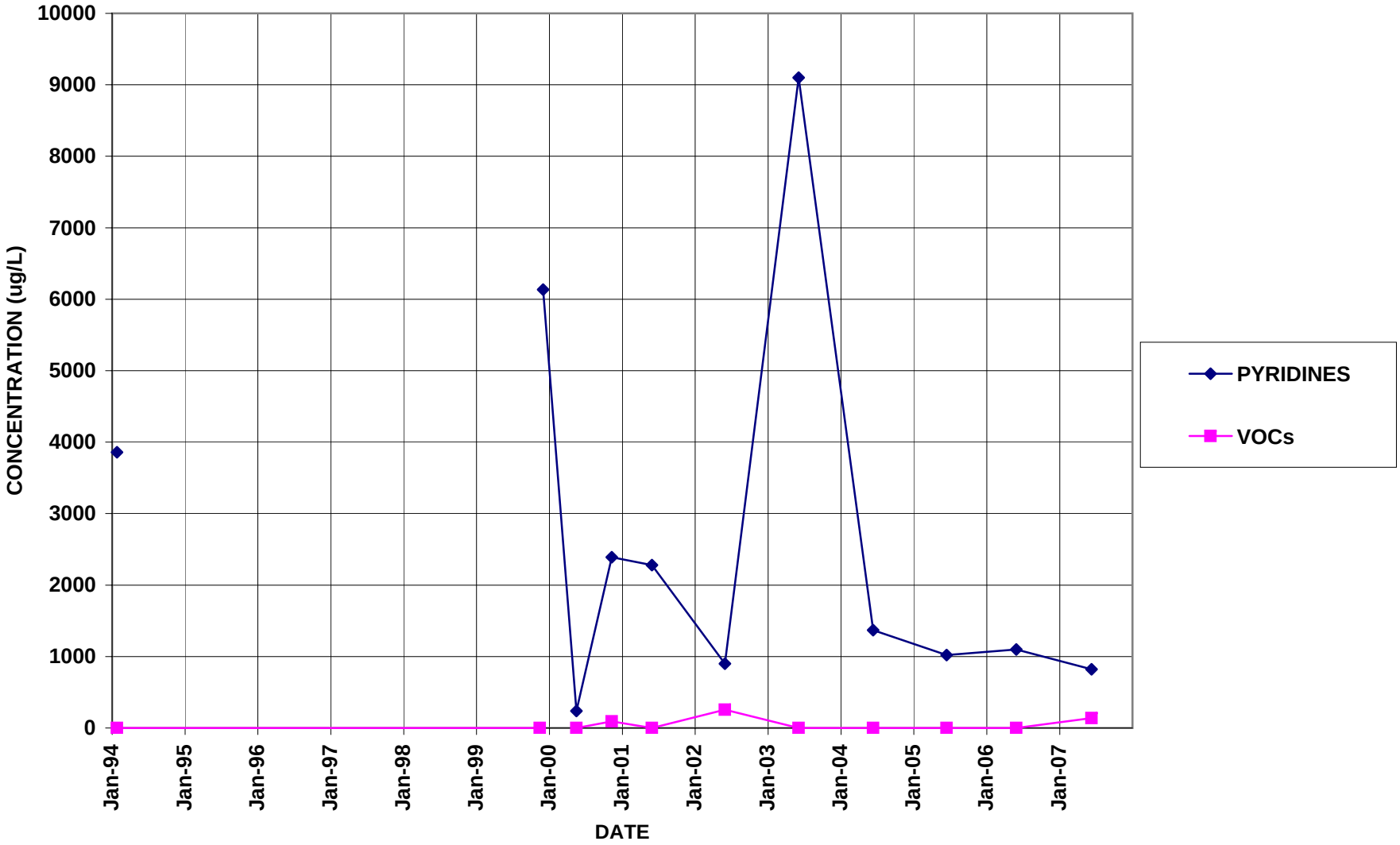
Well Trend Data

B-17



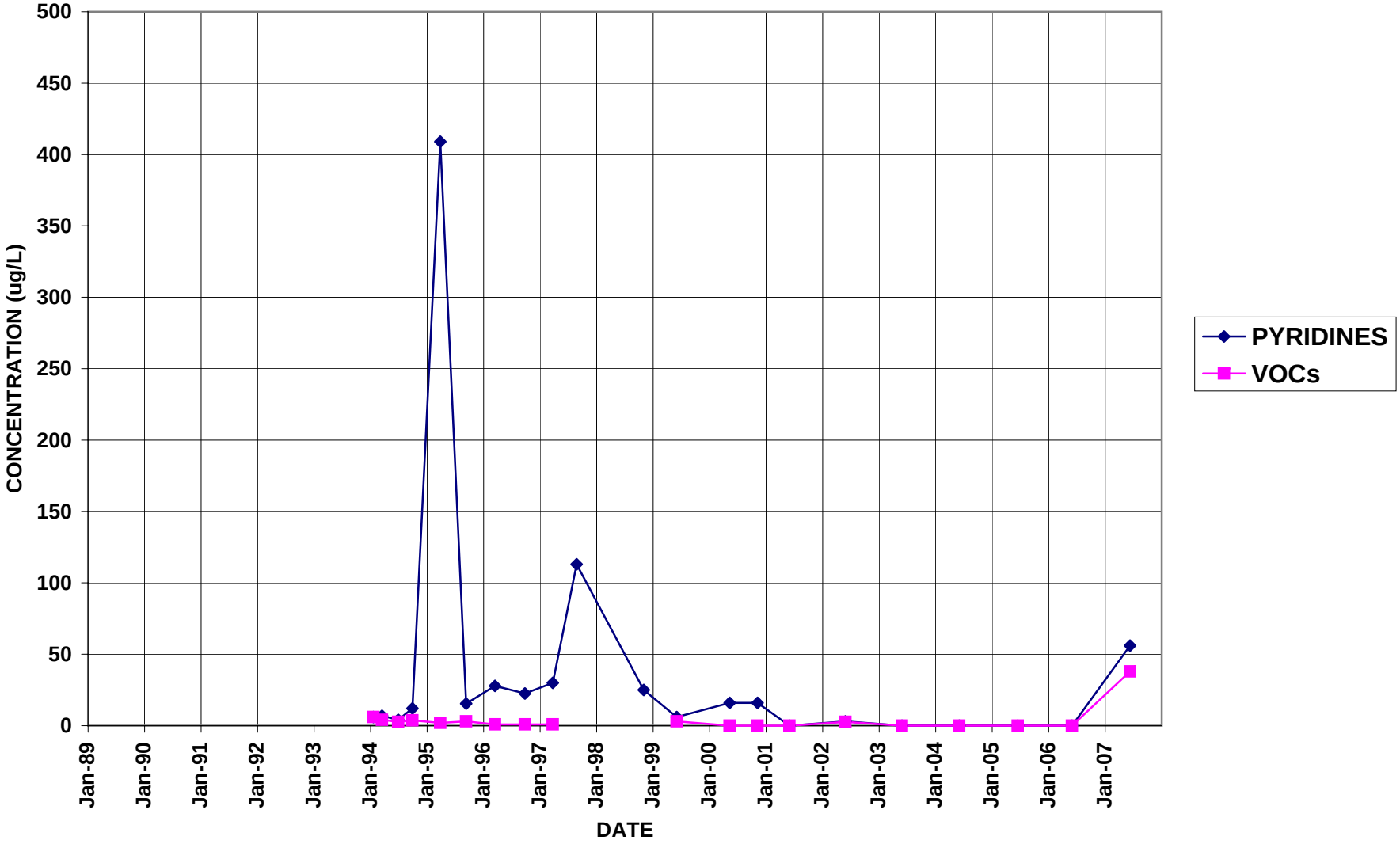
Prepared by: nmb
Reviewed by: jeb

B-7



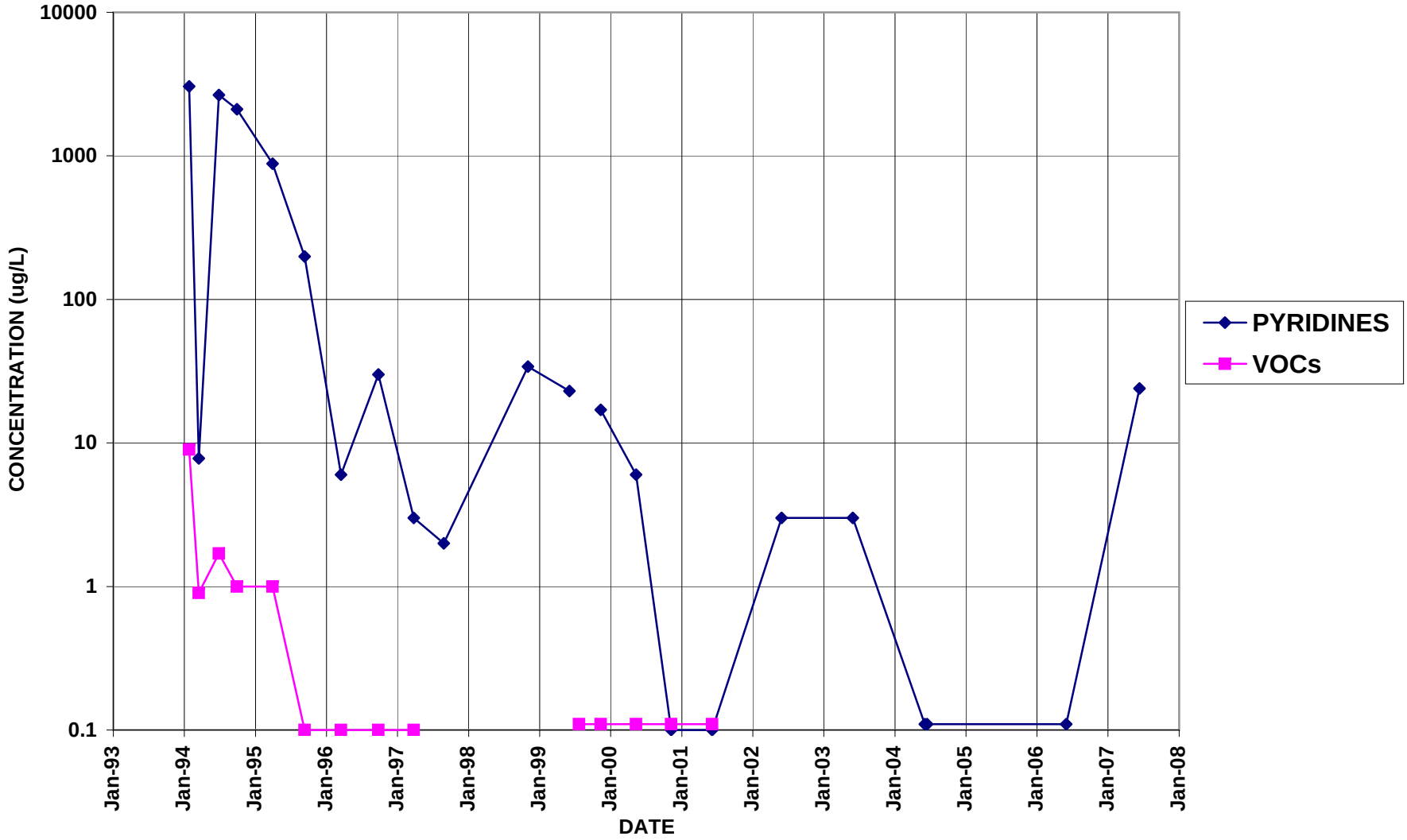
Prepared by: nmb
Reviewed by: jeb

BR-103

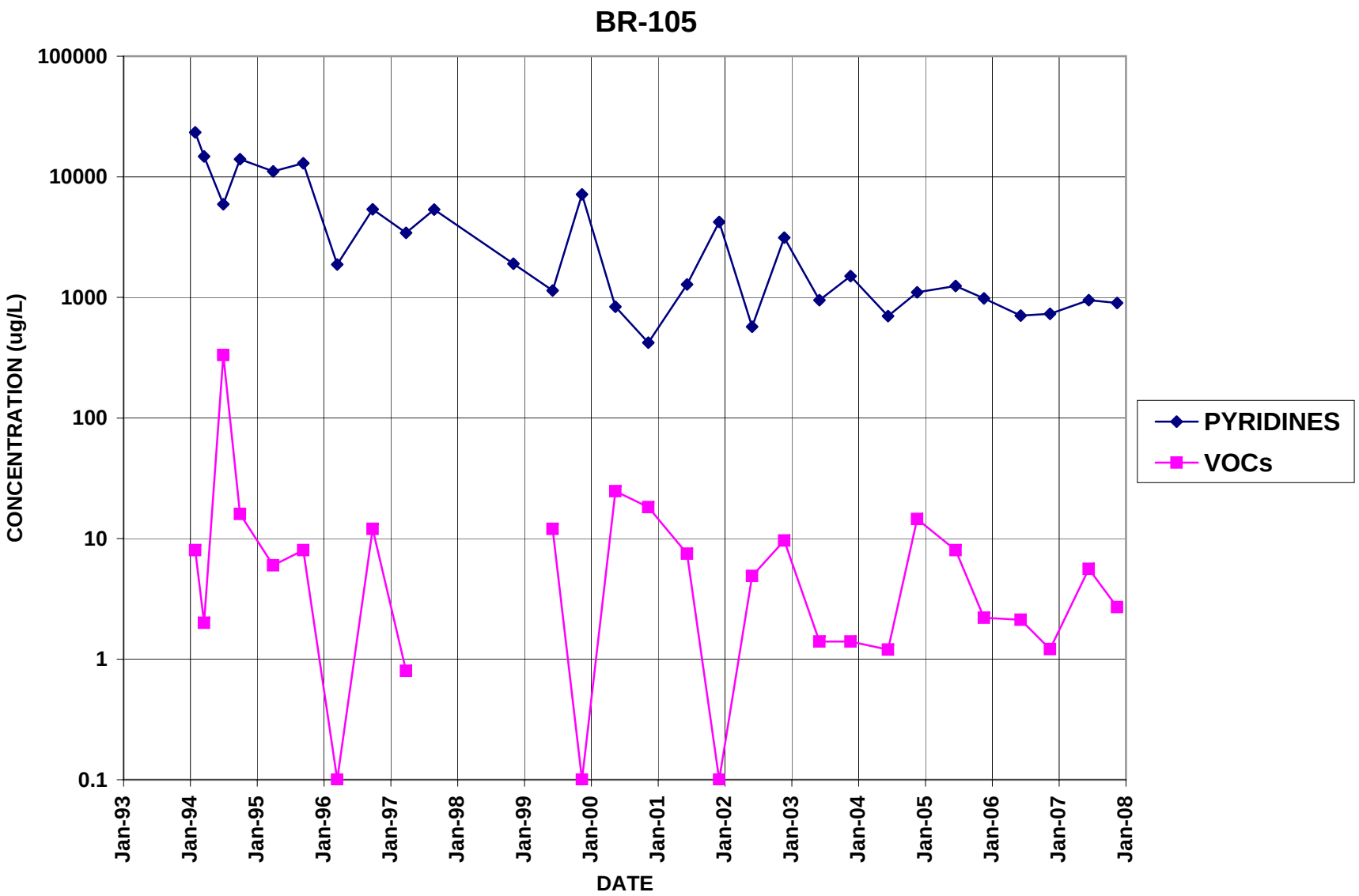


Prepared by: nmb
Reviewed by: jeb

BR-104

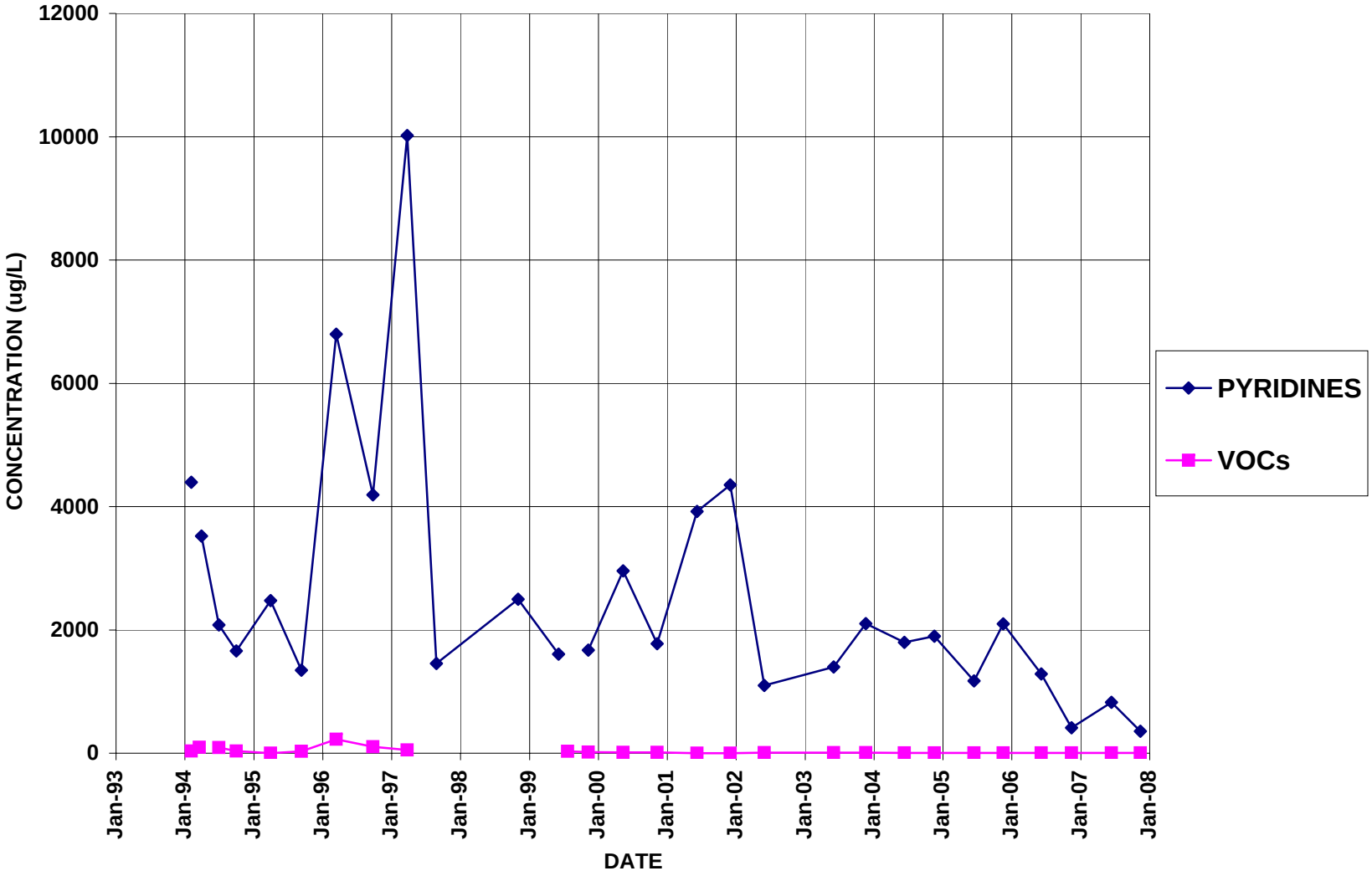


Prepared by: nmb
Reviewed by: jeb



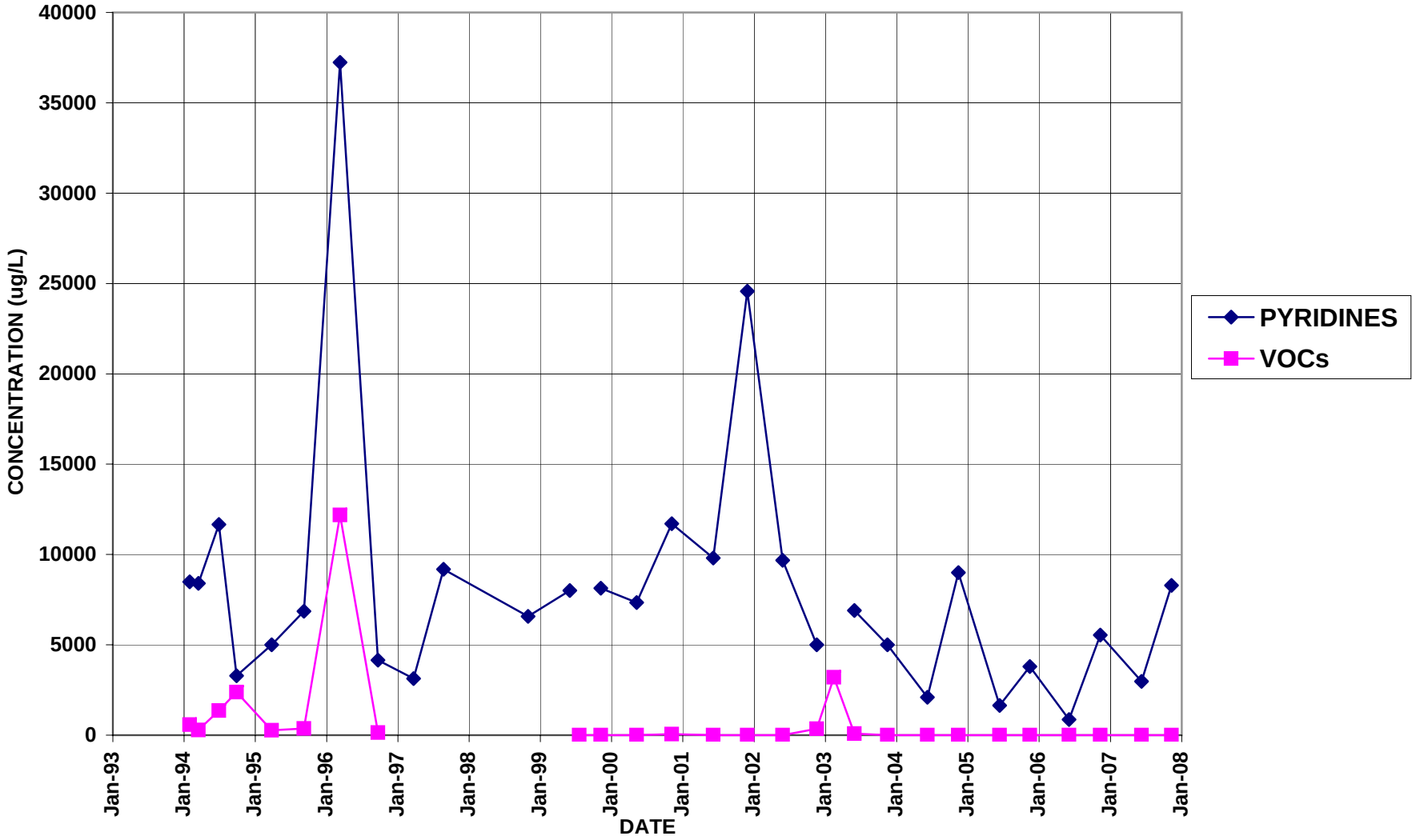
Prepared by: nmb
Reviewed by: jeb

BR-105D



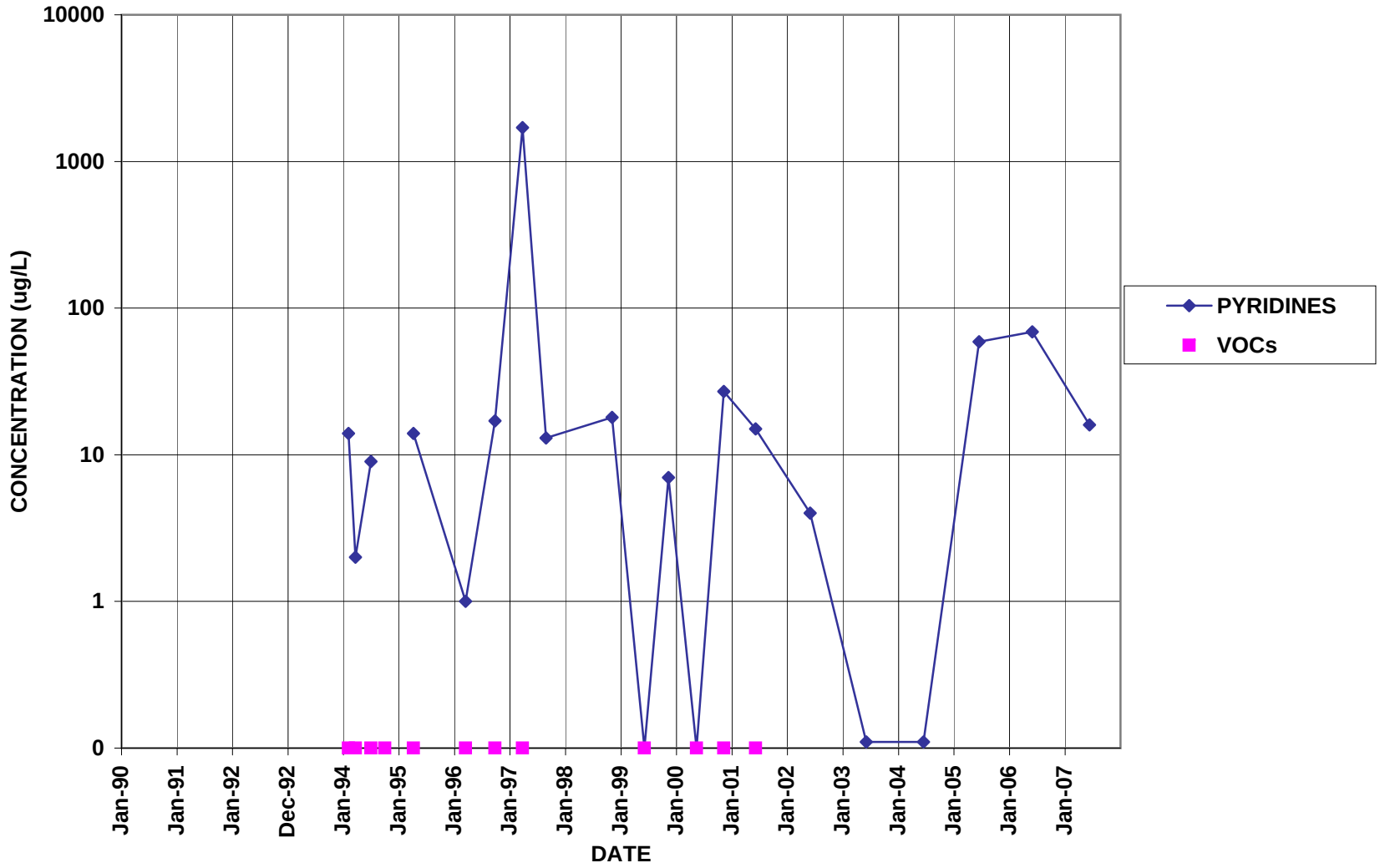
Prepared by: nmb
Reviewed by: jeb

BR-106



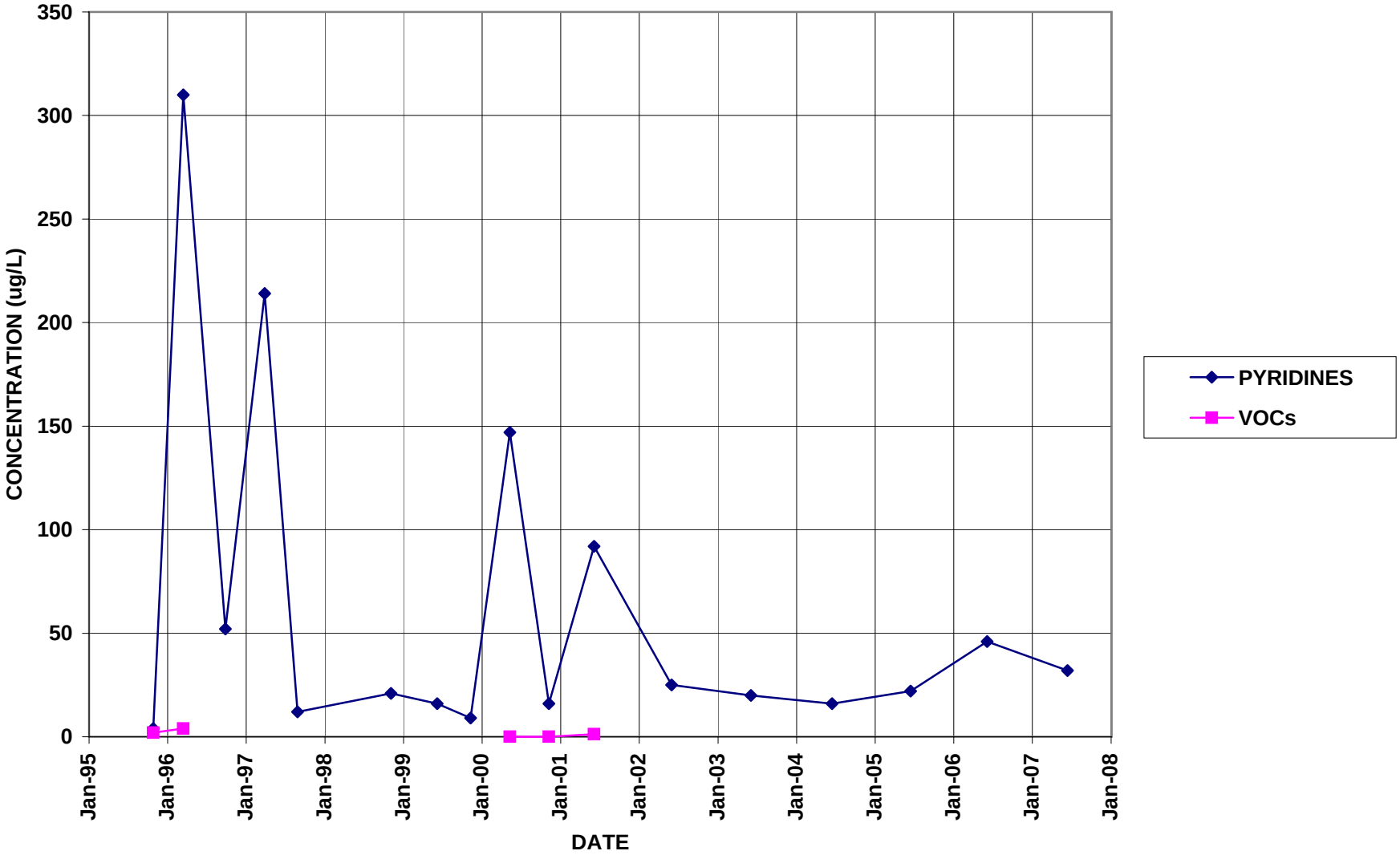
Prepared by: nmb
Reviewed by: jeb

BR-108



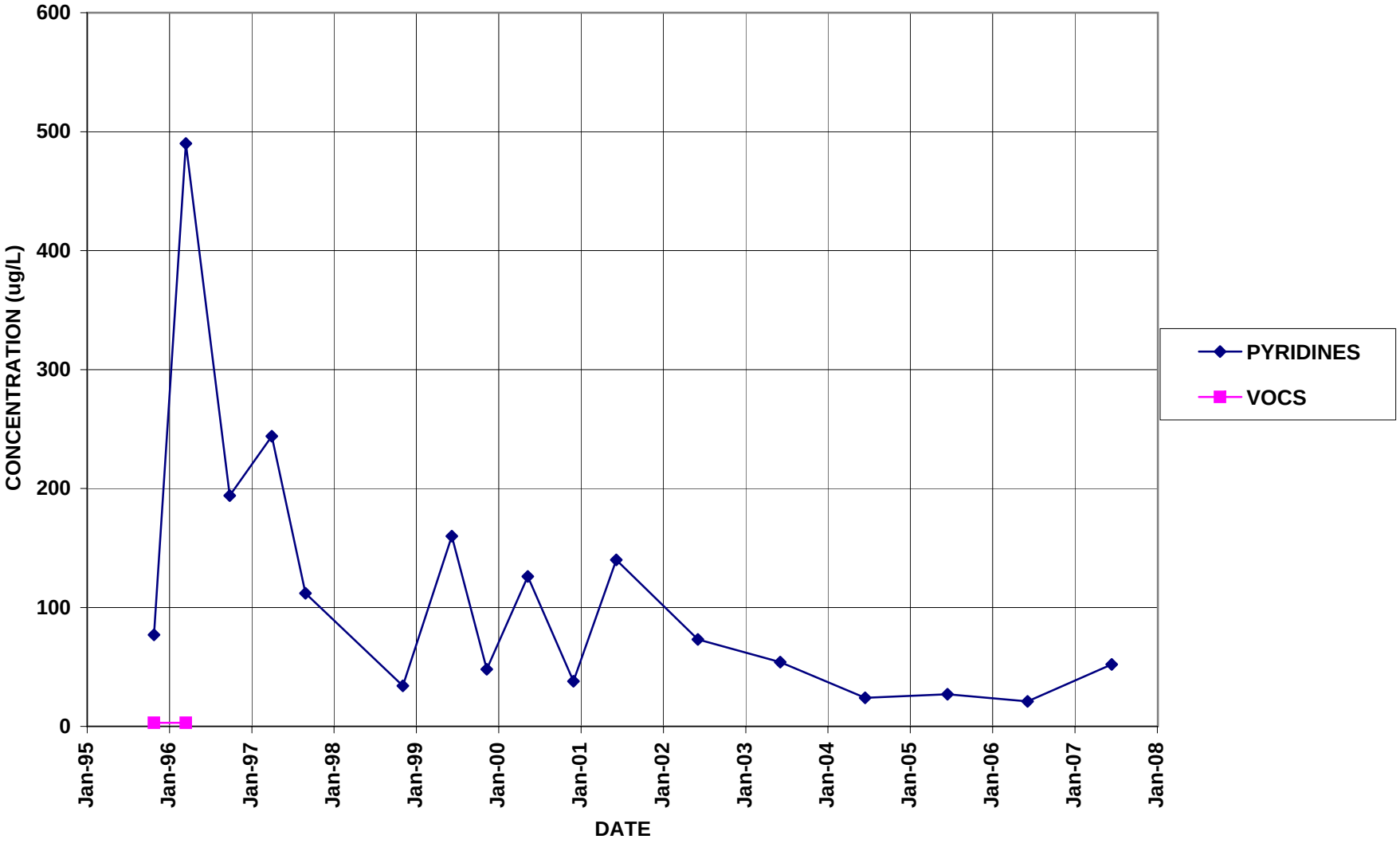
Prepared by: nmb
Reviewed by: jeb

BR-112D



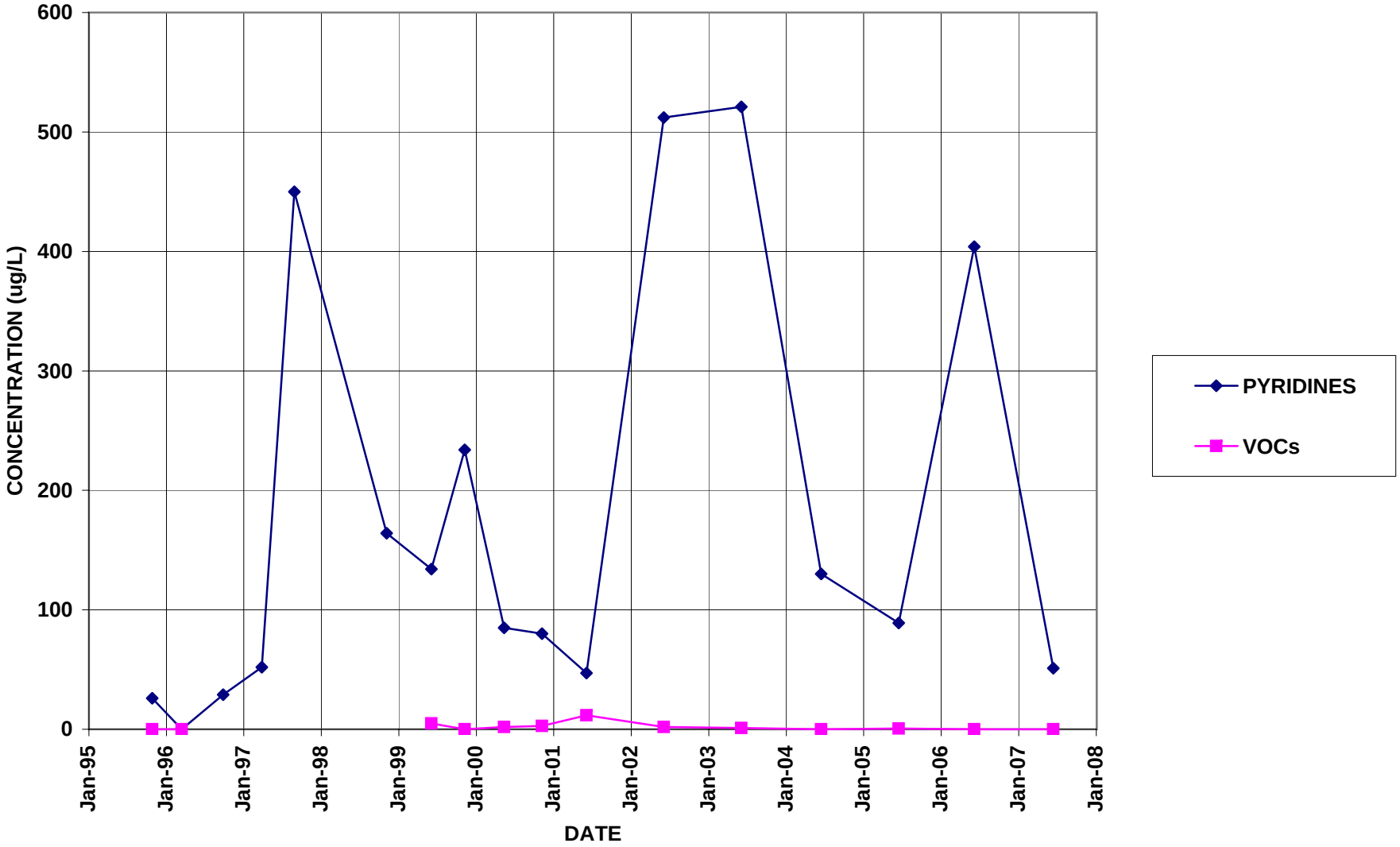
Prepared by: nmb
Reviewed by: jeb

BR-113D



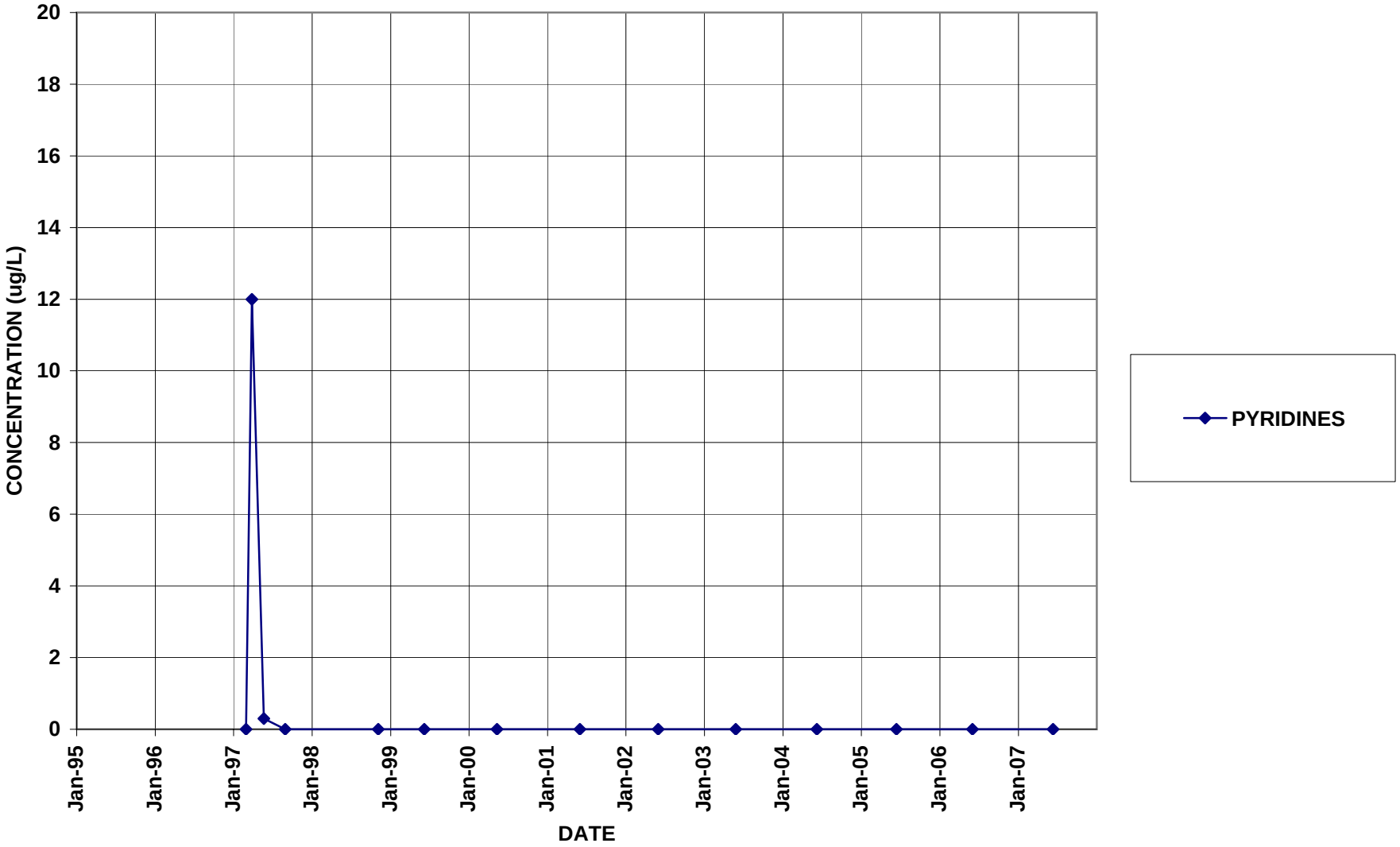
Prepared by: nmb
Reviewed by: jeb

BR-114



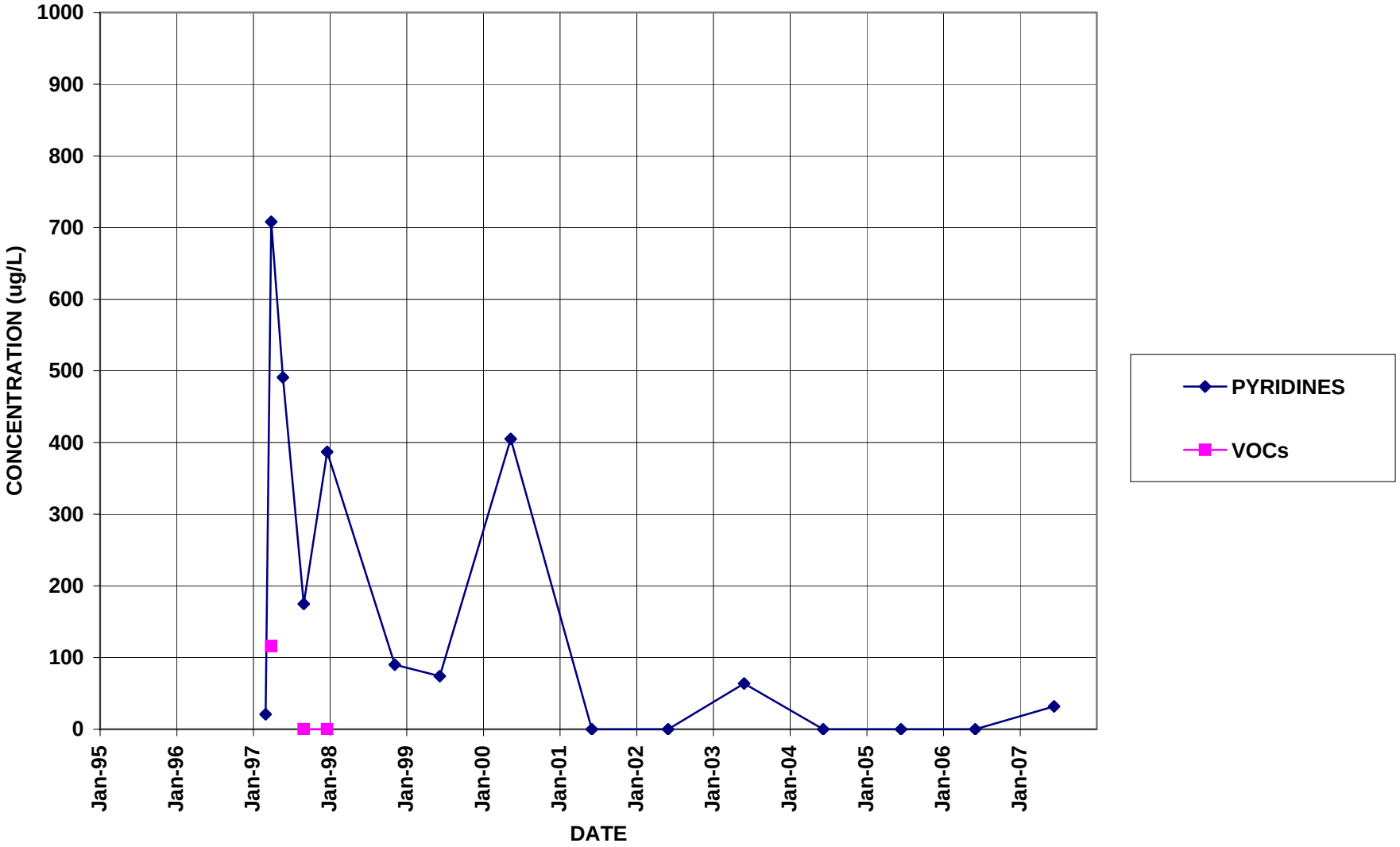
Prepared by: nmb
Reviewed by: jeb

BR-116



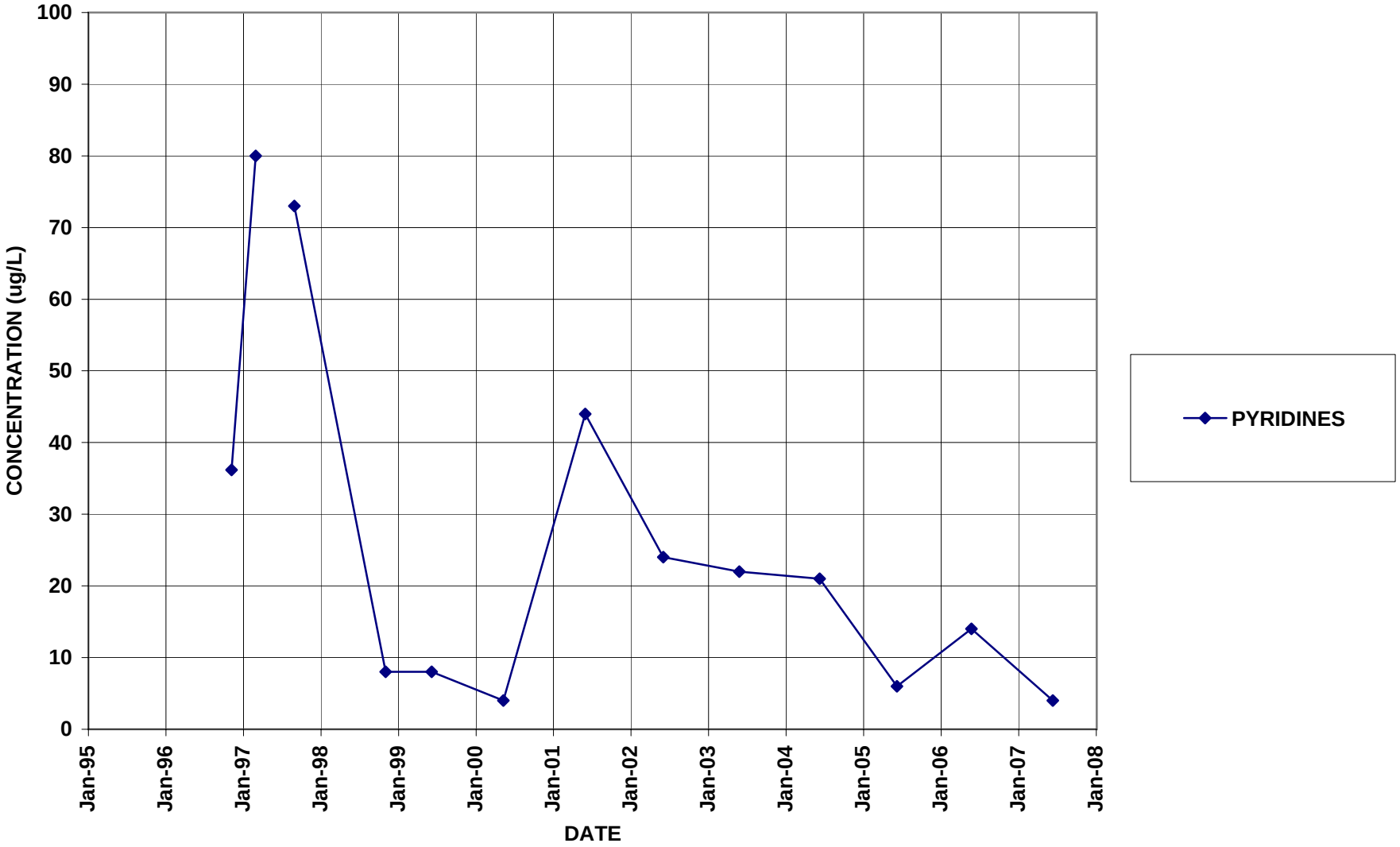
Prepared by: nmb
Reviewed by: jeb

BR-116D



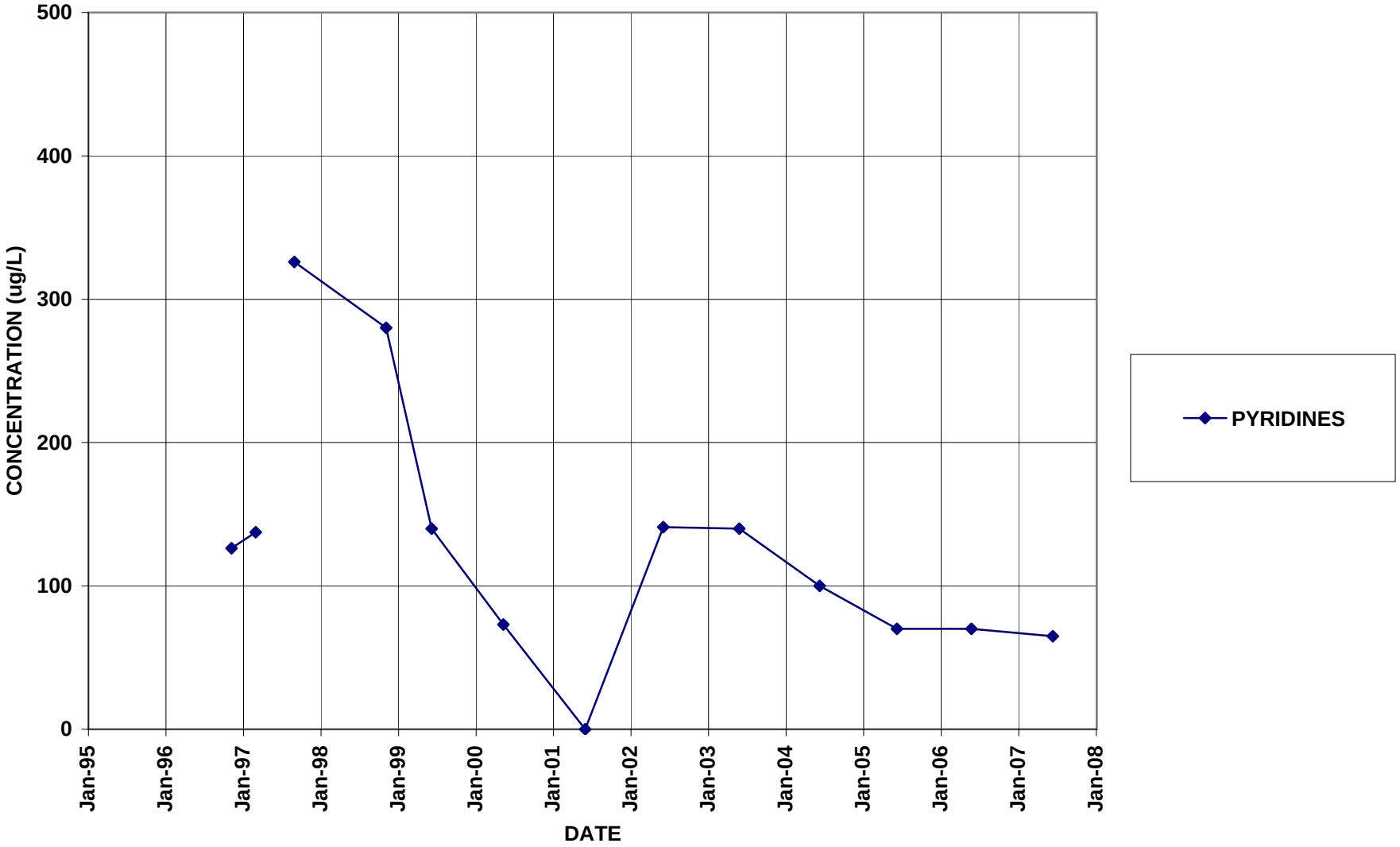
Prepared by: nmb
Reviewed by: jeb

BR-117D



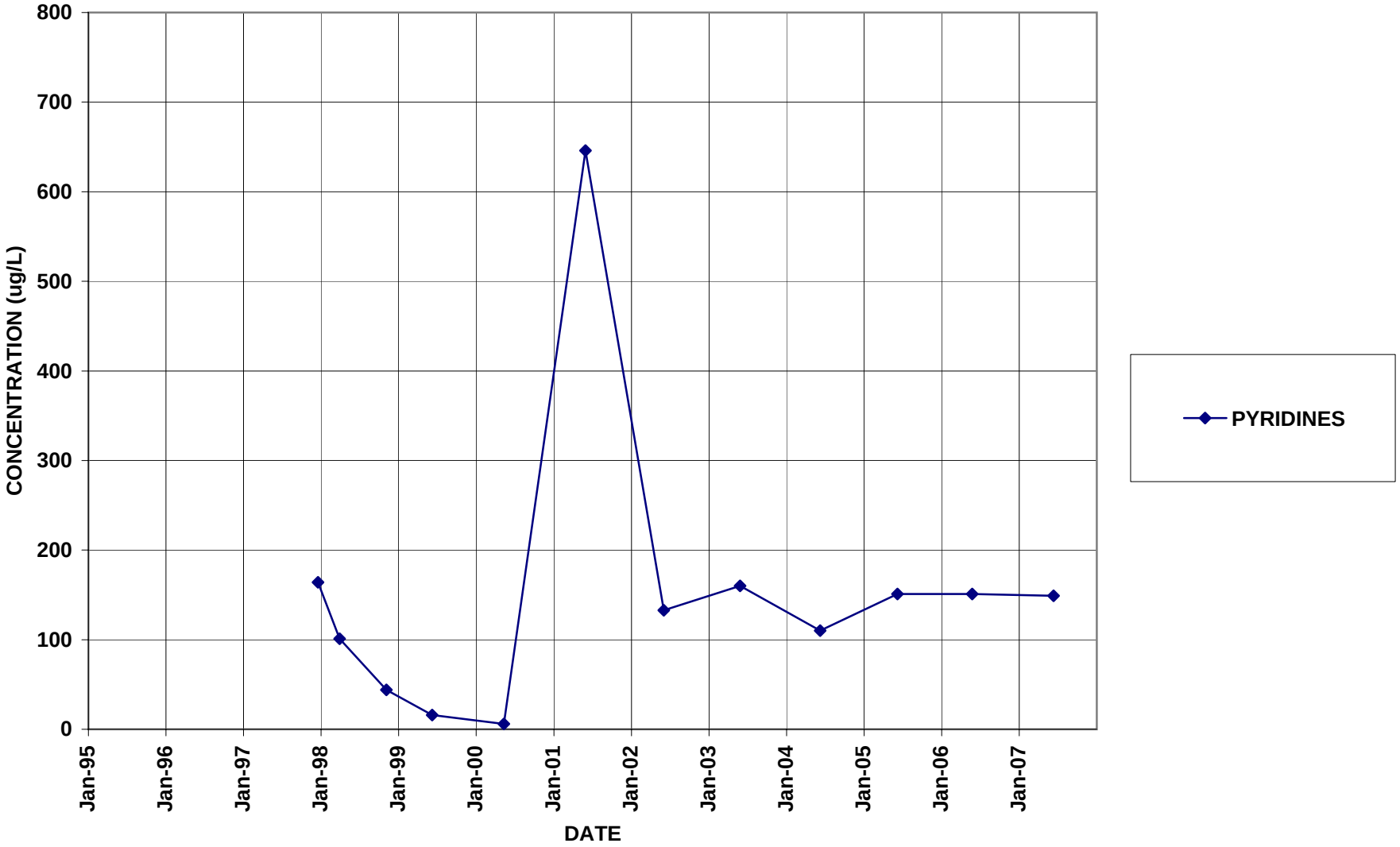
Prepared by: nmb
Reviewed by: jeb

BR-118D



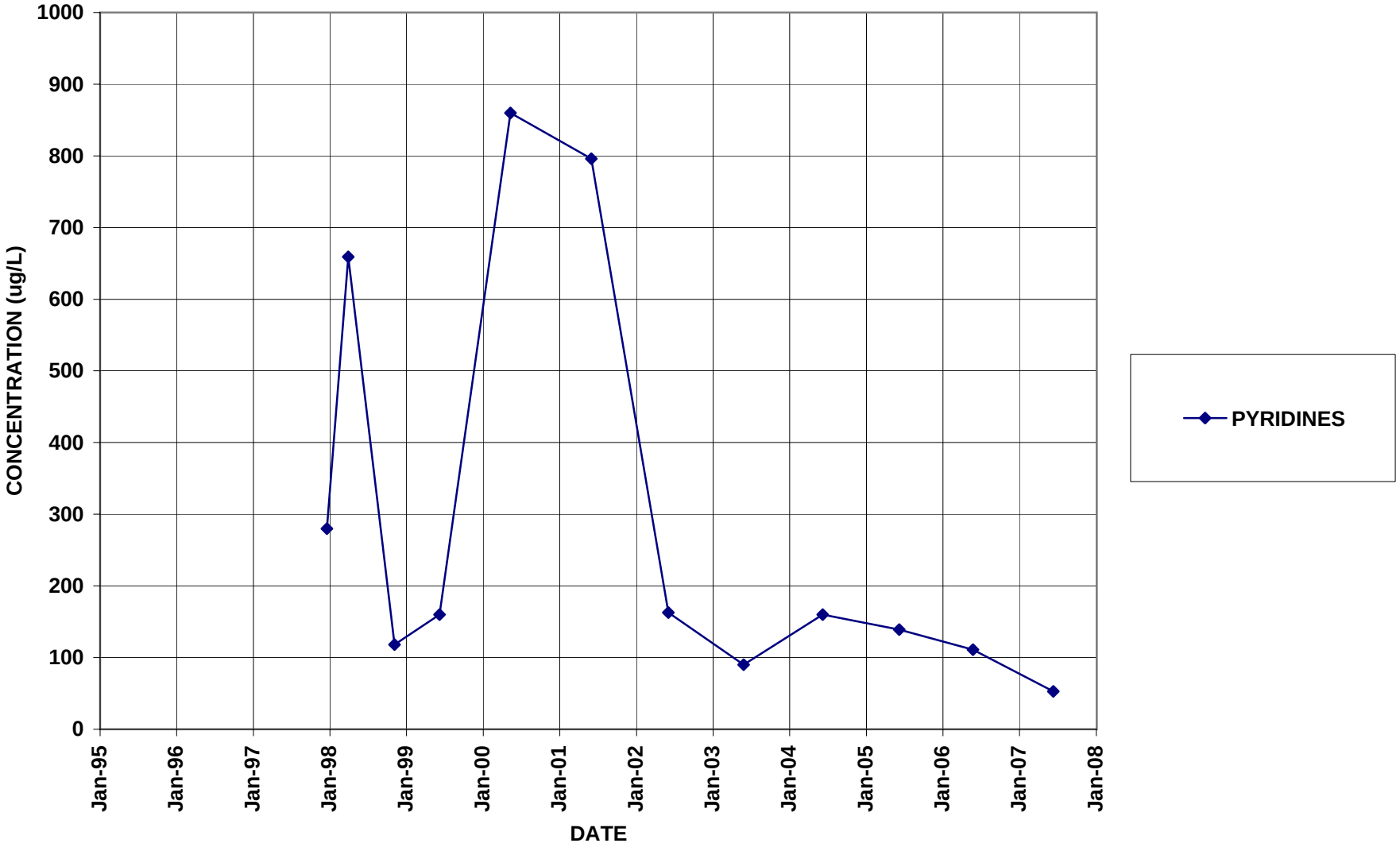
Prepared by: nmb
Reviewed by: jeb

BR-122D



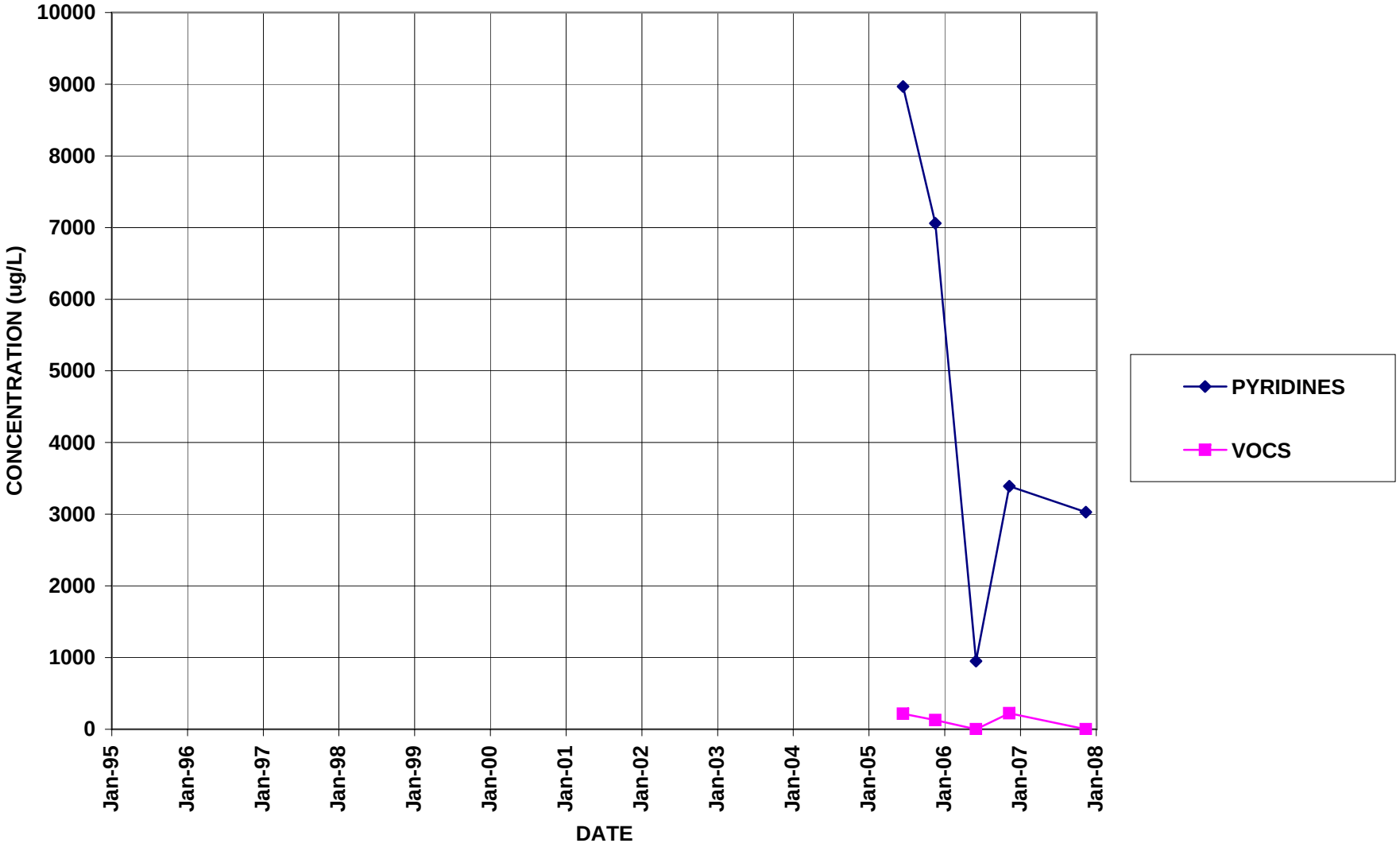
Prepared by: nmb
Reviewed by: jeb

BR-123D



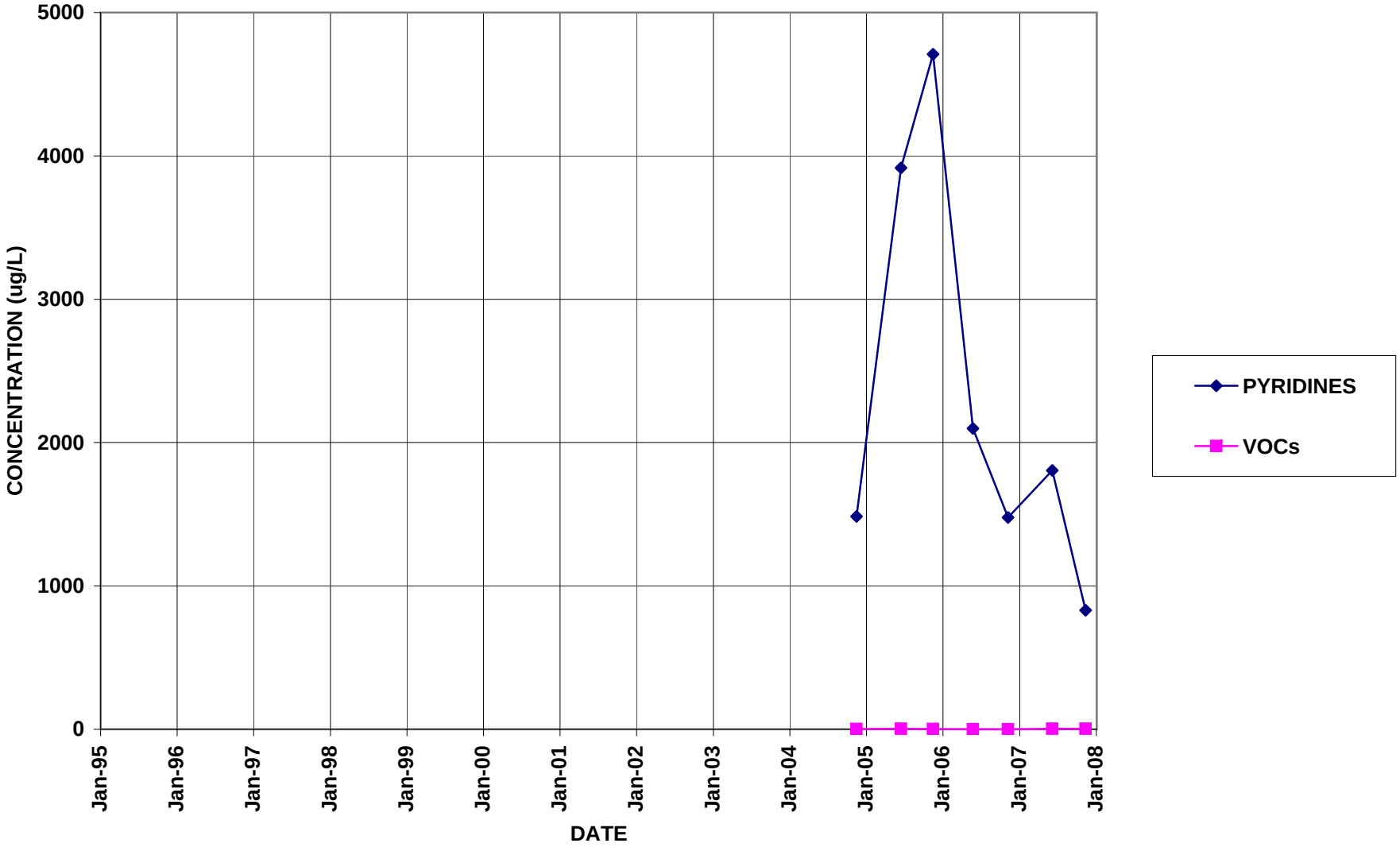
Prepared by: nmb
Reviewed by: jeb

BR-126

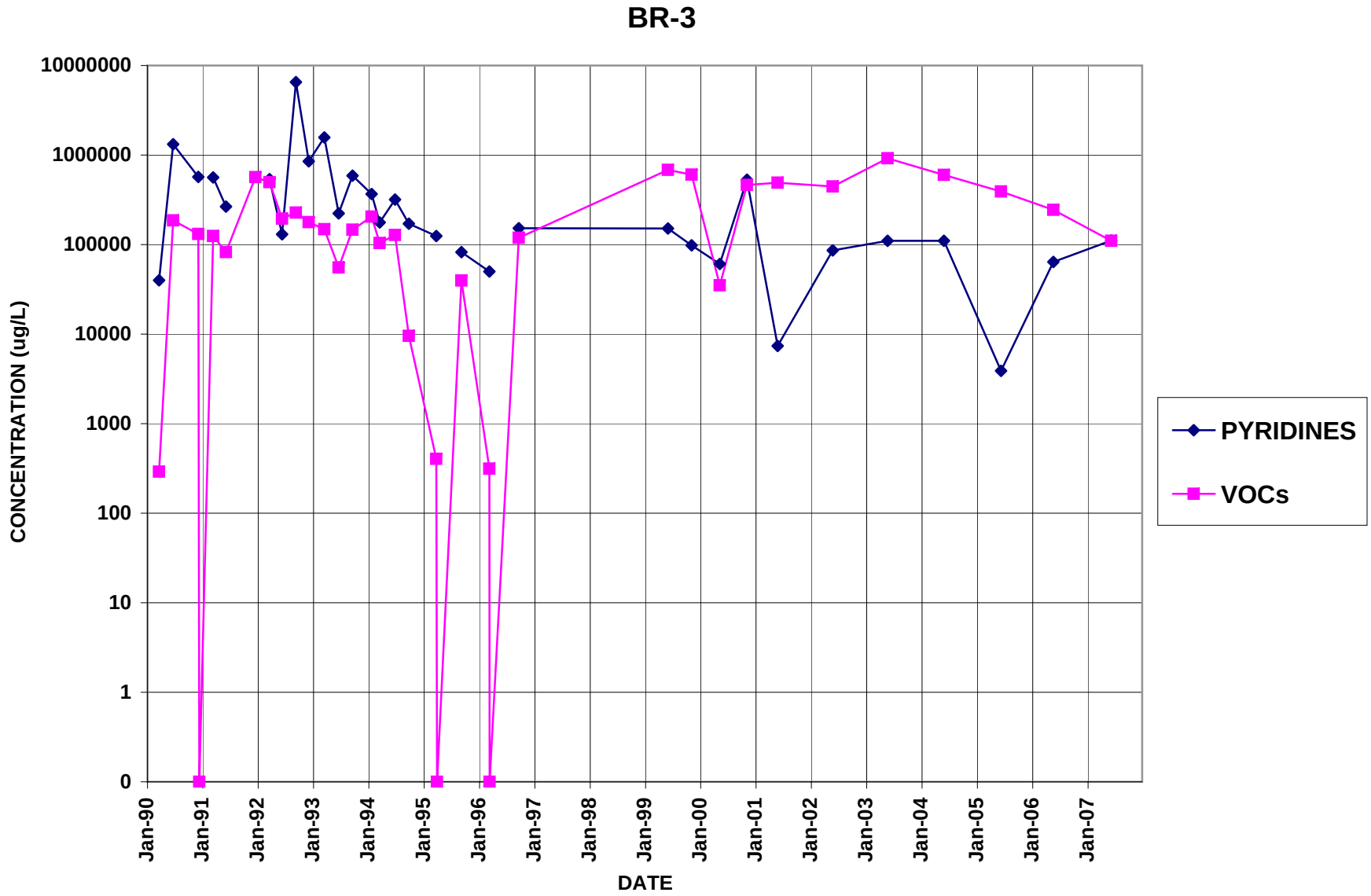


Prepared by: nmb
Reviewed by: jeb

BR-127

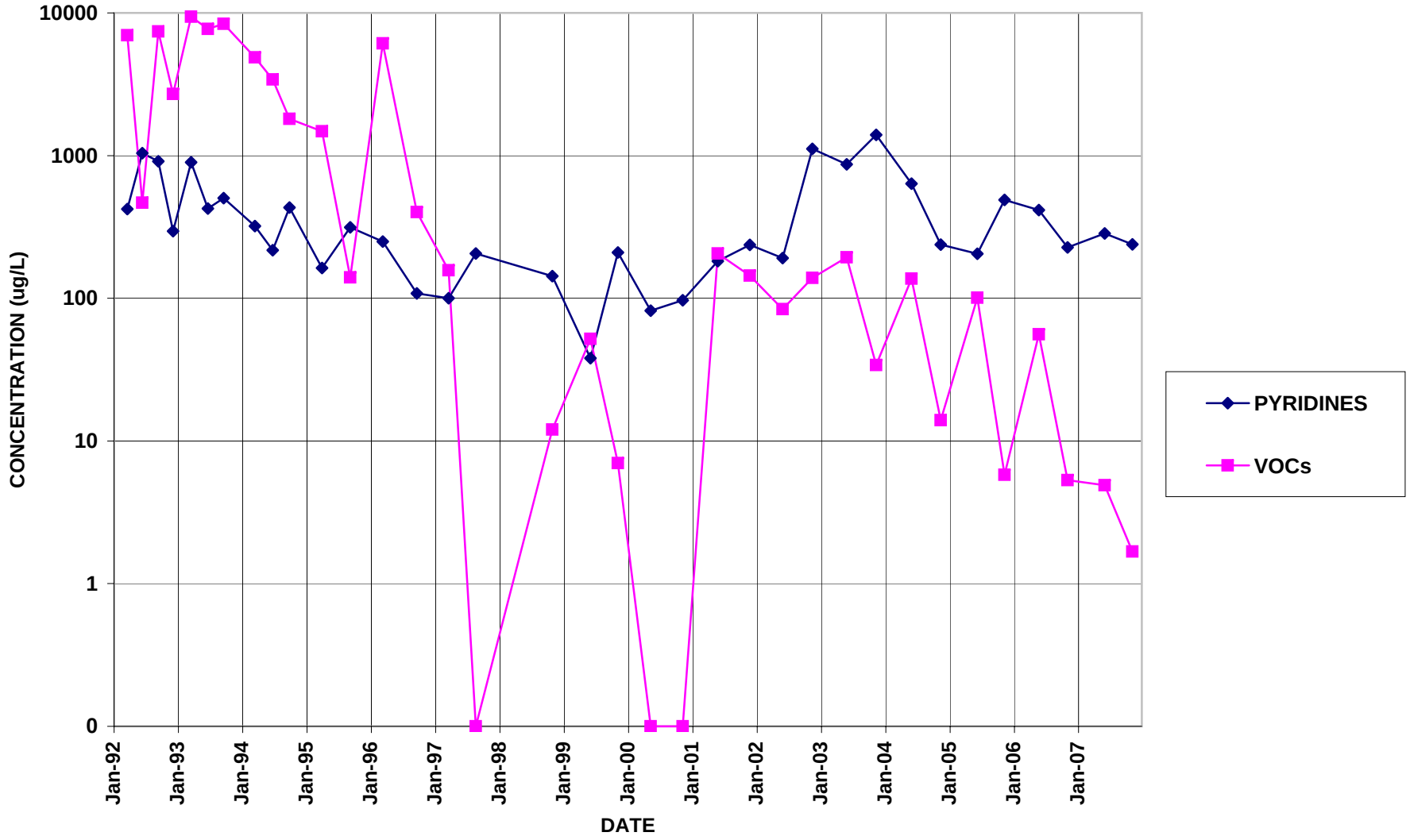


Prepared by: nmb
Reviewed by: jeb



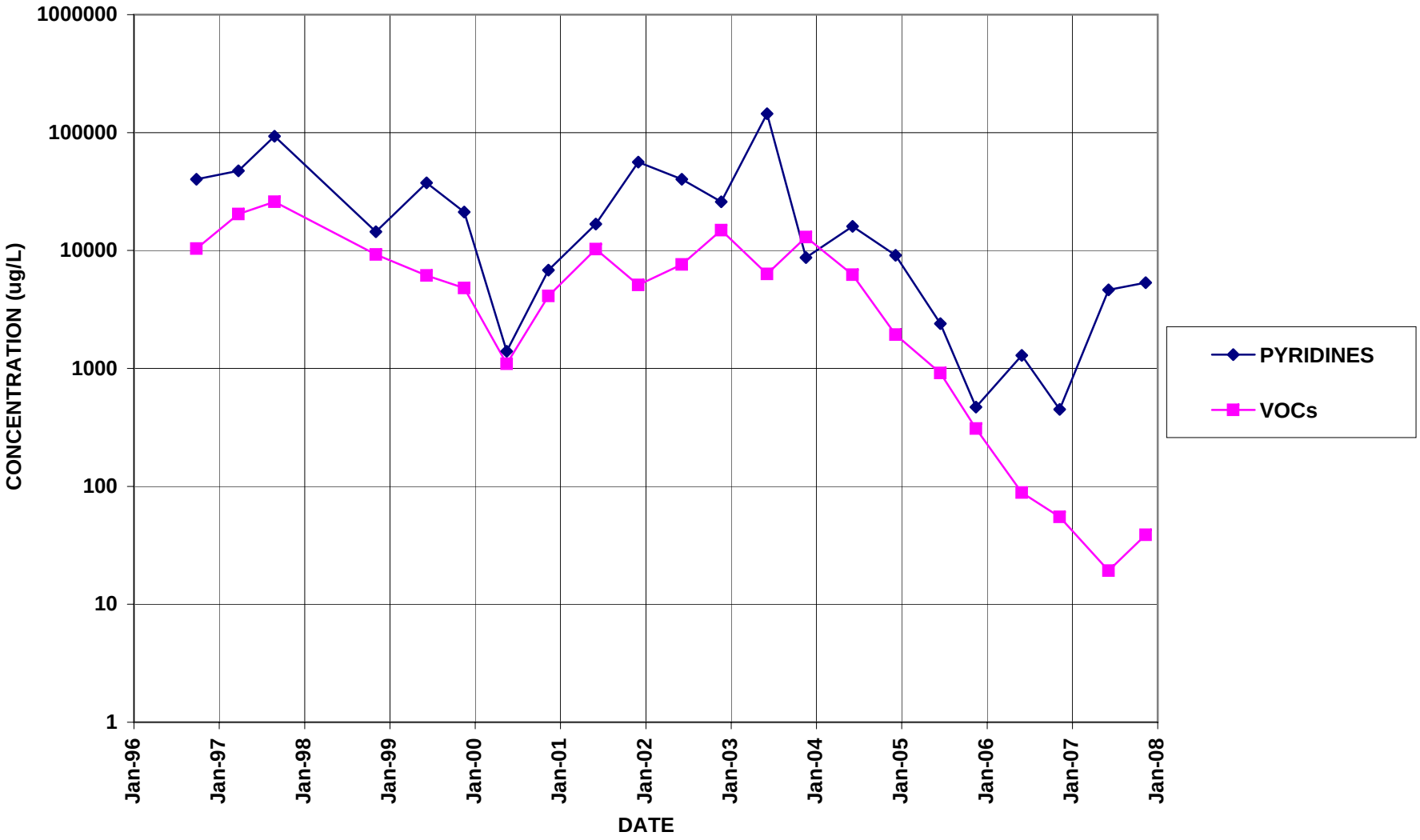
Prepared by: nmb
Reviewed by: jeb

BR-5A

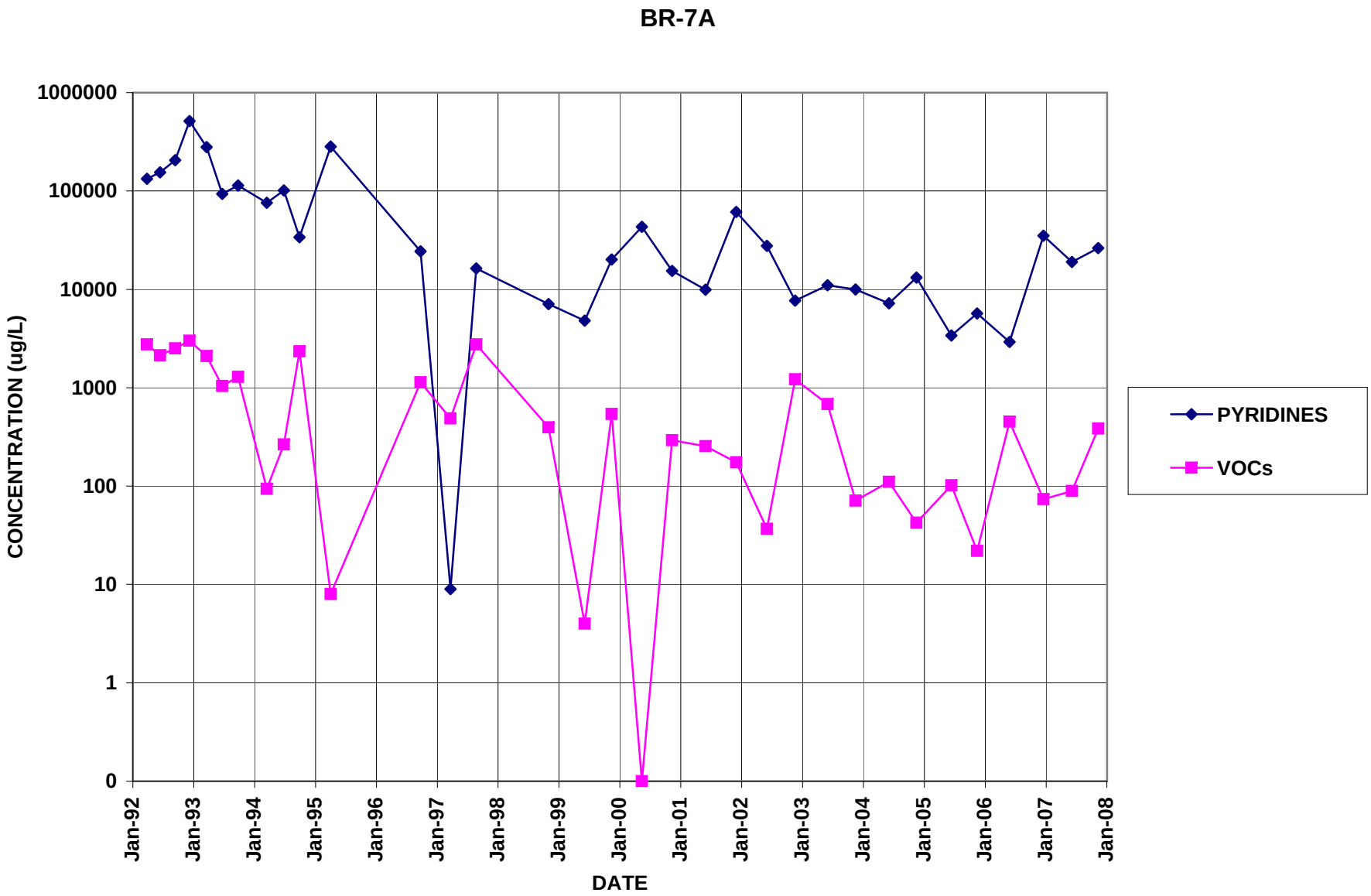


Prepared by: nmb
Reviewed by: jeb

BR-6A

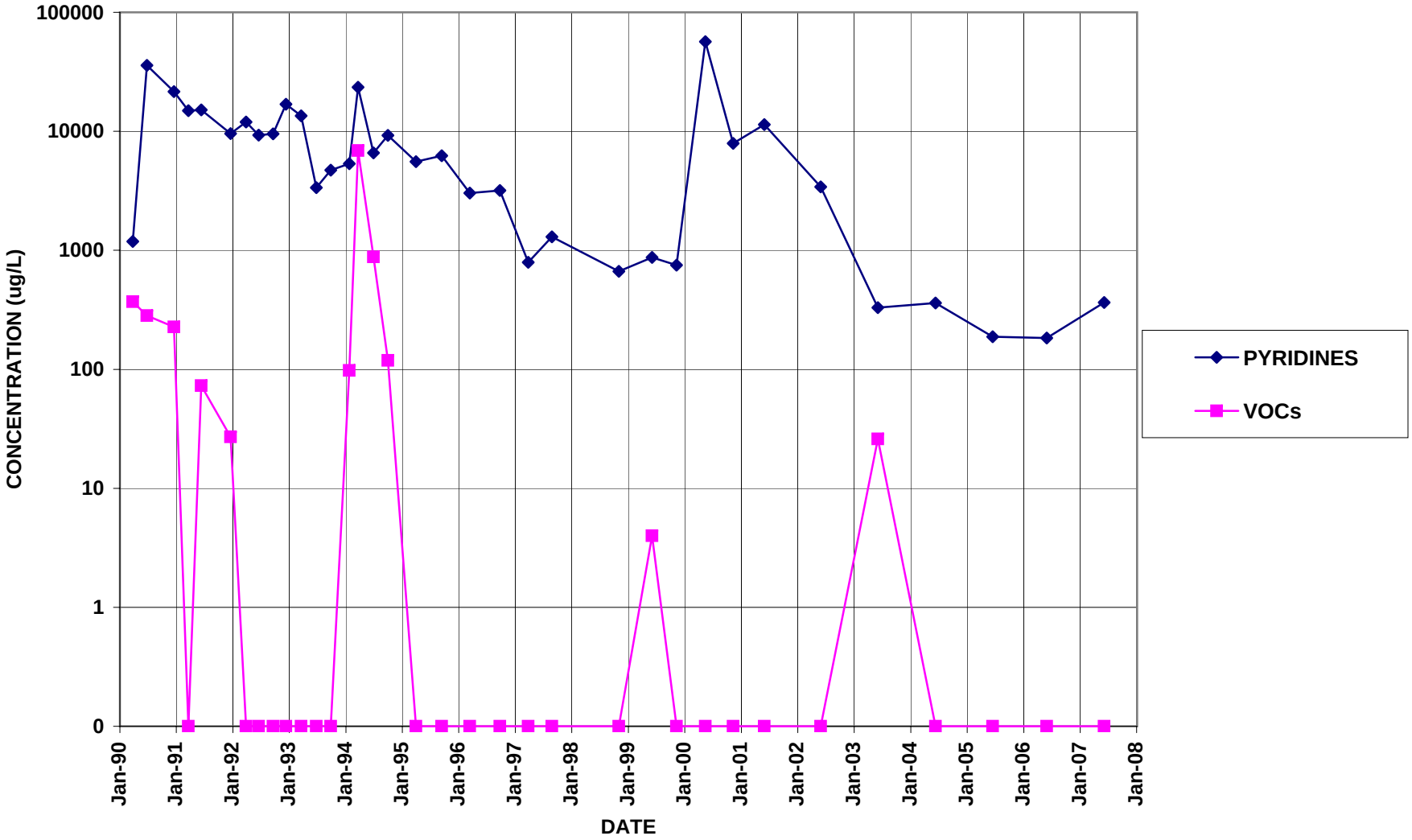


Prepared by: nmb
Reviewed by: jeb



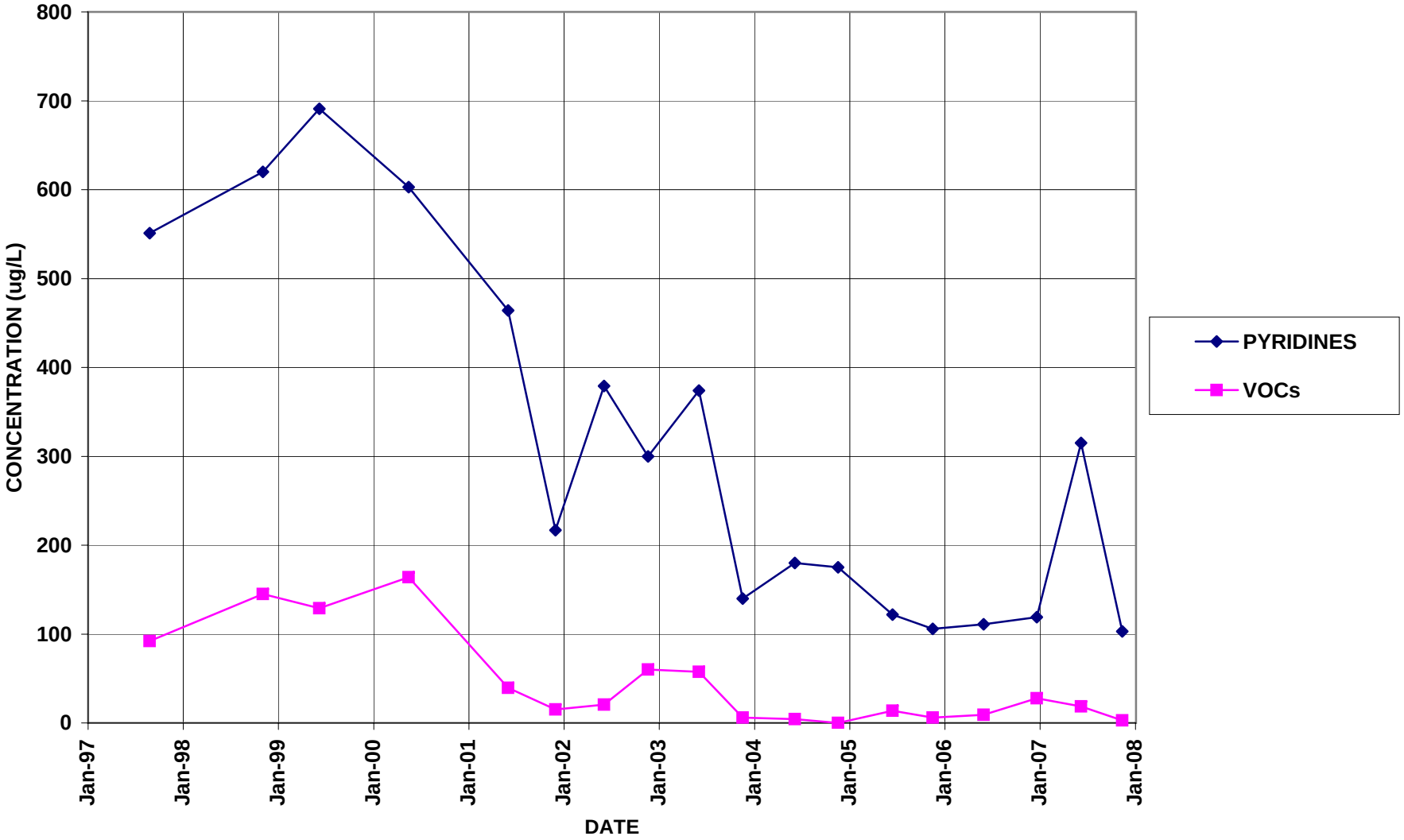
Prepared by: nmb
Reviewed by: jeb

BR-8



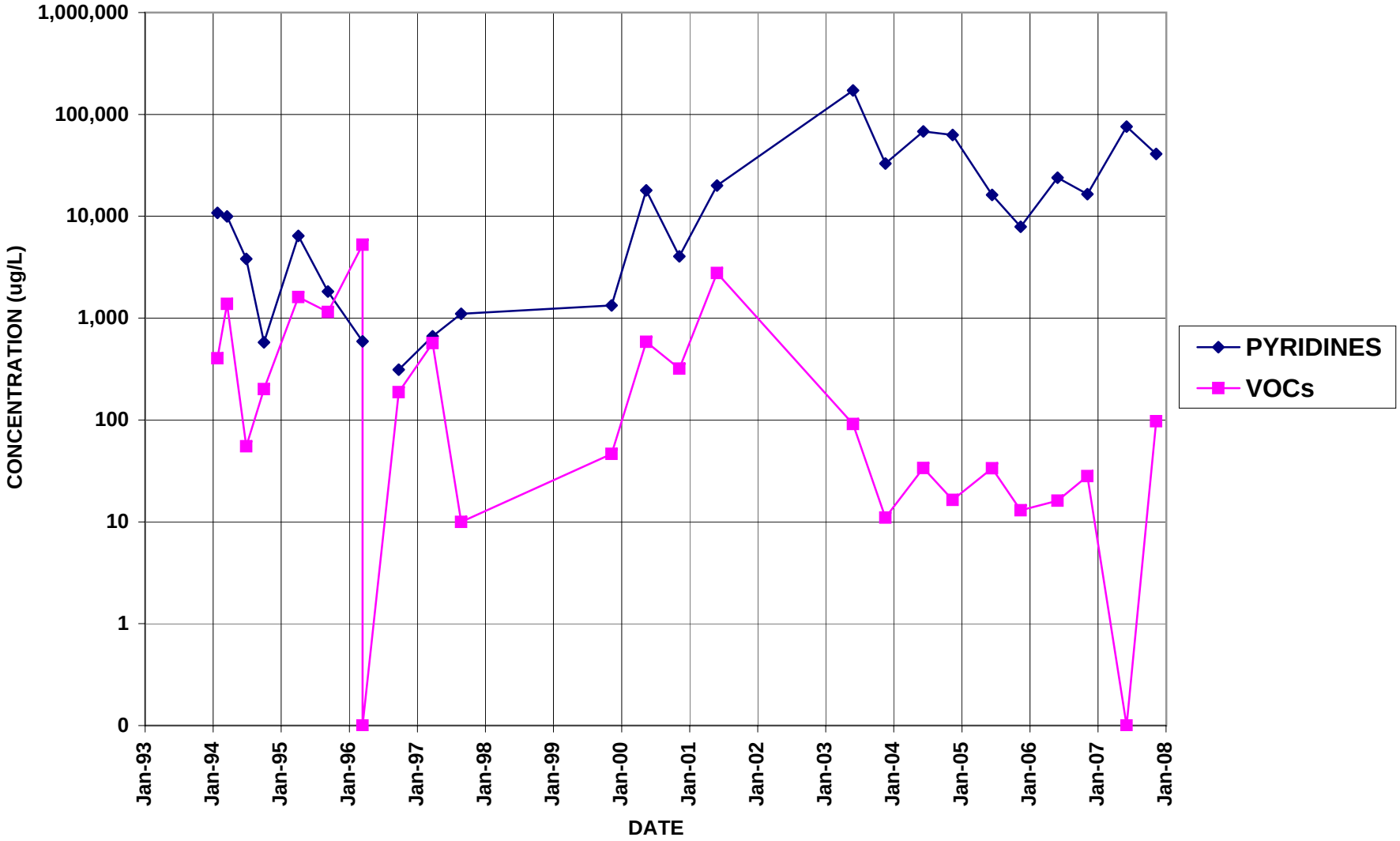
Prepared by: nmb
Reviewed by: jeb

BR-9



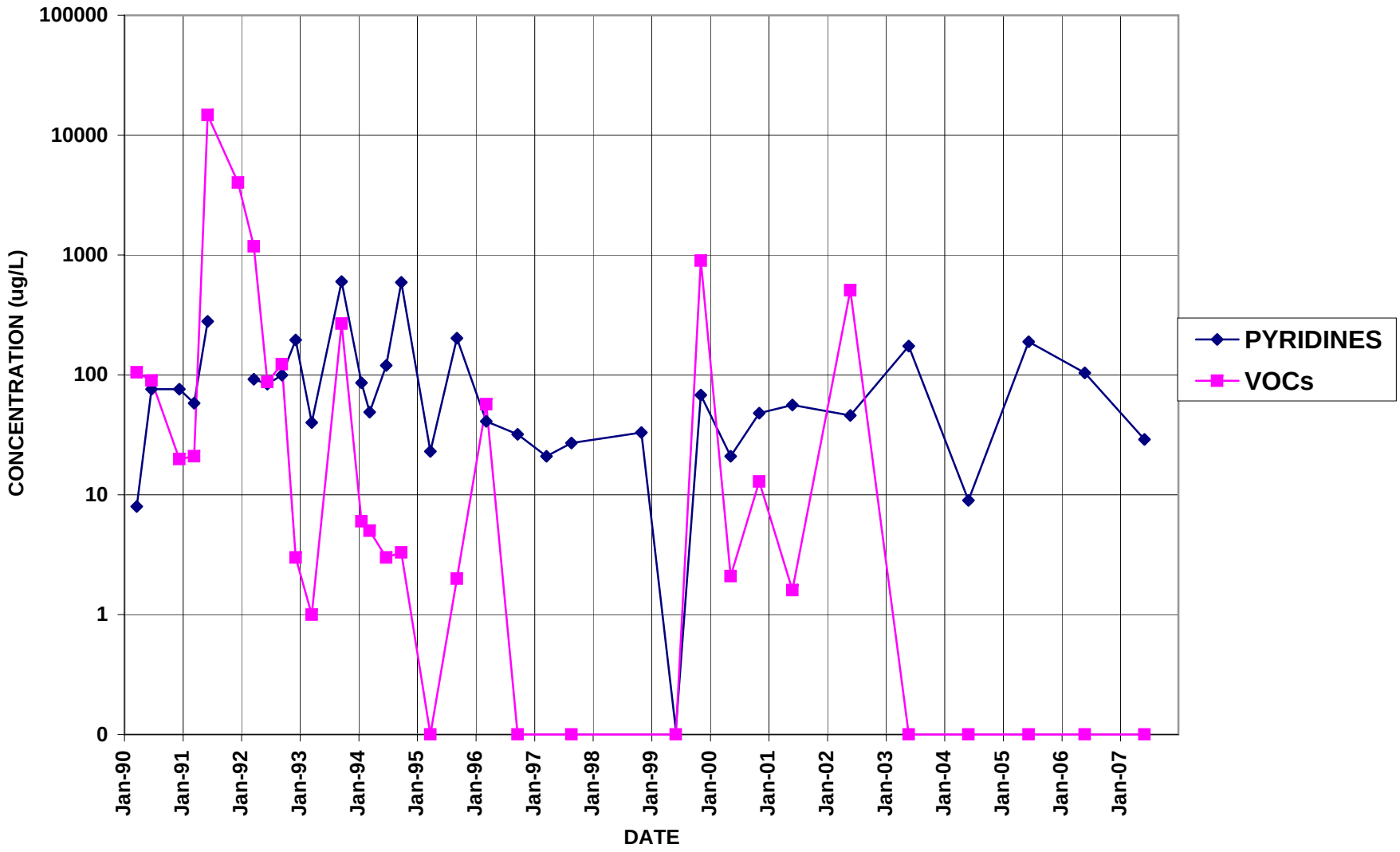
Prepared by: nmb
Reviewed by: jeb

E-1



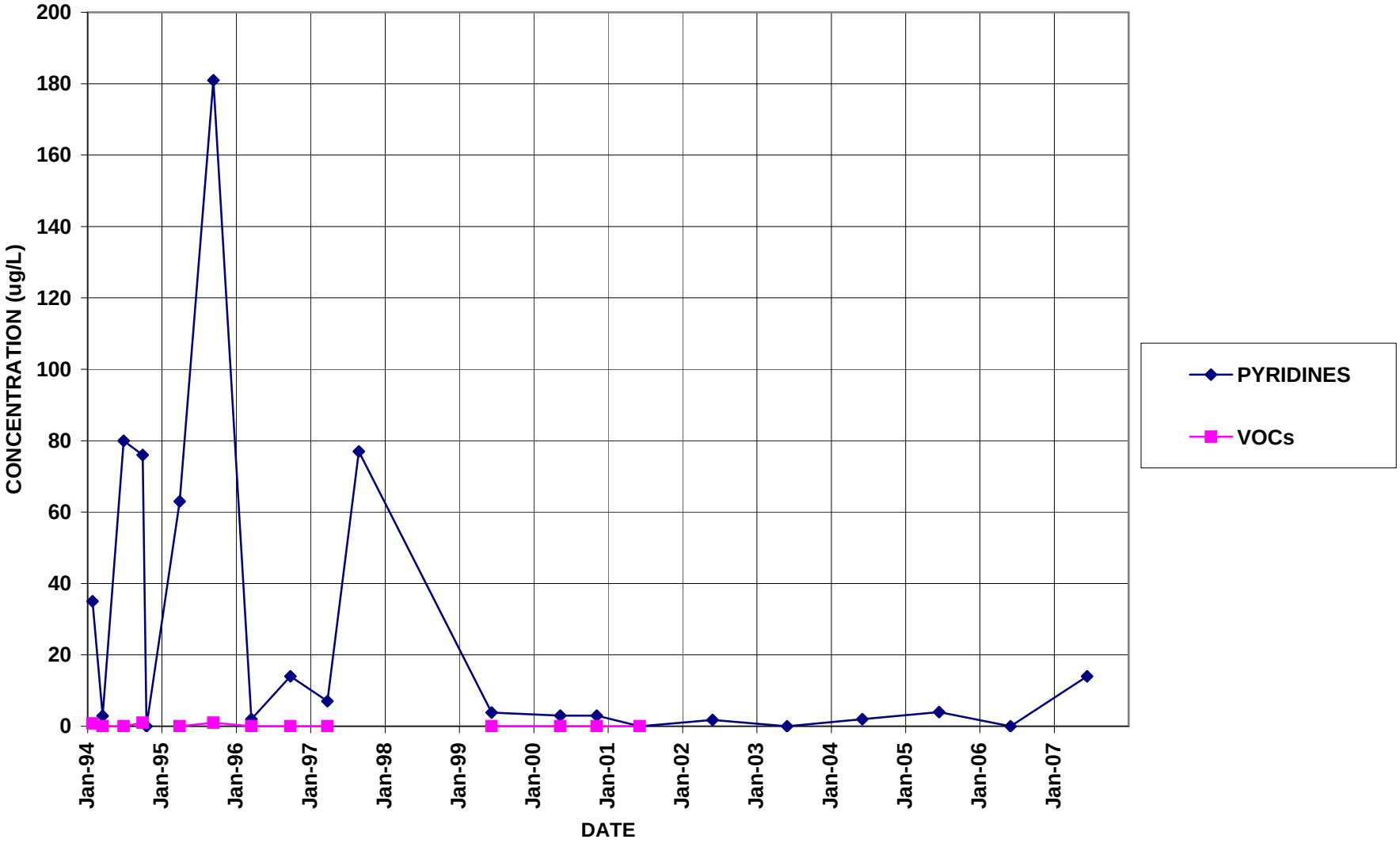
Prepared by: nmb
Reviewed by: jeb

E-3



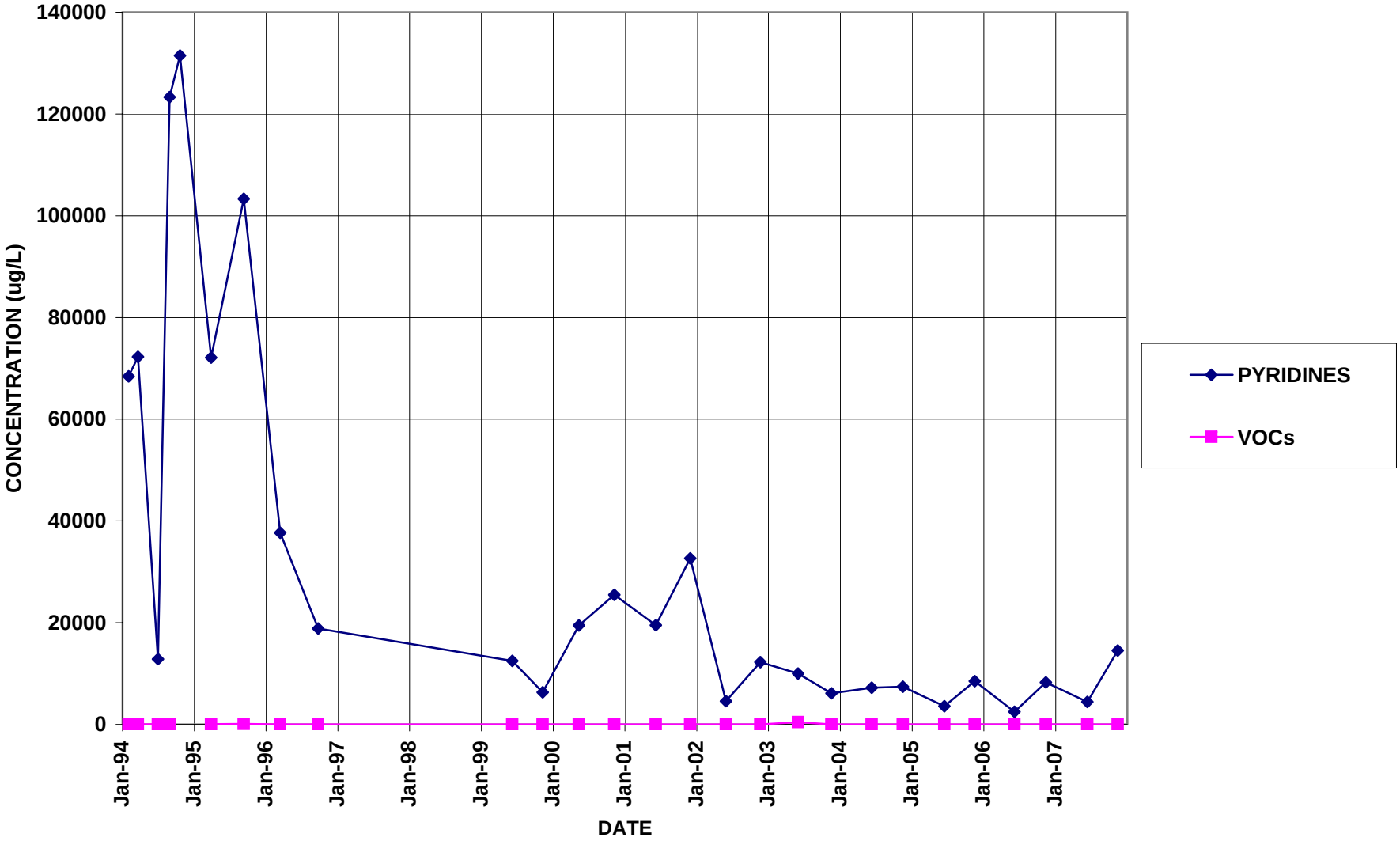
Prepared by: nmb
Reviewed by: jeb

MW-104



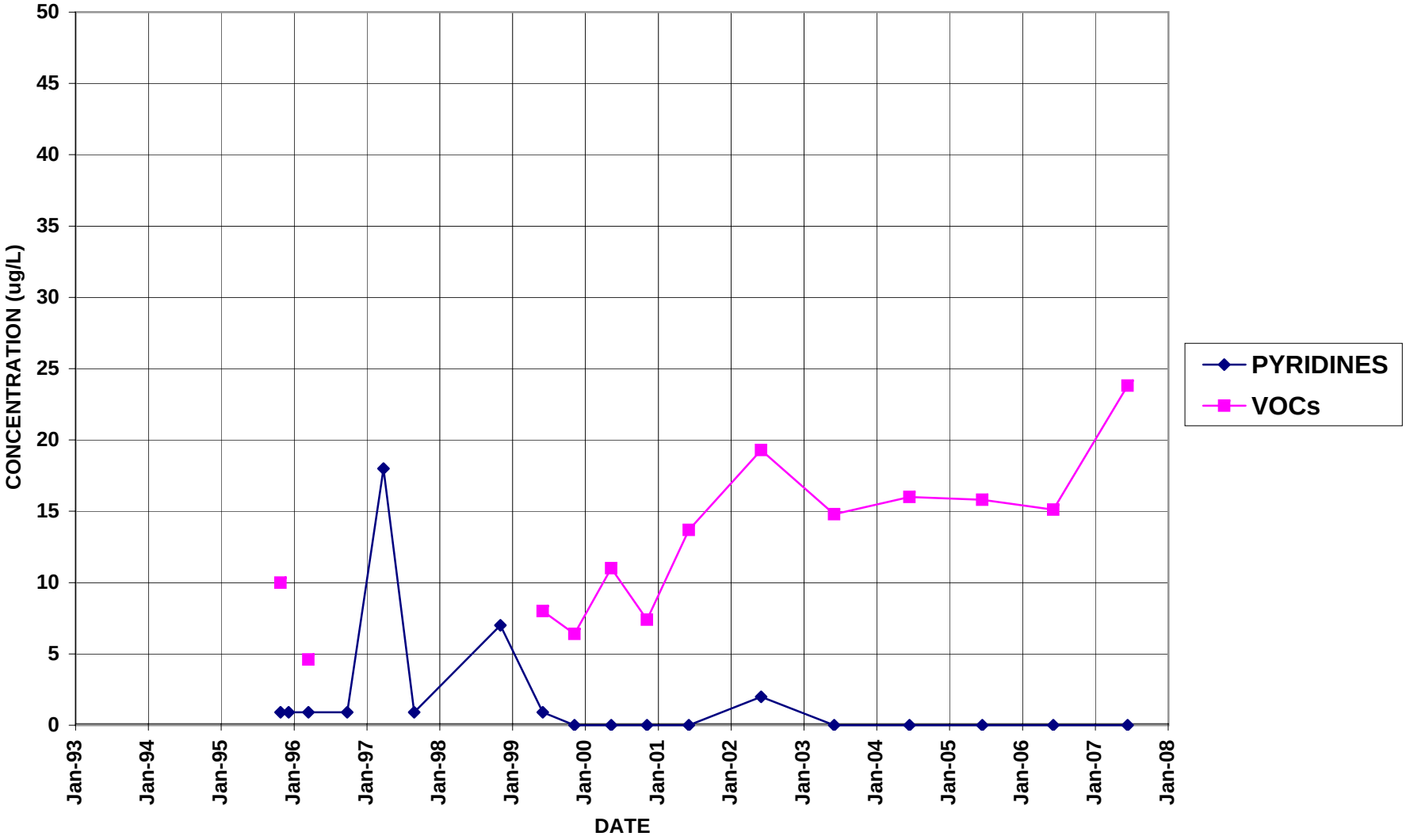
Prepared by: nmb
Reviewed by: jeb

MW-106



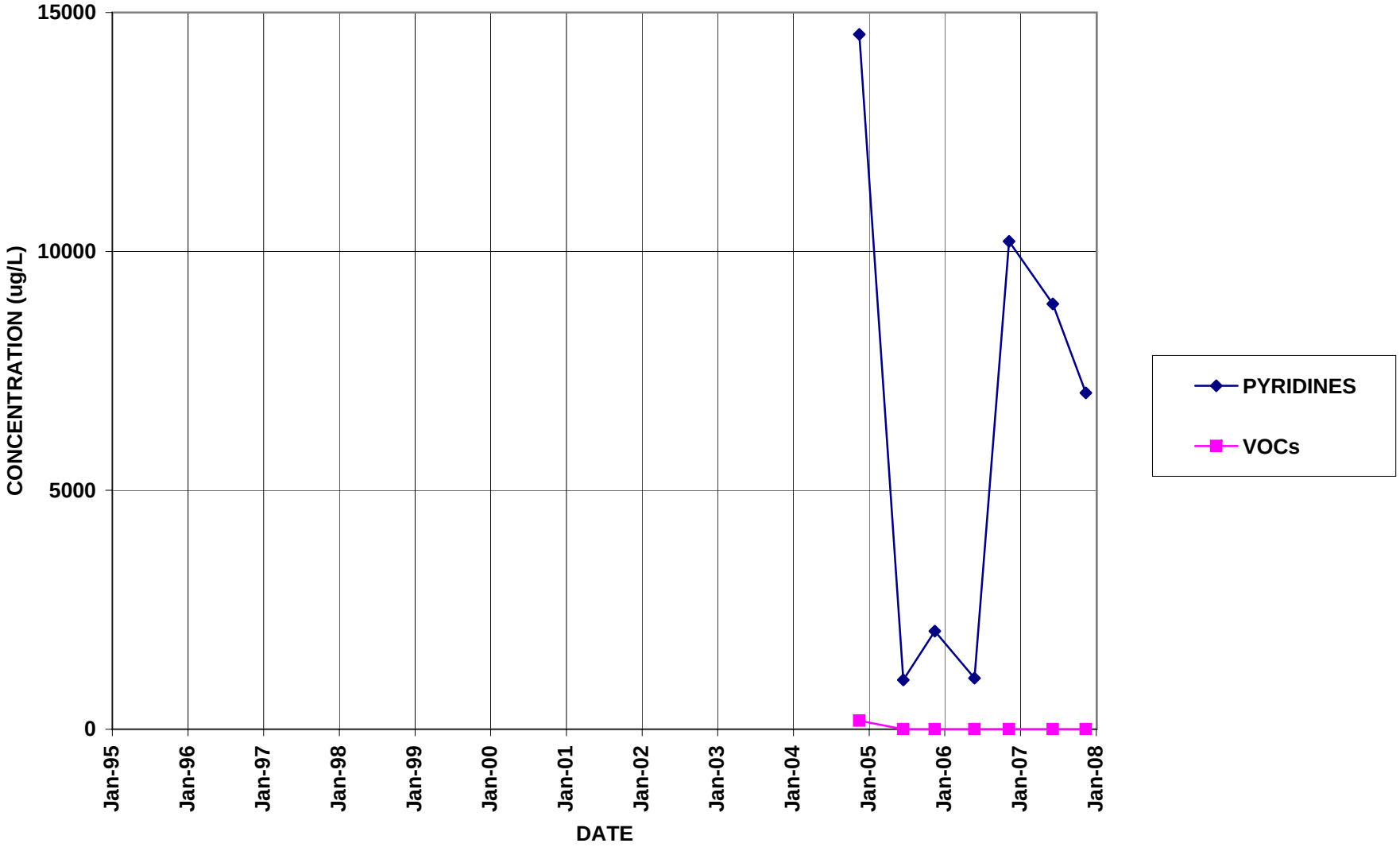
Prepared by: nmb
Reviewed by: jeb

MW-114



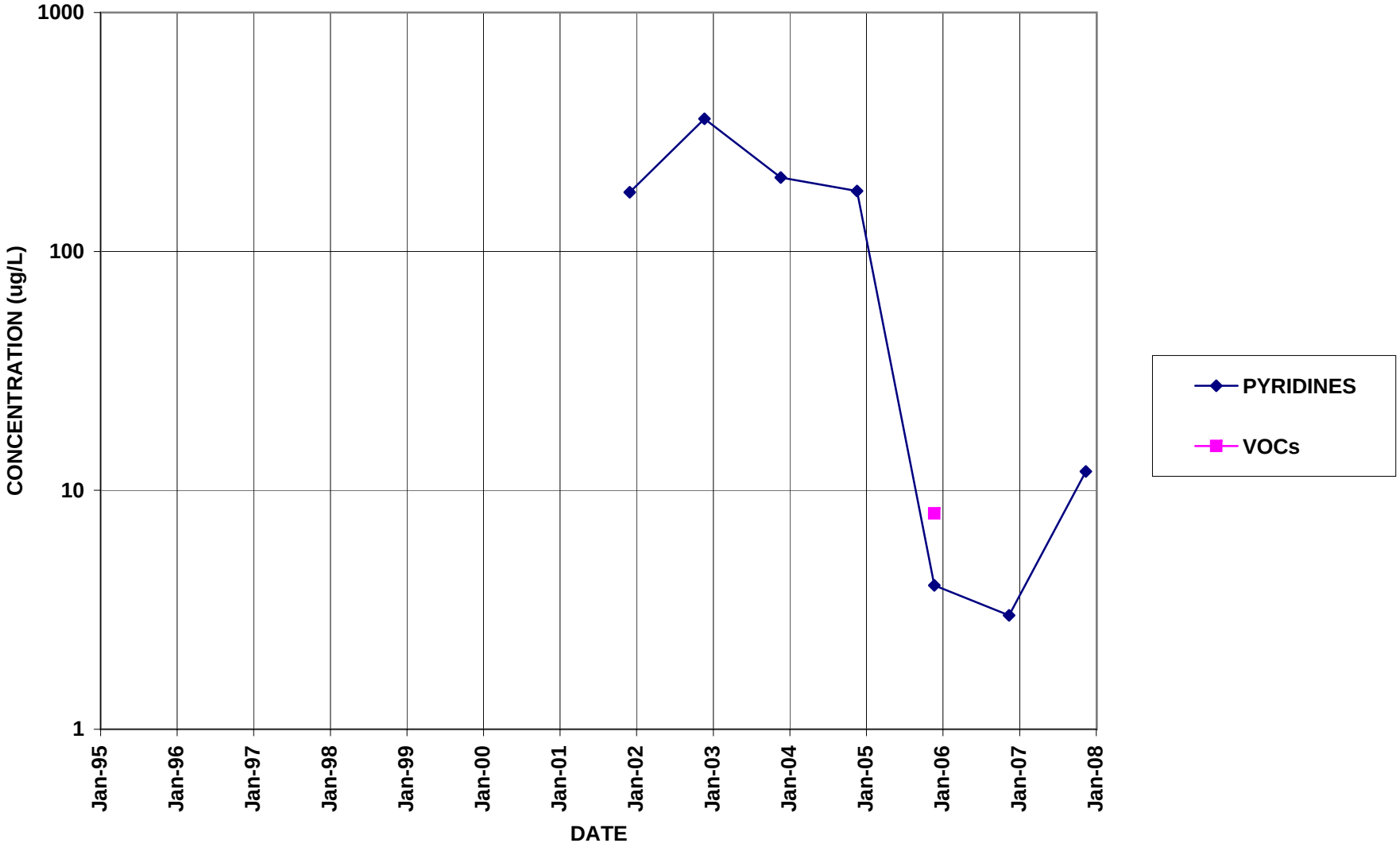
Prepared by: nmb
Reviewed by: jeb

MW-127



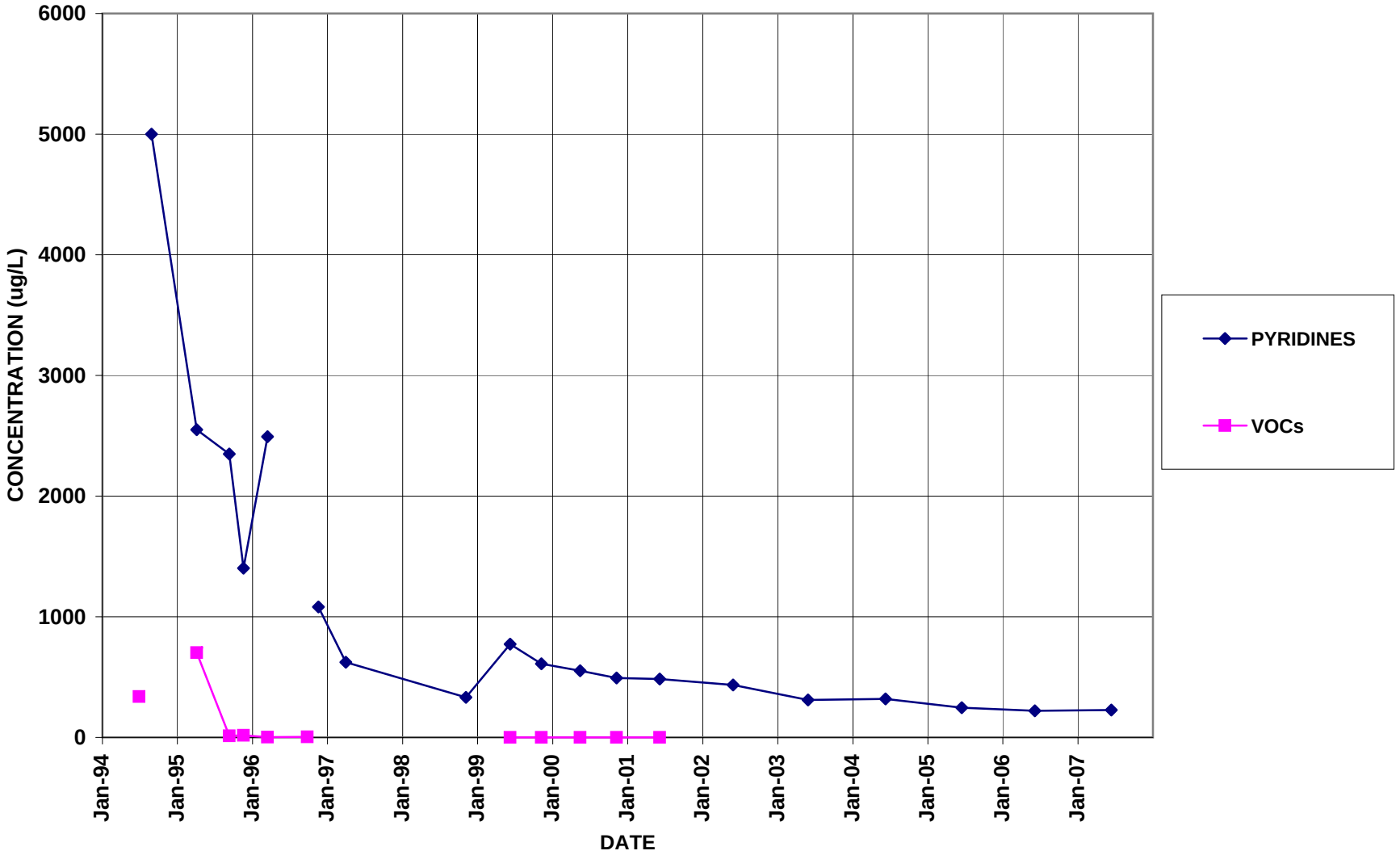
Prepared by: nmb
Reviewed by: jeb

MW-16



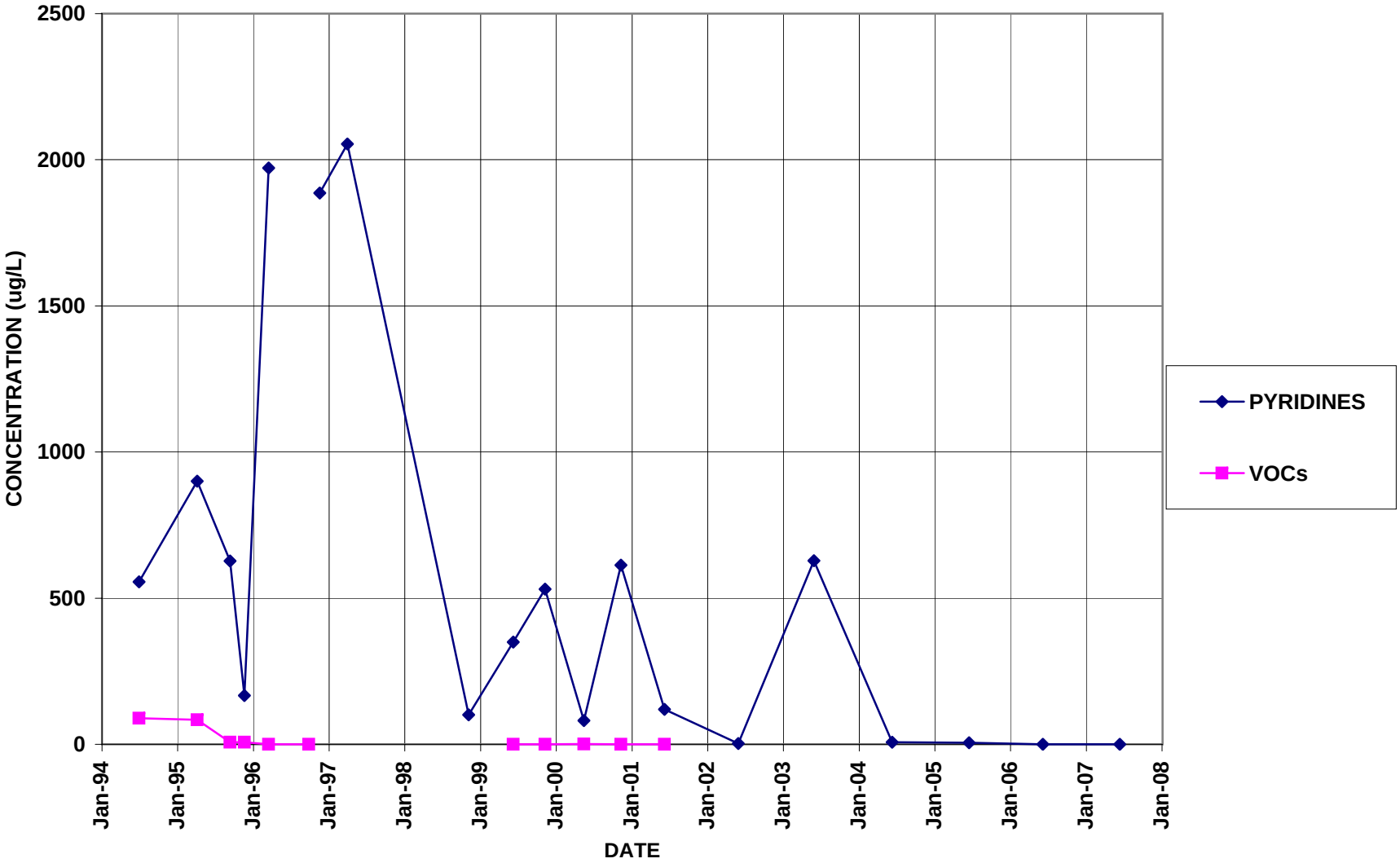
Prepared by: nmb
Reviewed by: jeb

NESS-E



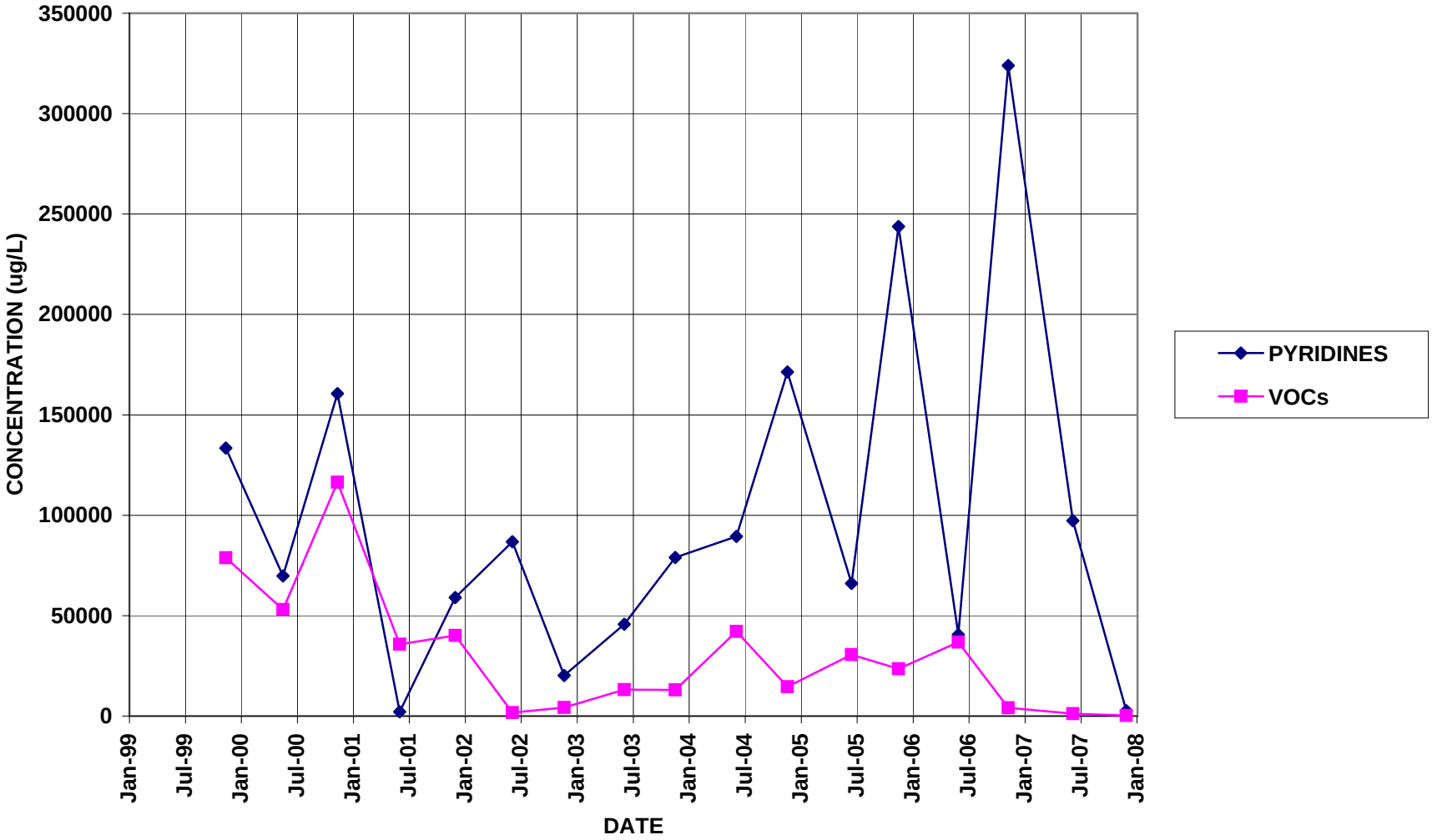
Prepared by: nmb
Reviewed by: jeb

NESS-W



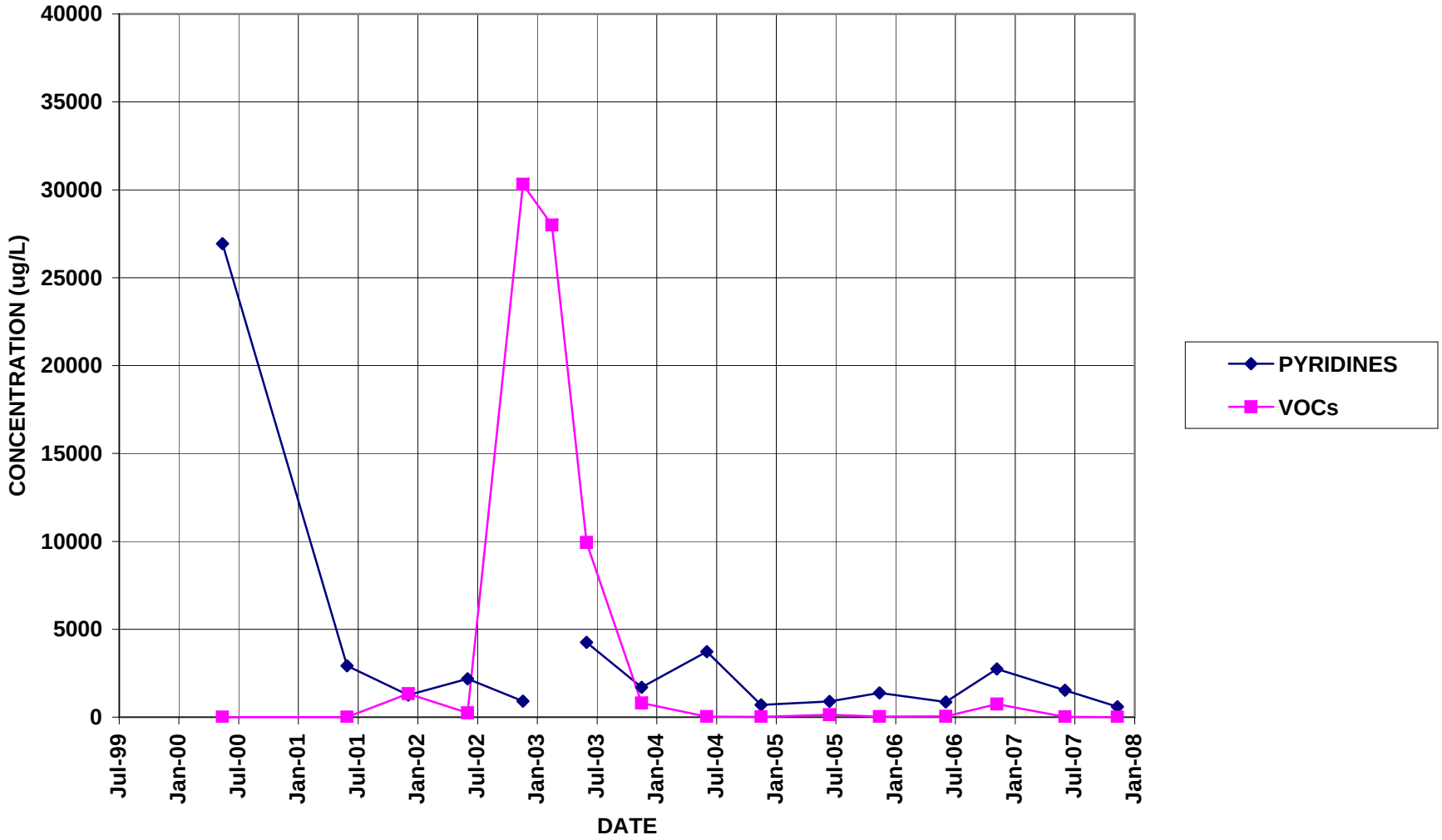
Prepared by: nmb
Reviewed by: jeb

PW10



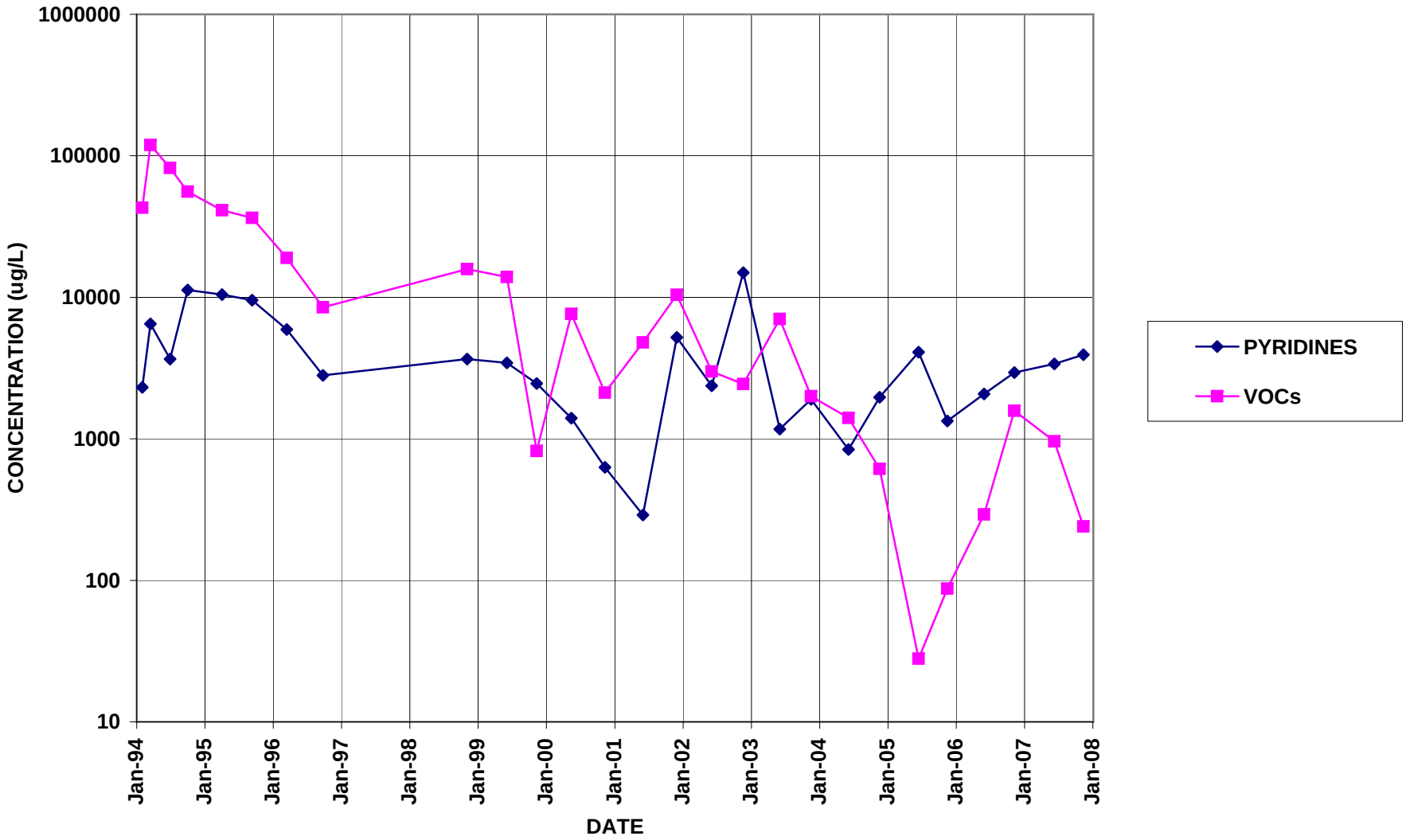
Prepared by: nmb
Reviewed by: jeb

PW11



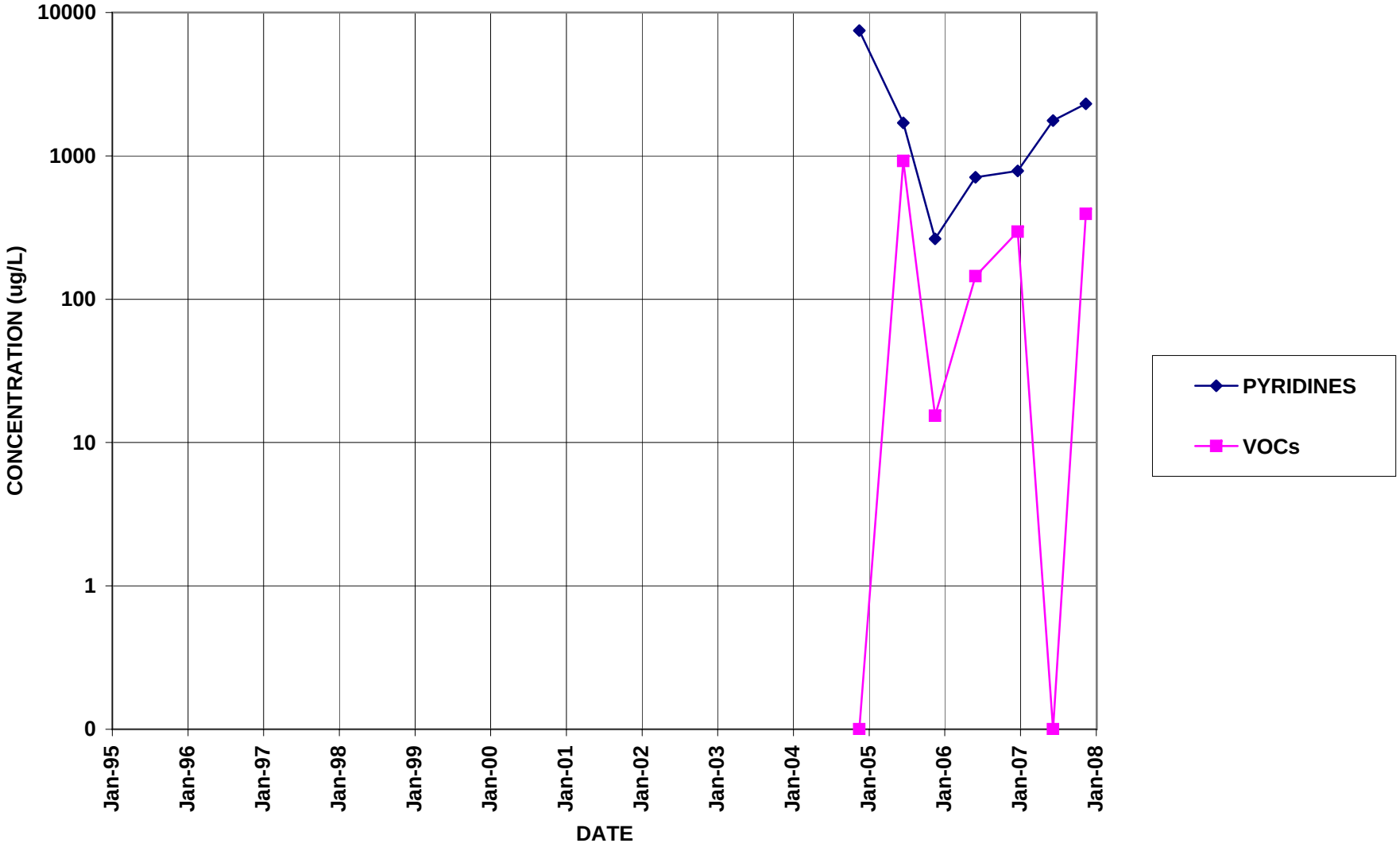
Prepared by: nmb
Reviewed by: jeb

PW12 (Formerly BR-101)



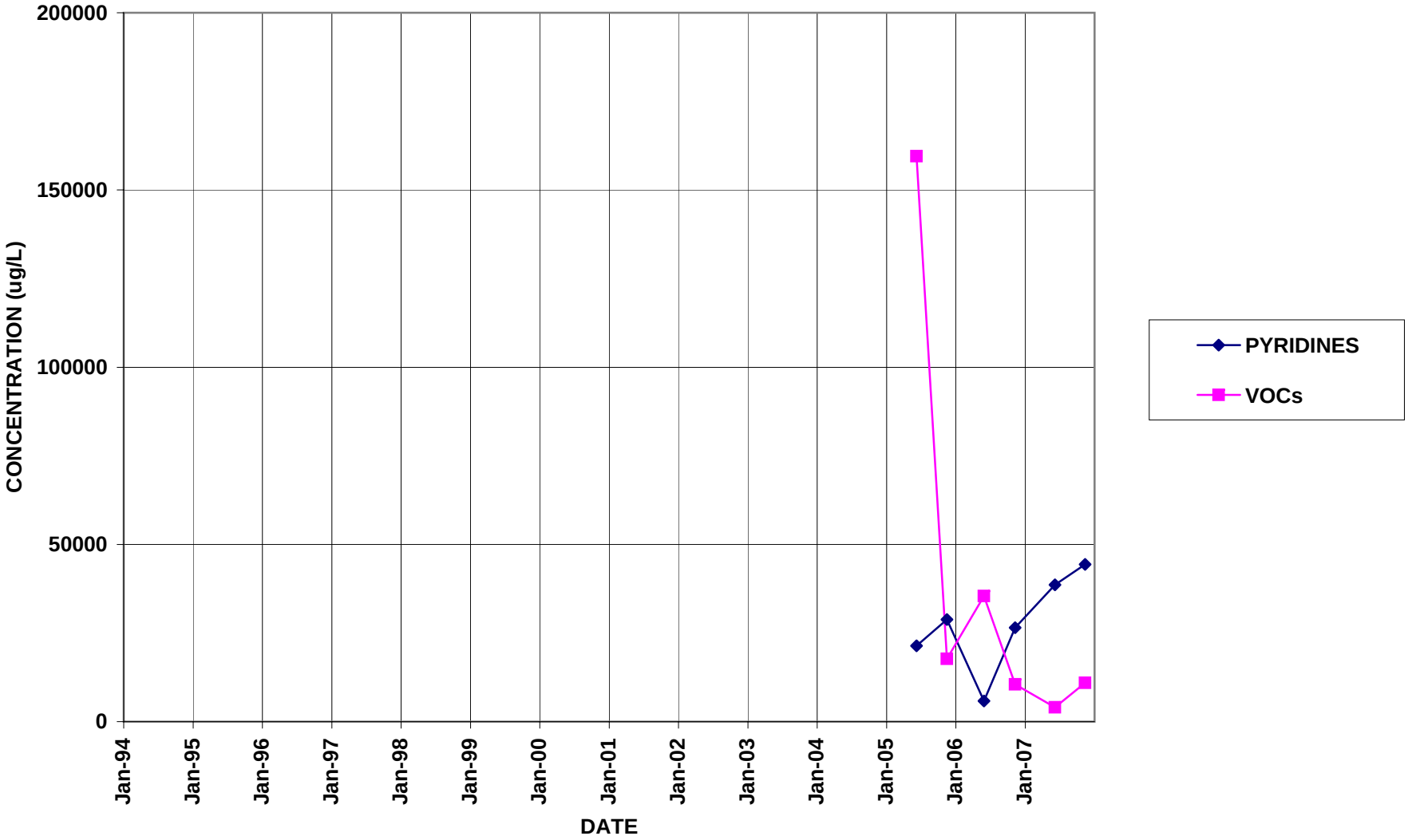
Prepared by: nmb
Reviewed by: jeb

PW13



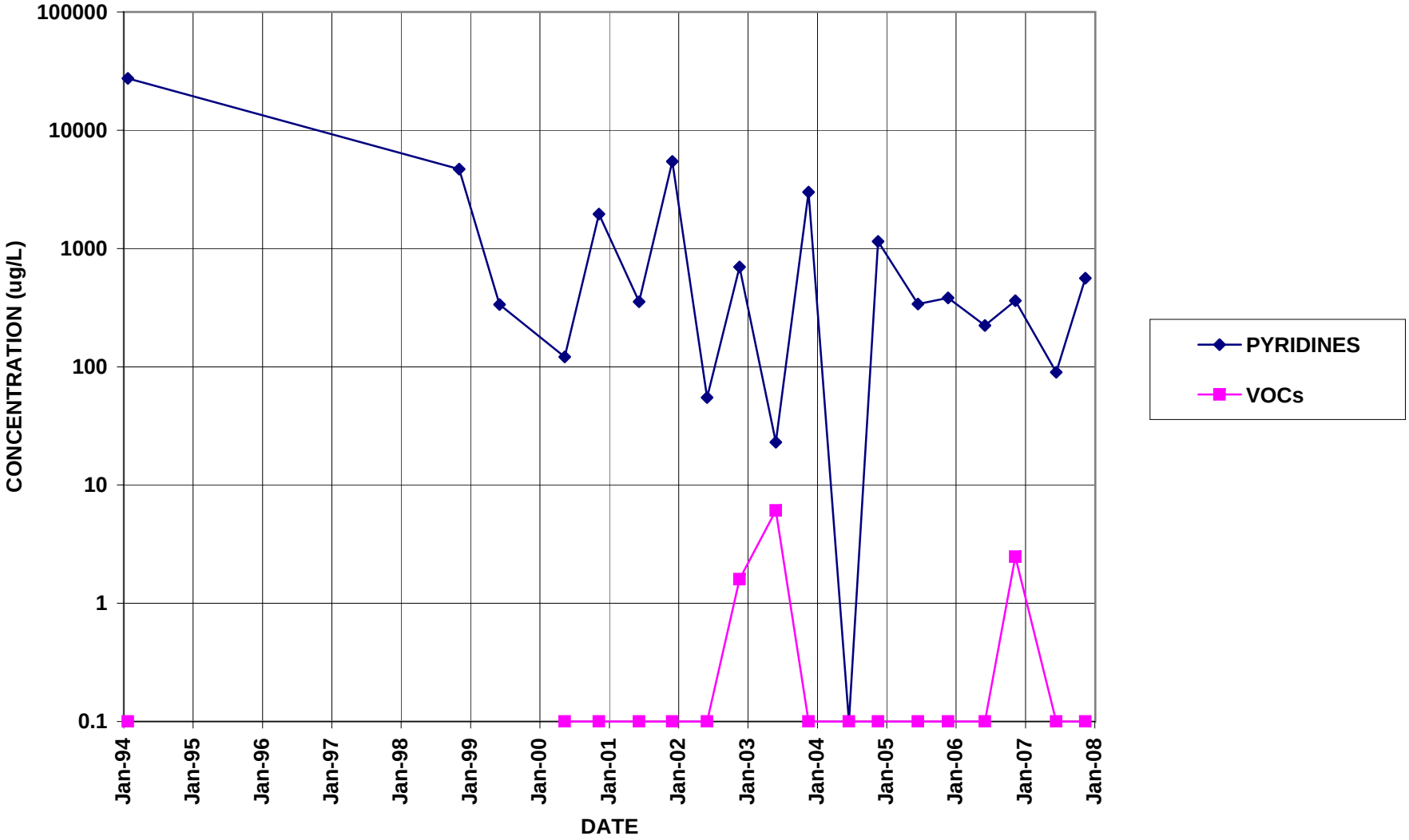
Prepared by: nmb
Reviewed by: jeb

PW14



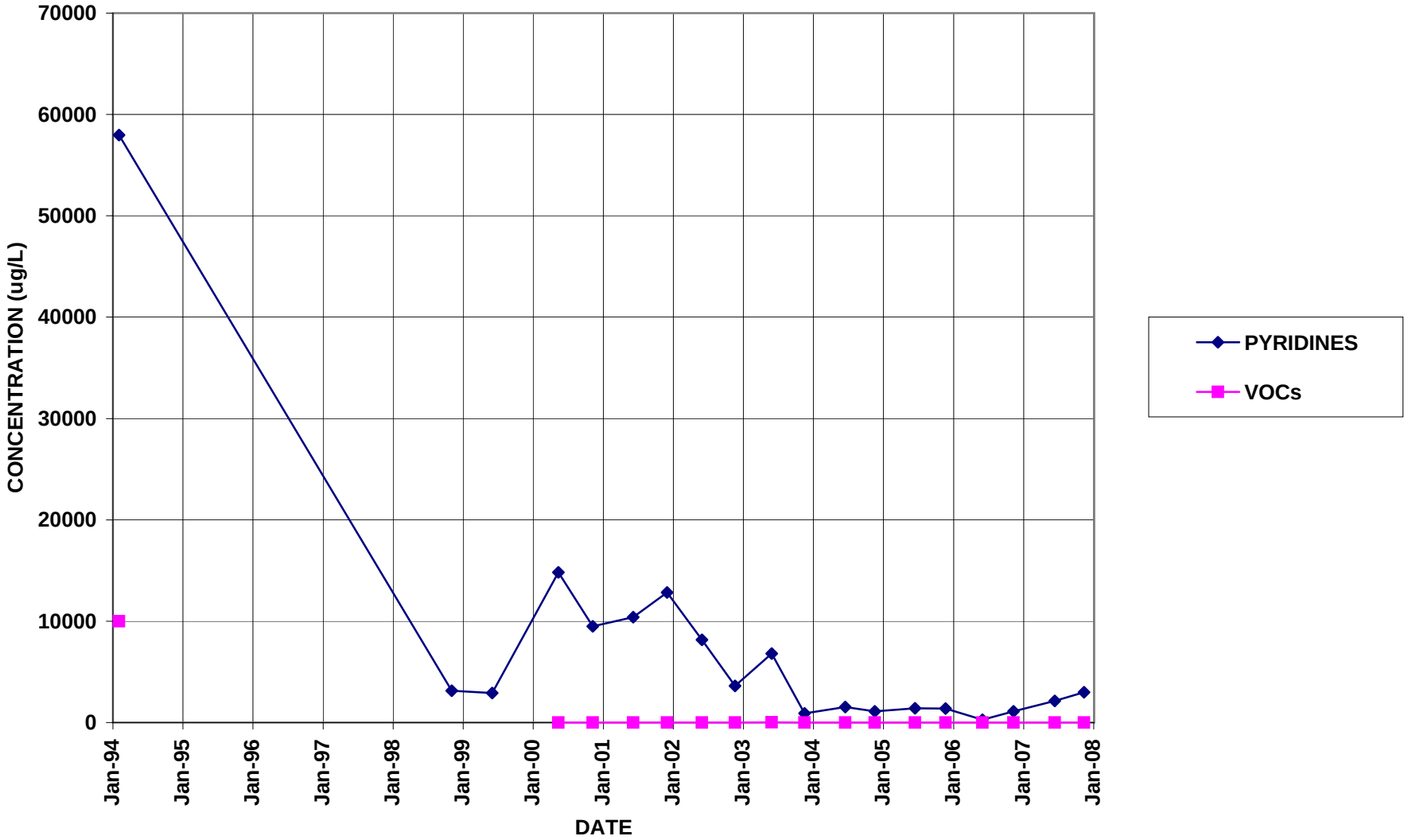
Prepared by: nmb
Reviewed by: jeb

PZ-101



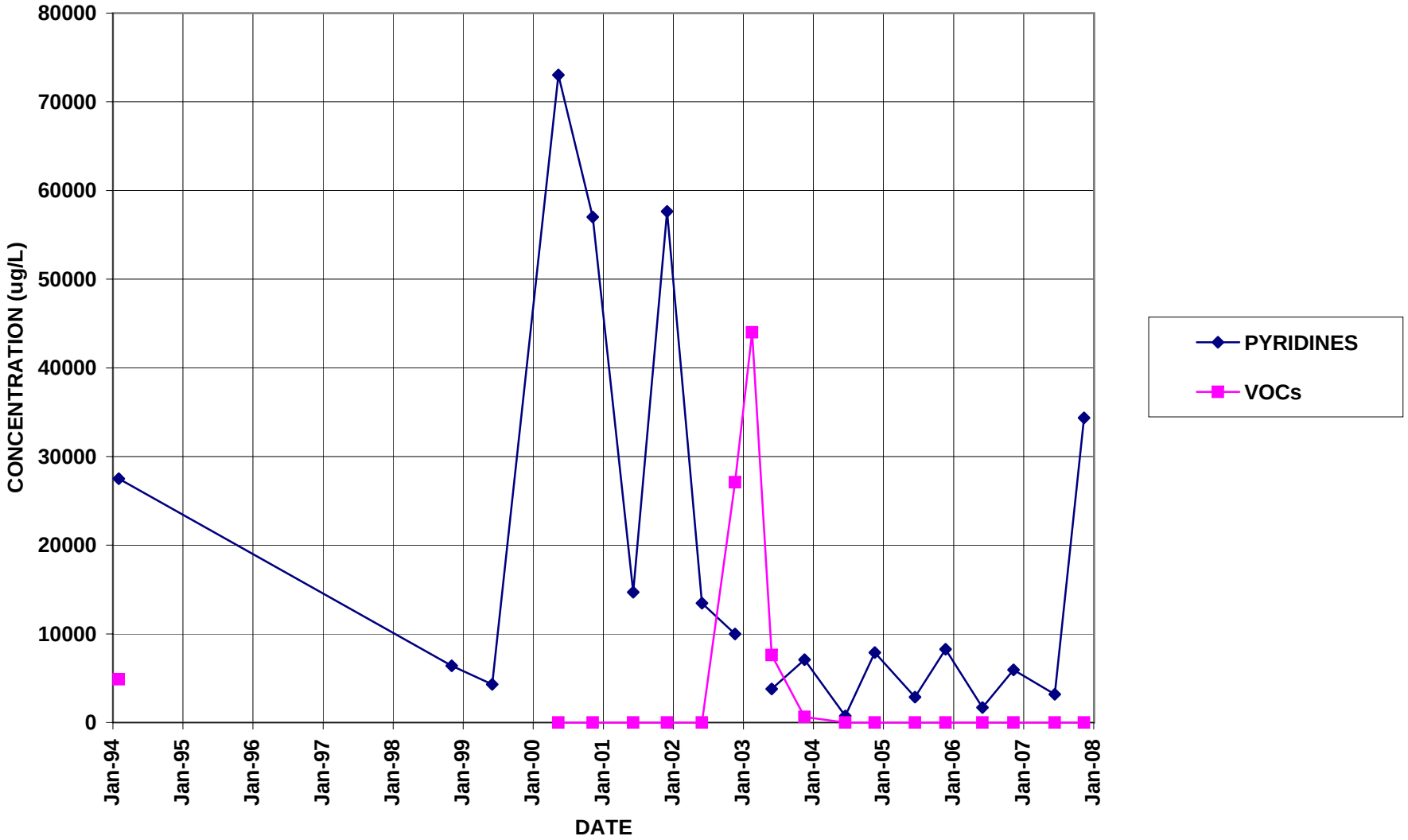
Prepared by: nmb
Reviewed by: jeb

PZ-102



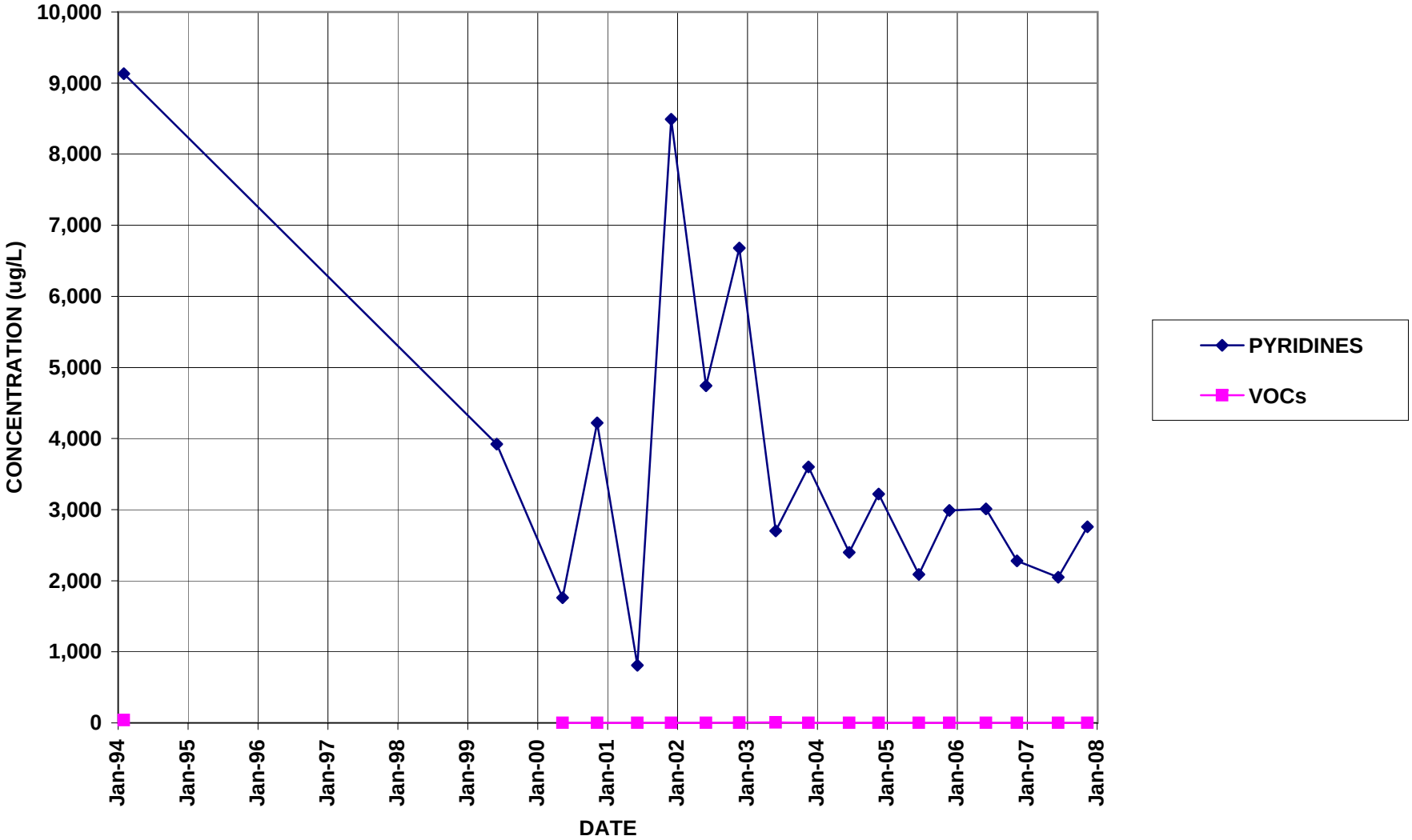
Prepared by: nmb
Reviewed by: jeb

PZ-103



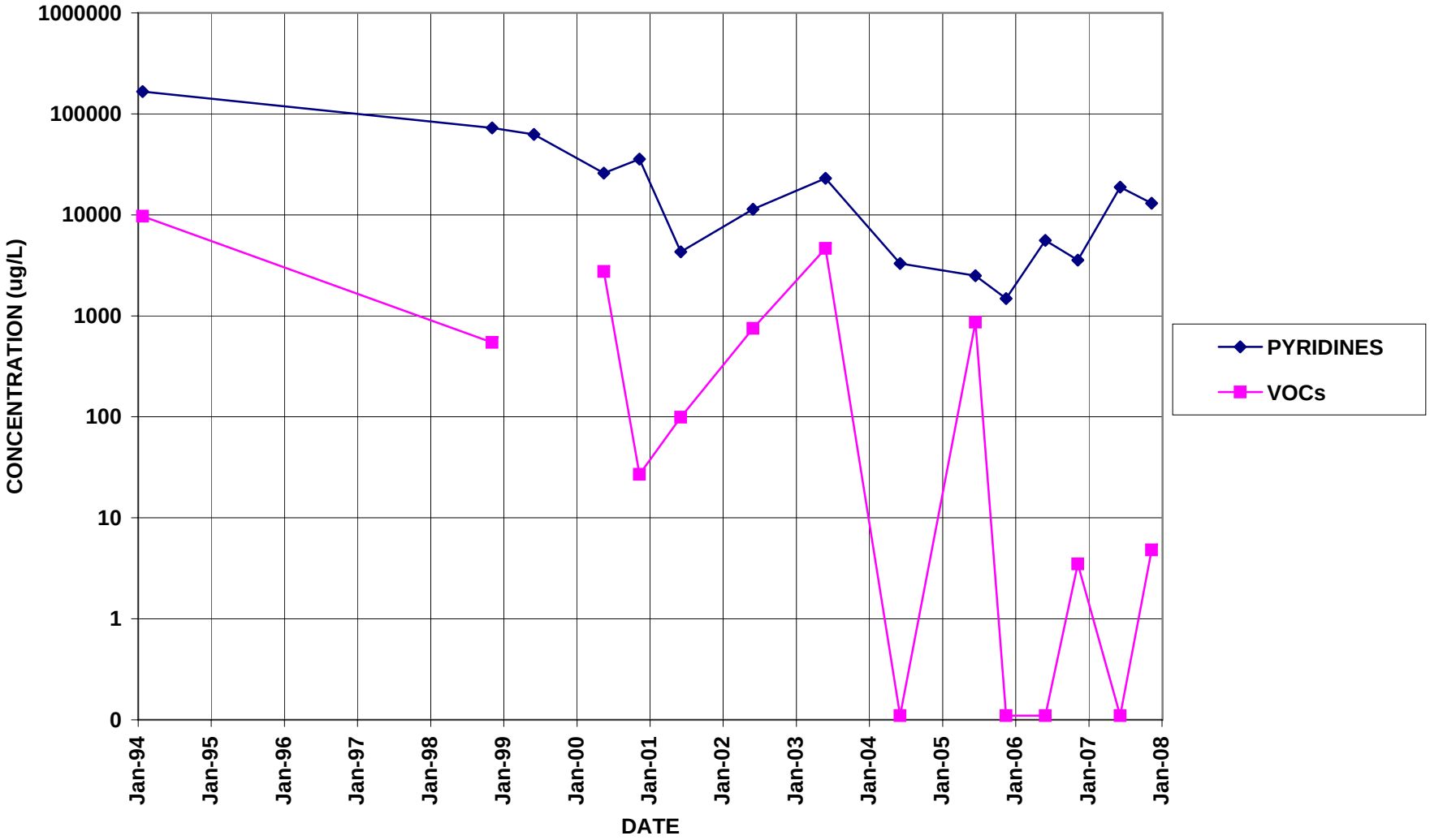
Prepared by: nmb
Reviewed by: jeb

PZ-104



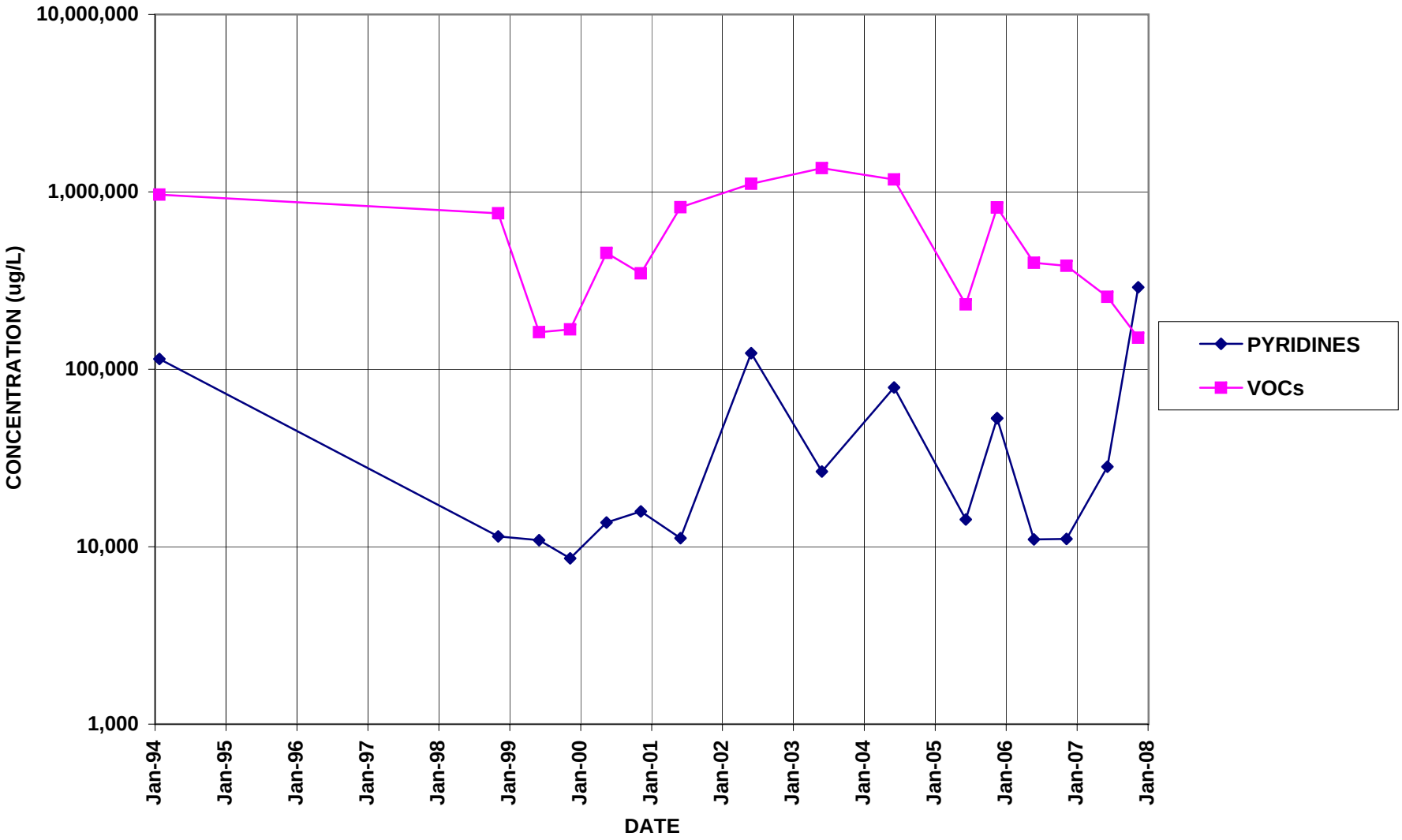
Prepared by: nmb
Reviewed by: jeb

PZ-105



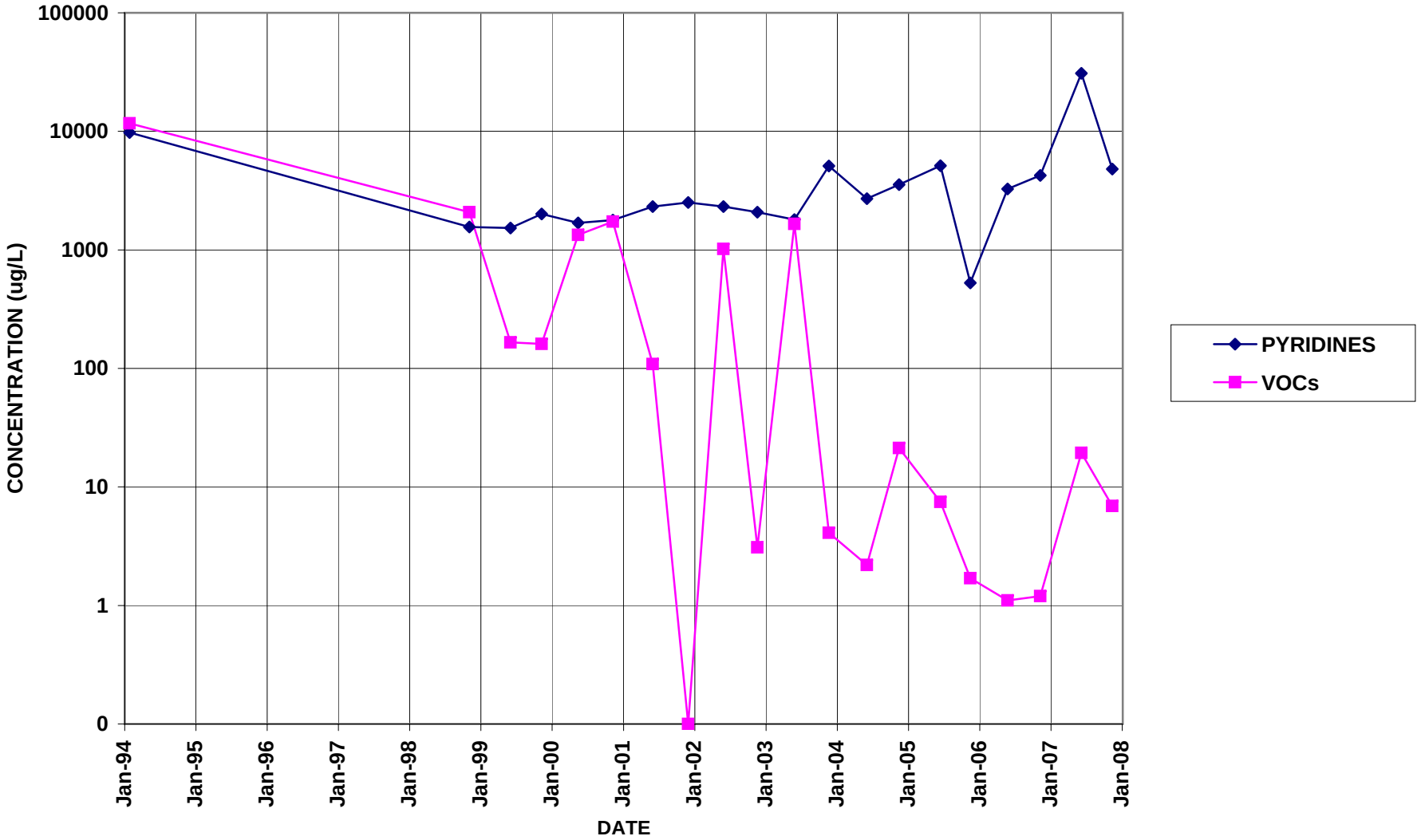
Prepared by: nmb
Reviewed by: jeb

PZ-106



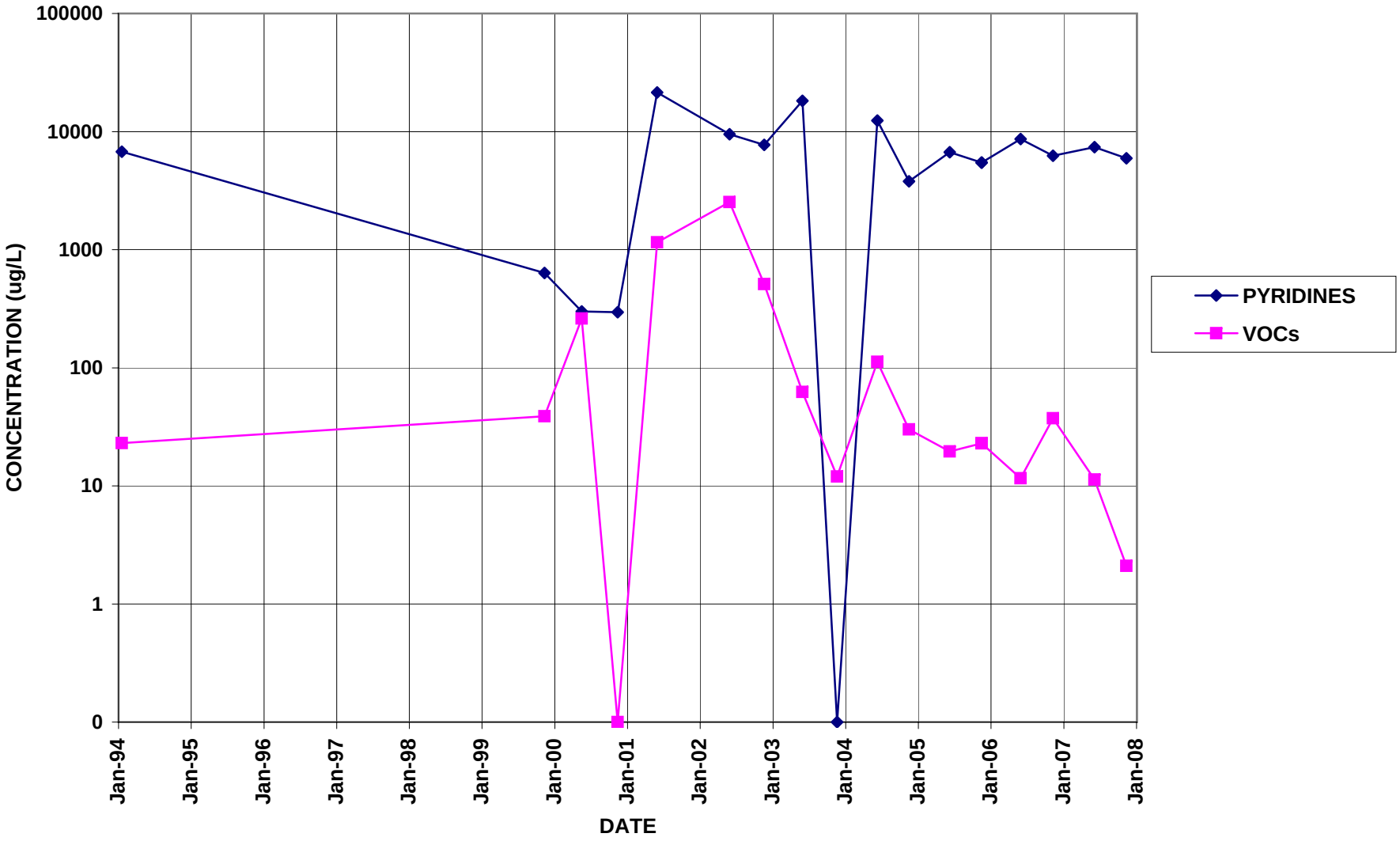
Prepared by: nmb
Reviewed by: jeb

PZ-107



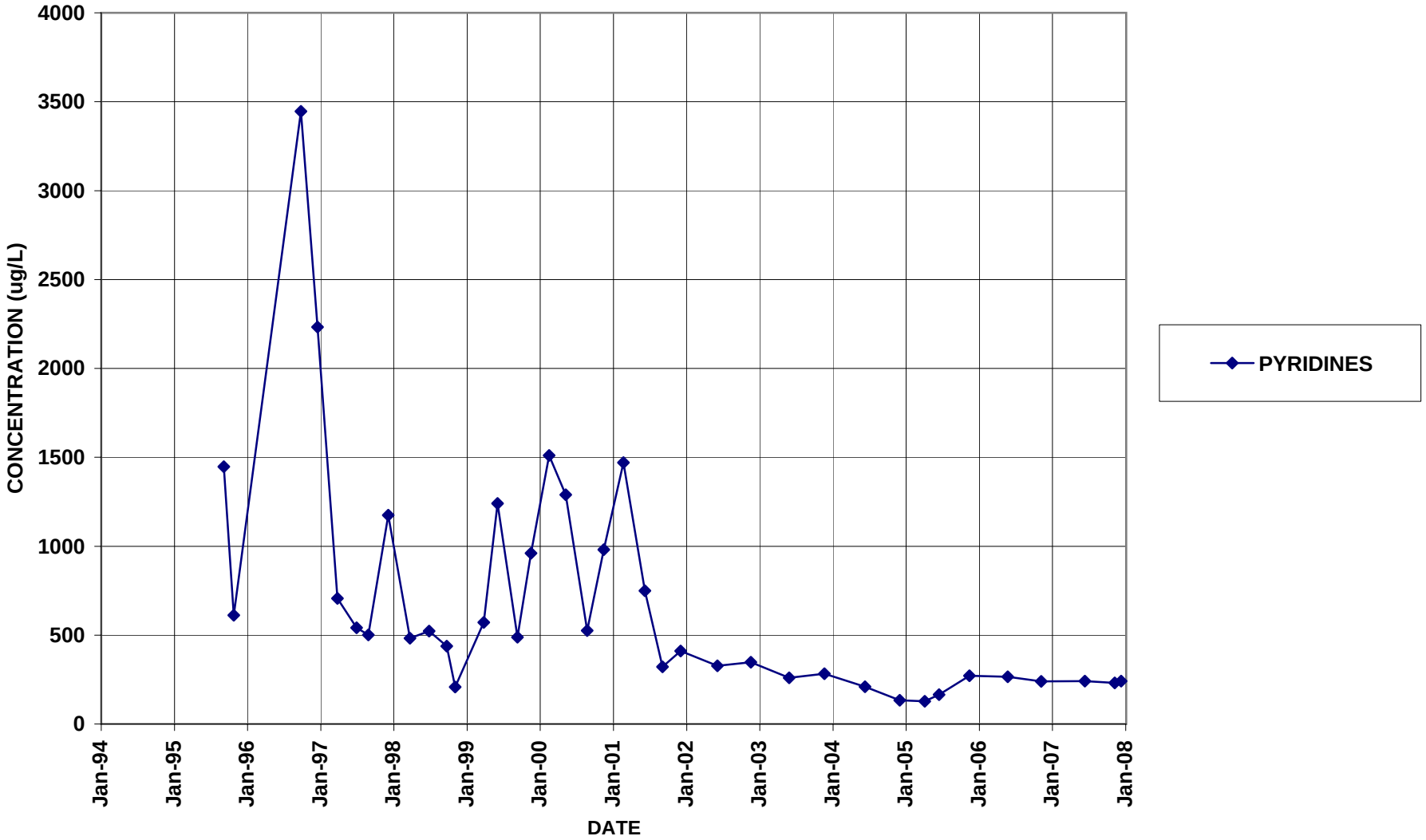
Prepared by: nmb
Reviewed by: jeb

S-3



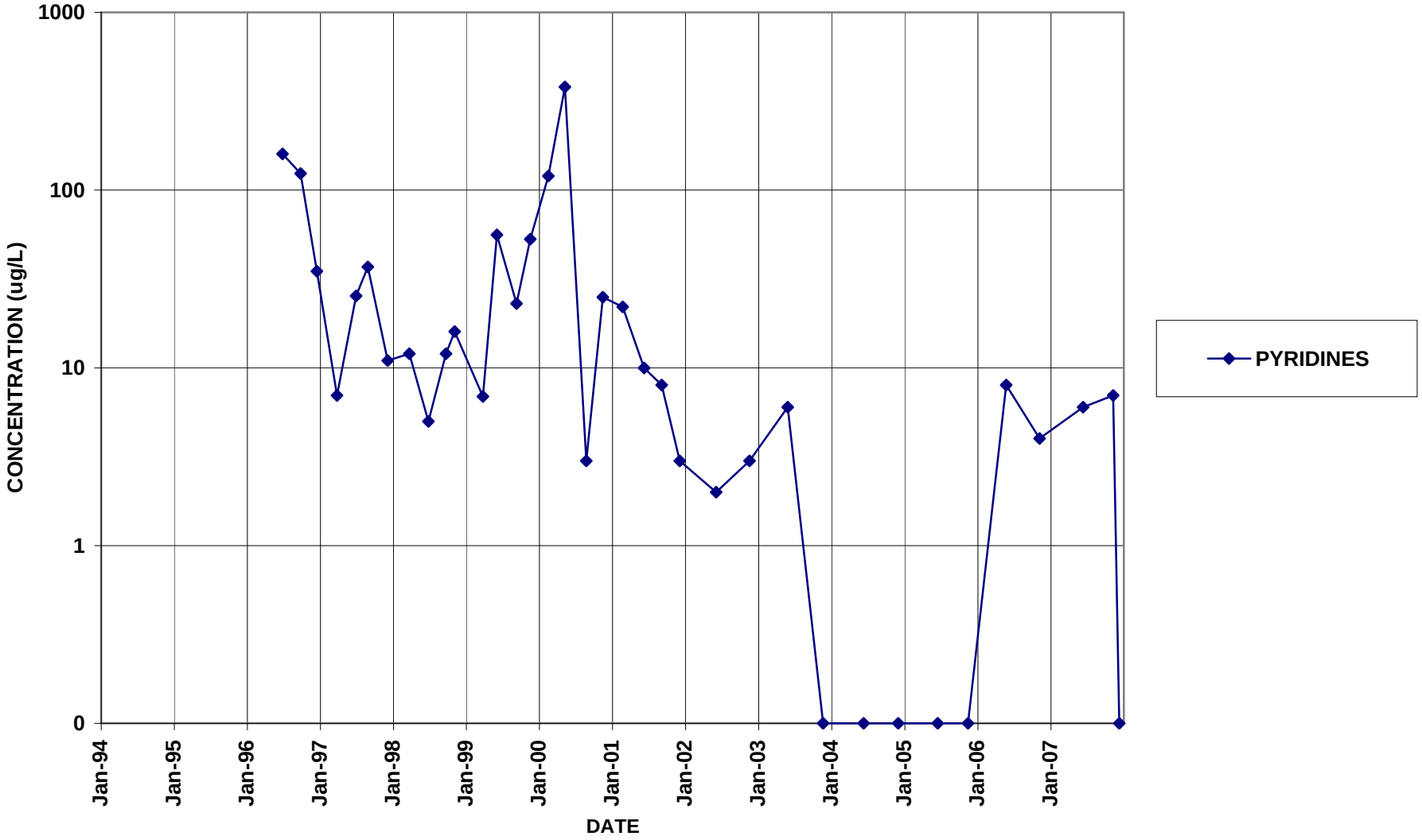
Prepared by: nmb
Reviewed by: jeb

QS-4 (QUARRY SEEP)



Prepared by: nmb
Reviewed by: jeb

QO-2 (QUARRY OUTFALL)



Prepared by: nmb
Reviewed by: jeb