Arch Chemicals, Inc.

Rochester, New York (Site #828018a)

Groundwater Monitoring Report 40
Spring 2008

September 2008

SURFACE WATER AND GROUNDWATER MONITORING PROGRAM
SPRING 2008 MONITORING REPORT

ARCH CHEMICALS
ROCHESTER PLANT SITE
ROCHESTER, NEW YORK

ARCH CHEMICALS, INC.
CHARLESTON, TENNESSEE

SEPTEMBER 2008

SURFACE WATER AND GROUNDWATER MONITORING PROGRAM
SPRING 2008 MONITORING REPORT

ARCH CHEMICALS
ROCHESTER PLANT SITE
ROCHESTER, NEW YORK

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September 2008

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TABLE OF CONTENTS

LIST OF FIGURES

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 June 2008.

During this monitoring event, samples from a total of 49 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. Thirty of the 53 monitoring locations sampled for chloropyridines had contaminant concentrations that were at or below their respective 5-year prior averages. Twenty-five of the 36 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). Chloropyridine concentrations in quarry seep QS-4 remain below the historical average for this location. Sample locations QD-1 and QO-2 contained chloropyridines at estimated concentrations of 11 µg/L and 10 µg/L, respectively. The canal location had no detectable chloropyridines.

During the period December 2007 through May 2008, the on-site groundwater extraction system pumped approximately 6.9 million gallons of groundwater to the on-site treatment system, containing an estimated 1,220 pounds of chloropyridines and 45 pounds of target volatile organic compounds. New pumping well PW-15 was brought online in April 2008, and was responsible for the substantial increase observed in total contaminant mass removal (from 384 pounds of chloropyridines and 17 pounds of volatile organic compounds in the fall of 2007).

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

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, only a trace of LNAPL was observed in PW-13.

The next regular monitoring event will occur in November 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 Spring 2008 sampling event included the collection and analysis of a total of 53 groundwater, surface water, and seep samples from off-site and on-site locations. Samples were collected June 2 through June 10, 2008, for analysis of selected chloropyridines and volatile organic compounds (VOCs).

This report presents the results of the Spring 2008 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, PW-14, and PW-15) were collected from the discharge lines.

Groundwater piezometric elevations were measured on May 30, 2008. 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. A trace (<0.01 ft) 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 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) were collected by TestAmerica on June 2, 2008. All quarry-related samples were analyzed for the Arch suite of selected chloropyridines. The quarry locations sampled during the Spring 2008 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. Carbon disulfide (0.61 µg/L) was reported in the trip blank associated with samples collected on June 4, 2008. An action level was established at five times the blank concentration for carbon disulfide. The action level was then multiplied by the dilution factor if applicable. The result for carbon disulfide in sample B-17 was less than the action level and was qualified non-detect (U) at the reporting limit.

Miscellaneous. Several samples required dilutions due to concentrations of the target analytes carbon disulfide, carbon tetrachloride, chloroform, chlorobenzene, and 2-

chloropyridine that were greater than the instrument calibration range. Dilutions ranged from five to ten thousand times. Results were reported from the lowest diluted analytical run that met validation criteria.

Due to high concentrations of target analytes in the chloropyridine analyses, most of the samples were extracted at a dilution prior to analysis. Dilutions ranged from five to ten times.

3.0 ANALYTICAL RESULTS

3.1 GROUNDWATER

The validated results from the Spring 2008 groundwater monitoring event are provided in Tables 2 and 3. Table 4 provides a comparison of the Spring 2008 analytical results for selected chloropyridines and VOCs in representative wells to mean concentrations of the prior five years (Spring 2003 through Fall 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 23 on-site wells sampled in the Spring 2008 event. Concentrations of chloropyridines ranged from 54 micrograms per liter (µg/L) (sum of all chloropyridine and pyridine isomer concentrations) in pumping well BR-9 to 360,000 µg/L in pumping well PW-15. Thirteen of the on-site wells exhibited total chloropyridine concentrations that were above their respective means from monitoring events over the previous five years (see Table 4).

Off-Site. Chloropyridines were detected above sample quantitation limits in 19 of the 26 off-site wells that were sampled. Concentrations of total selected chloropyridines ranged from not detected (in monitoring wells BR-104, BR-116, BR-116D, MW-103, MW-104, MW-114, and NESS-W) to 12,000 µg/L (in well PZ-103 on the west side of McKee Road). Eight of the off-site wells contained total chloropyridine concentrations that were above their respective 5-year prior 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 22 of the 23 on-site wells sampled in the Spring 2008 event. Total concentrations of selected VOCs ranged from not detected (in well S-4) to 630,000 µg/L in PZ-106 for the sum of the principal site-related contaminants (carbon tetrachloride, chloroform, methylene chloride, tetrachloroethene, and trichloroethene). Eight of the 23 on-site wells 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 19 out of 23 wells), toluene (19 of 23), carbon disulfide (19 of 23), benzene (14 of 23), vinyl chloride (11 of 23), 1,2-dichloroethene (10 of 23),

bromoform (9 of 23), acetone (7 of 23), ethylbenzene (6 of 23), total xylenes (6 of 23), and 1,1-dichloroethane (5 of 23).

Off-Site. Selected VOCs were detected in 6 of the 13 off-site wells sampled for VOCs in the Spring 2008 event. Total concentrations of selected VOCs ranged from not detected (in BR-103, BR-106, BR-126, MW-103, MW-106, PZ-101, and PZ-104) to 16 µg/L (in MW-114). Three of the 13 off-site wells had selected VOC concentrations above their prior 5-year means. In addition to the selected VOCs, other notable constituents detected in off-site wells include benzene (in 9 out of 13 wells), chlorobenzene (6 of 13), 1,2-dichloroethene (5 of 13), carbon disulfide (4 of 13), toluene (3 of 13), vinyl chloride (3 of 13), 1,1-dichloroethane (2 of 13), and bromodichloromethane (2 of 13).

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

3.2 SURFACE WATER

Results from the Spring 2008 canal and quarry monitoring event are presented in Table 5, and summarized below.

3.2.1 Quarry

One quarry seep (QS-4) was sampled in the Spring 2008 monitoring event, and contained 178 µg/L total chloropyridines. The concentration at QS-4 remains 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, at the point where the quarry's dewatering discharge enters the ditch; and QO-2, 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 11 µg/L. Chloropyridines were detected in the sample at QO-2 at an estimated concentration of 10 µg/L.

3.2.3 Barge Canal

One sample was collected from the Erie Barge Canal location (QO-2S1, approximately 100 feet downstream of QO-2). Chloropyridines were not detected in this sample.

4.0 EXTRACTION SYSTEM PERFORMANCE AND MAINTENANCE

Table 6 is a summary of the system flow measurements for the on-site extraction wells from December 2007 through May 2008. The total volume pumped during the six-month period is approximately 6.9 million gallons.

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

New pumping well PW-15 was activated in early April 2008. This well replaces nearby pumping well PW-10, which partially collapsed in November 2006 and is no longer operational. Since being activated, PW-15 has been pumping at an average of 2.5 gallons per minute, and has already contributed significant contaminant mass removal. Table 7 provides a calculation of mass removal rates since the previous groundwater monitoring event (i.e., from December 2007 through May 2008). Arch estimates that approximately 45 pounds of target VOCs and 1220 pounds of chloropyridine compounds were removed by the groundwater extraction system and treated by the plant's activated carbon adsorption units over that time period.

5.0 OTHER ISSUES

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

6.0 NEXT MONITORING EVENT

The next regular monitoring event will occur in November 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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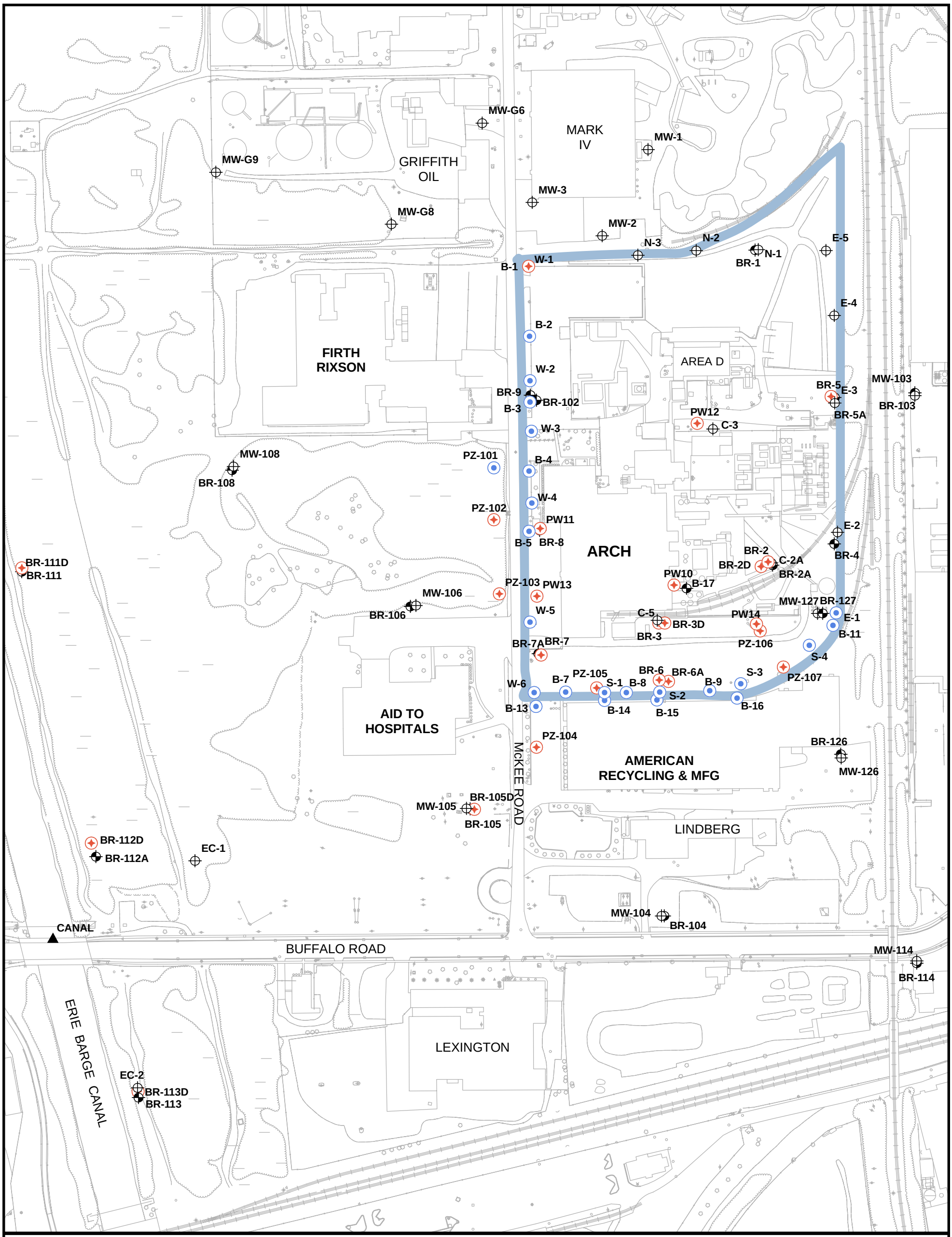

NOTES:

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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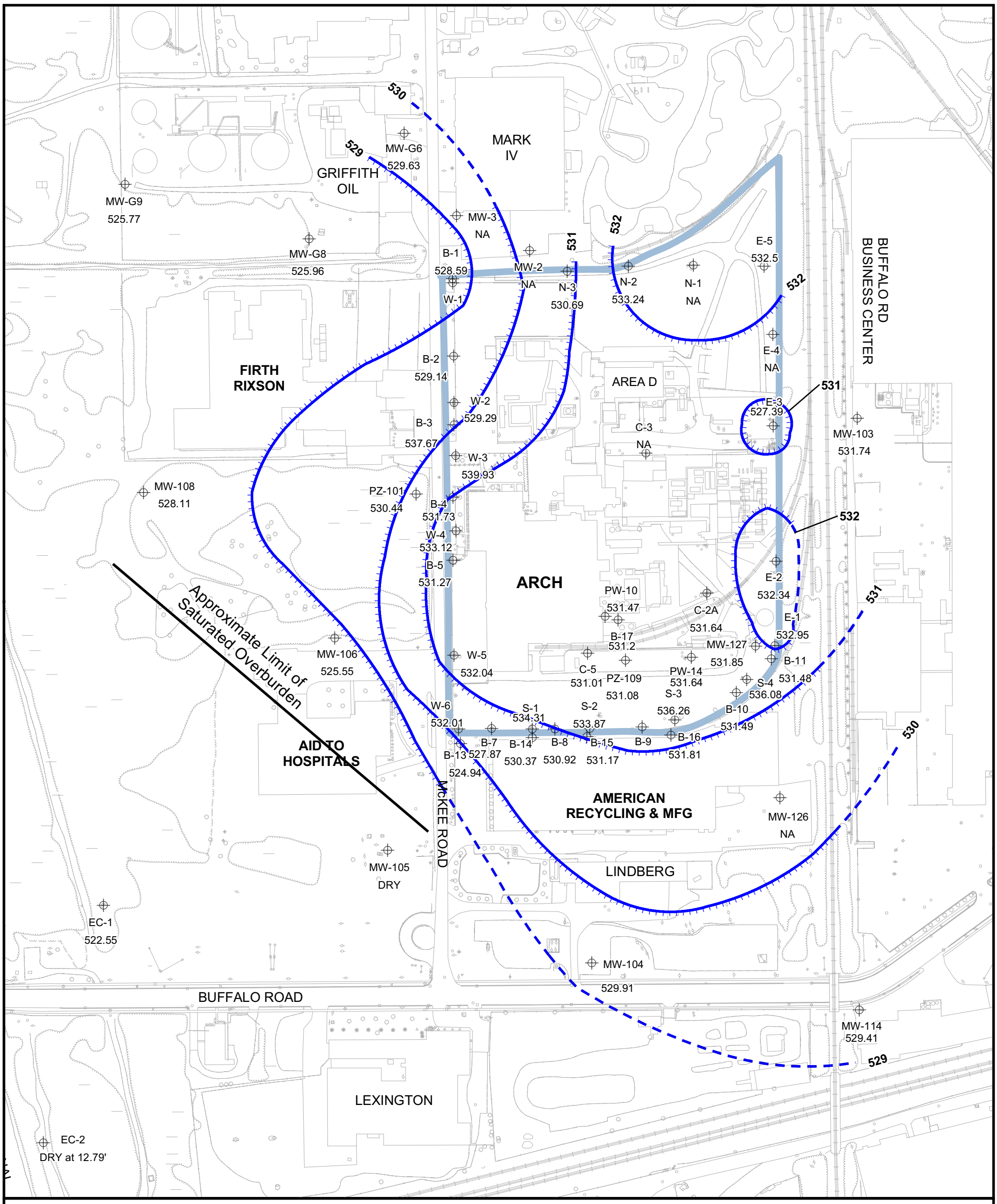

Legend

- 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 May 30, 2008
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

0 100 200 400 Feet

N

Prepared by DBW | Checked by NMB

Figure 3
Spring 2008
Overburden Groundwater
Interpreted Piezometric Contours

Arch Chemicals
Rochester, NY
MACTEC, Inc.

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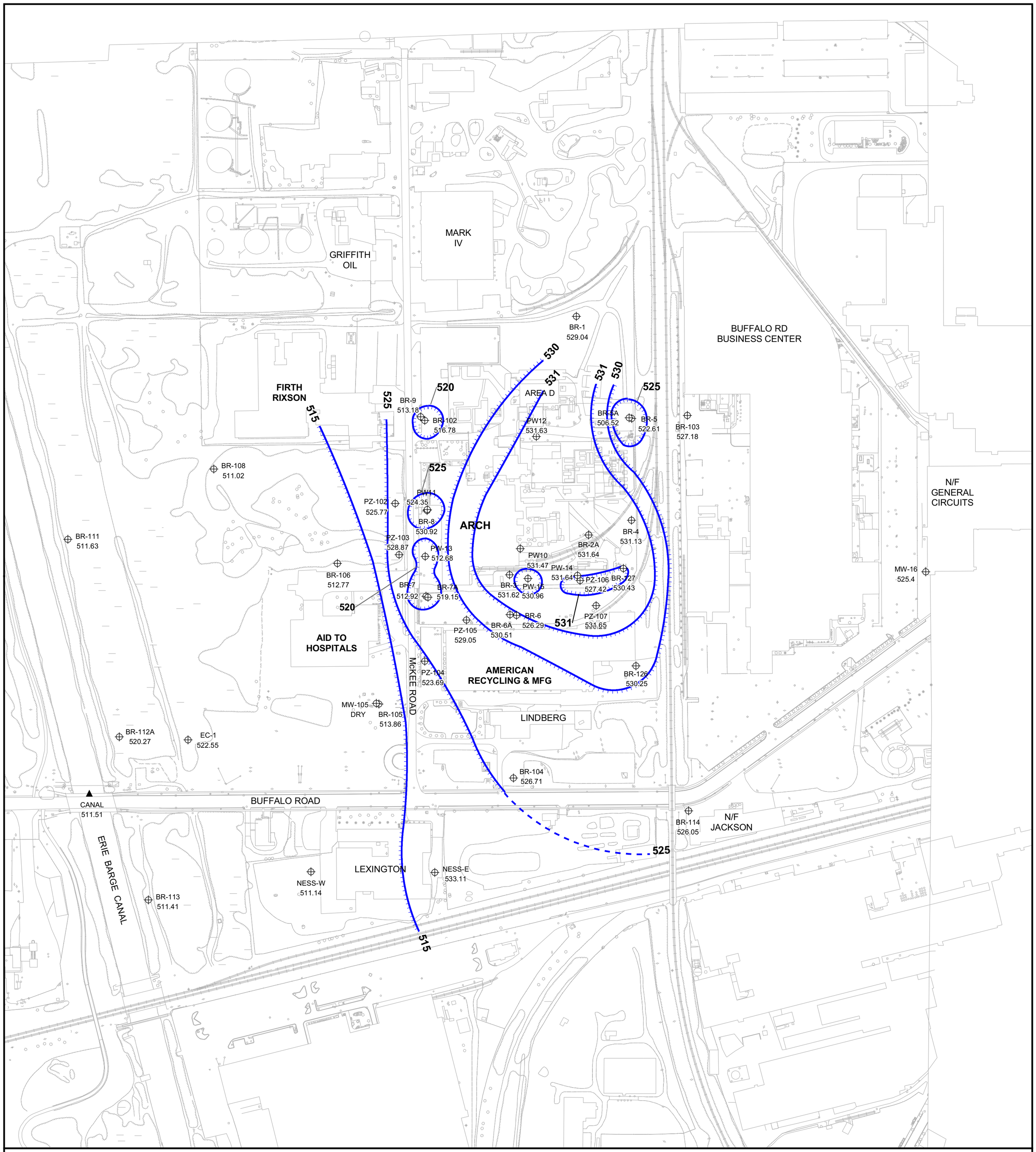

NOTES:

1. Water Levels Measured on May 30, 2008

Legend

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

N

0 100 200 400 Feet

Prepared by DBW | Checked by NMB

Figure 4
Spring 2008
Bedrock Groundwater
Interpreted Piezometric Contours

Arch Chemicals
Rochester, NY
MACTEC, Inc.

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Legend

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

NOTES
1. Water Levels Measured on May 30, 2008
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
FIRTH RIXSON
BUFFALO RD. BUSINESS CENTER
ARCH
AID TO HOSPITALS
ARM
CUMBERLAND FARMS PETROLEUM TERMINAL
LEXINGTON
GENERAL RAIL SIGNAL CO.
PFAUDLER
DOLOMITE PRODUCTS QUARRY

BR-9
BR-103
BR-108
BR-111D 511.3
BR-111
BR-2D 537.22
BR-3D 477.51
BR-106
BR-112D 511.27
BR-112
BR-105
BR-105D 510.96
BR-104
BR-114
BR-113
BR-113D 511.25
BR-122D 507.07
BR-117D 496.89
BR-117
BR-118
BR-118D 498.75
BR-121D Abandoned
BR-120D Abandoned
BR-119D Abandoned
BR-123D 507.94
BR-116D 509.21
BR-116
BR-124D 505.97

511
509
507
505
503
501
499

Figure 5
Spring 2008
Deep Bedrock Groundwater
Interpreted Piezometric Contours

Arch Chemicals
Rochester, NY
MACTEC, Inc.

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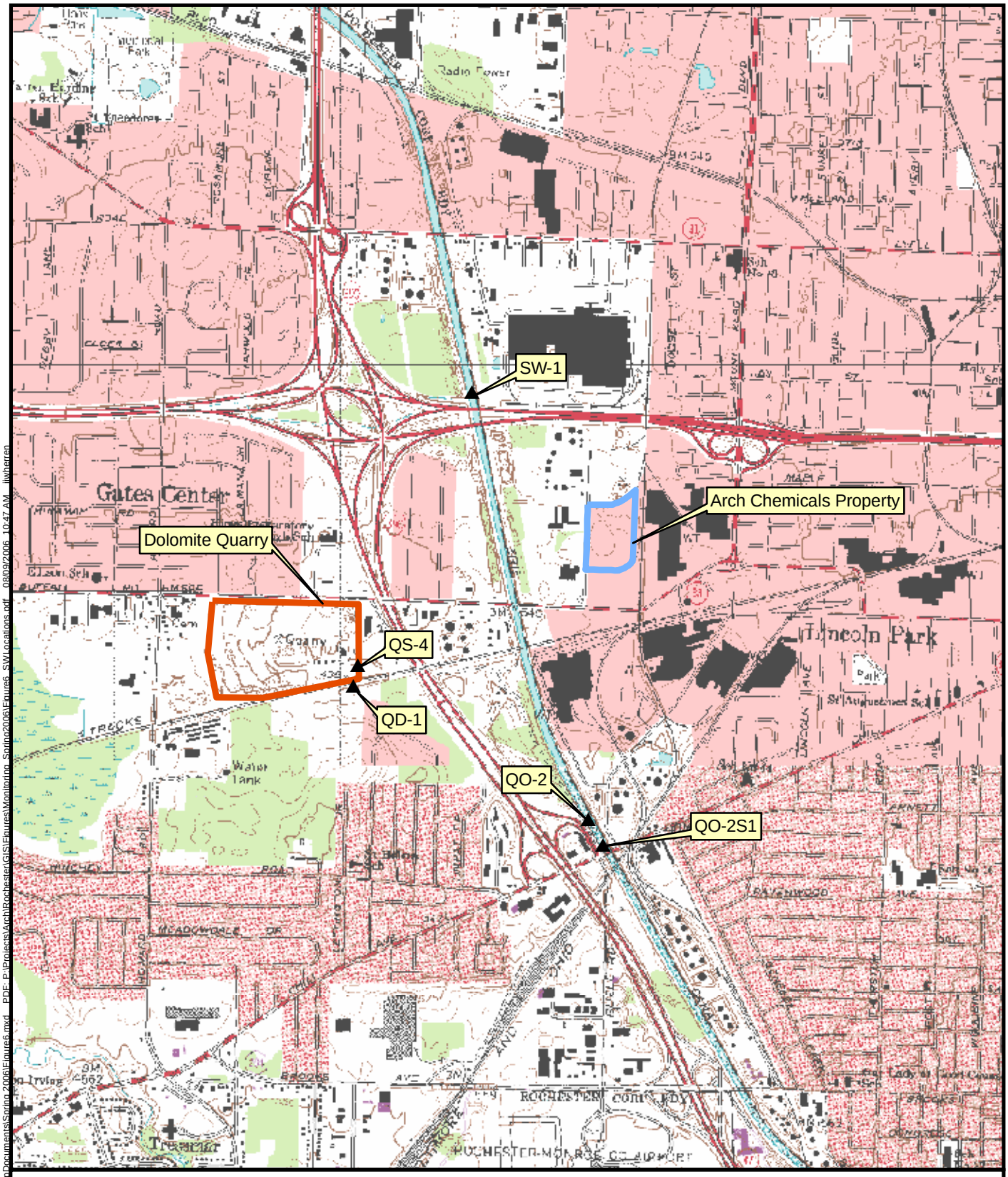

Source:
1:24,000 scale digital topographic map
obtained from New York State GIS
Clearinghouse at: www.nysgis.state.ny.us

N

0 0.25 0.5 Miles

Legend

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

Prepared by JJW | Checked by JEB

Figure 6
Sample Locations
Erie Barge Canal

Arch Chemicals
Rochester, New York
MACTEC, Inc.

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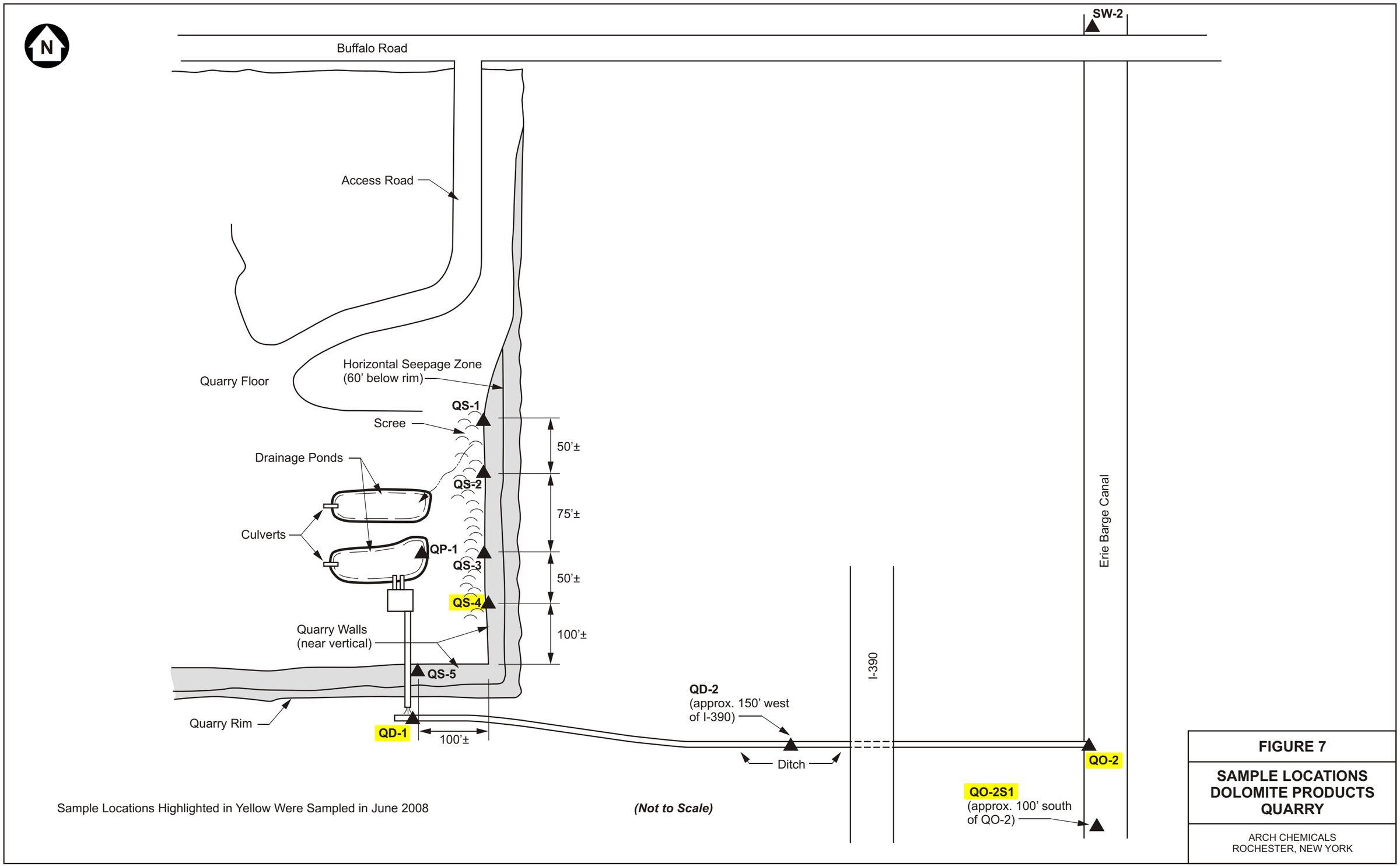

FIGURE 7

SAMPLE LOCATIONS
DOLOMITE PRODUCTS QUARRY

ARCH CHEMICALS
ROCHESTER, NEW YORK

W2004030a.cdr

MARK IV

GRIFFITH OIL

FIRTH RIXSON

BUFFALO RD BUSINESS CENTER

AREA D

1000

BR-9 54

BR-102

BR-5A 560

E-3 (330)

PW12 2600

BR-103 1

MW-103 (ND)

100

MW-108

BR-108 38

PZ-101 (31)

N/F GENERAL CIRCUITS

PW11 990

1000

PZ-102 1400

BR-8 320

ARCH

10000

BR-111D

100

100,000

PW10 25000

B-17 (360000)

BR-106 6600

MW-106 (7600)

PZ-103 12000

PW13 3300

PW14 24000

BR-127 4900

E-1 (47000)

BR-3 59000

PW15 380000

PZ-106 150000

MW-16

MW-127 (3300)

BR-7A 54000

S-4 (200)

PZ-107 6600

BR-6A 19000

B-9

S-3 (18000)

B-7 (1500)

PZ-105 39000

10000

AID TO HOSPITALS

McKEE ROAD

BR-126 2500

PZ-104 3100

AMERICAN RECYCLING & MFG

MW-126

BR-105 810

BR-105D {330}

LINDBERG

1000

BR-112D {35}

MW-104

BR-104 ND

MW-114 (ND)

BUFFALO ROAD

100

BR-114 360

N/F JACKSON

ERIE BARGE CANAL

LEXINGTON

NESS-W ND

NESS-E 53

BR-113D {12}

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

NOTES:

1. Samples Collected June, 2008
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.

Prepared by DBW | Checked by NMB

Figure 8
Spring 2008
Selected Chloropyridine Concentration Contours

Arch Chemicals
Rochester, NY
MACTEC, Inc.

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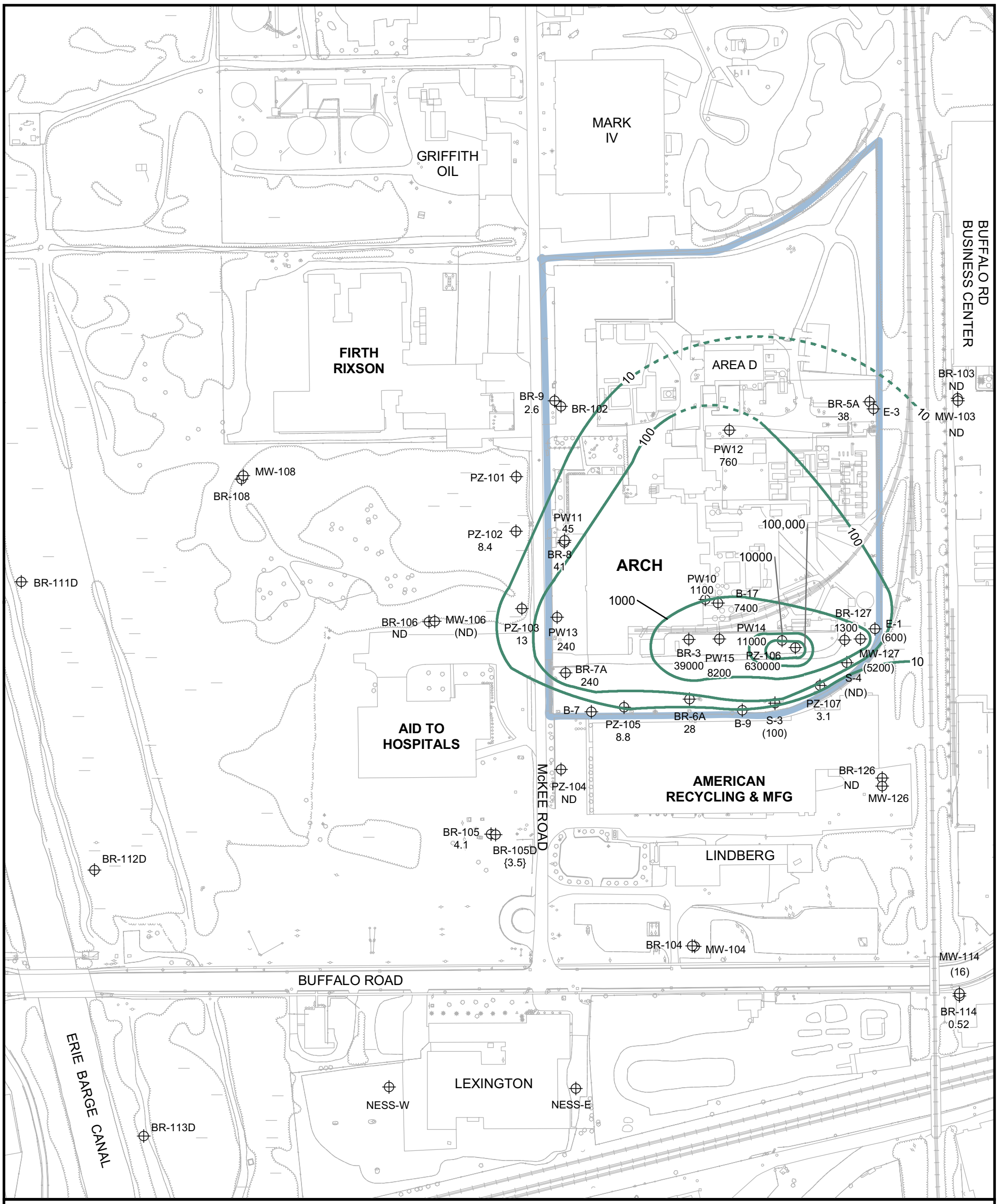

Legend

- 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

0 100 200 Feet

N

Prepared by DBW | Checked by NMB

NOTES:

1. Samples Collected in June, 2008
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.

Figure 9
Spring 2008
Selected Volatile Organic Compound Concentration Contours

Arch Chemicals
Rochester, NY
MACTEC, Inc.

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Tables

TABLE 1
SPRING 2008GROUNDWATER 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	6/10/2008	Sample	X	X
	BR-108	6/10/2008	Sample	X	
	MW-106	6/10/2008	Sample	X	X
	PZ-101	6/2/2008	Sample	X	X
	PZ-102	6/2/2008	Sample	X	X
	PZ-103	6/2/2008	Sample	X	X
AMERICAN RECYCLING & MANUFACTURING (58 MCKEE ROAD)	BR-126	6/2/2008	Sample	X	X
	PZ-104	6/2/2008	Sample	X	X
ARCH ROCHESTER	B-17	6/4/2008	Sample	X	X
	B-7	6/5/2008	Sample	X	X
	BR-127	6/4/2008	Sample	X	X
	BR-3	6/5/2008	Sample	X	X
	BR-5A	6/5/2008	Sample	X	X
	BR-6A	6/3/2008	Duplicate	X	X
	BR-6A	6/3/2008	Sample	X	X
	BR-7A	6/5/2008	Sample	X	X
	BR-8	6/5/2008	Sample	X	X
	BR-9	6/5/2008	Sample	X	X
	E-1	6/4/2008	Sample	X	X
	E-3	6/5/2008	Sample	X	X
	MW-127	6/4/2008	Sample	X	X
	PW10	6/4/2008	Sample	X	X
	PW11	6/5/2008	Sample	X	X
	PW12	6/4/2008	Sample	X	X
	PW13	6/5/2008	Sample	X	X
	PW14	6/5/2008	Sample	X	X
	PW15	6/5/2008	Sample	X	X
	PZ-105	6/3/2008	Sample	X	X
	PZ-106	6/4/2008	Sample	X	X
	PZ-107	6/3/2008	Sample	X	X
	S-3	6/3/2008	Sample	X	X
	S-4	6/3/2008	Sample	X	X
DOLOMITE PRODUCTS, INC.	BR-117D	6/2/2008	Sample	X	
	BR-118D	6/2/2008	Sample	X	
	QD-1	6/2/2008	Sample	X	
	QS-4	6/2/2008	Sample	X	
BUFFALO RD BUSINESS CTR (formerly Gerber property, formerly Kodak property)	BR-103	6/6/2008	Sample	X	X
	MW-103	6/6/2008	Sample	X	X
ERIE BARGE CANAL(Samples in canal or property along canal)	BR-112D	6/10/2008	Sample	X	
	BR-113D	6/5/2008	Sample	X	
	BR-122D	6/2/2008	Sample	X	
	BR-123D	6/2/2008	Sample	X	
	QO-2	6/2/2008	Sample	X	
	QO-2S1	6/2/2008	Sample	X	
JACKSON WELDING	BR-114	6/6/2008	Sample	X	X
	MW-114	6/6/2008	Sample	X	X
LEXINGTON MACHINING	NESS-E	6/6/2008	Sample	X	
	NESS-W	6/6/2008	Sample	X	
PFAUDLER, INC.	BR-116	6/5/2008	Sample	X	
	BR-116D	6/5/2008	Sample	X	
RG & E RIGHT OF WAY	BR-104	6/10/2008	Sample	X	
	BR-105	6/10/2008	Sample	X	X
	BR-105D	6/10/2008	Sample	X	X
	MW-104	6/10/2008	Sample	X	

TABLE 2
SPRING 2008 GROUNDWATER MONITORING RESULTS
CHLOROPYRIDINES

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	B-17		B-7		BR-103		BR-104		BR-105		BR-105D		BR-106		BR-108		BR-112D		BR-113D	
SAMPLE DATE:	06/04/08		06/05/08		06/06/08		06/10/08		06/10/08		06/10/08		06/10/08		06/10/08		06/10/08		06/05/08	
QC TYPE:	Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample	
SELECTED CHLOROPYRIDINES BY SW-846 Method 8270C (µg/L)																				
2,6-Dichloropyridine	20000	J	280		10	U	9	U	500	U	200	U	1100		5	J	4	J	9	U
2-Chloropyridine	300000		1200		10	U	9	U	810		330		5300		33		31		12	
3-Chloropyridine	50000	U	250	U	10	U	9	U	500	U	200	U	500	U	10	U	9	U	9	U
4-Chloropyridine	50000	U	250	U	10	U	9	U	500	U	200	U	500	U	10	U	9	U	9	U
p-Fluoroaniline	50000	U	250	U	1	J	9	U	500	U	200	U	160	J	10	U	9	U	9	U
Pyridine	40000	J	620	U	24	U	24	U	1200	U	500	U	1200	U	24	U	24	U	24	U

Notes:

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

J = Estimated value

TABLE 2
SPRING 2008 GROUNDWATER MONITORING RESULTS
CHLOROPYRIDINES

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	BR-114		BR-116		BR-116D		BR-117D		BR-118D		BR-122D		BR-123D		BR-126		BR-127		BR-3	
SAMPLE DATE:	06/06/08		06/05/08		06/05/08		06/02/08		06/02/08		06/02/08		06/02/08		06/02/08		06/04/08		06/05/08	
QC TYPE:	Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample	
SELECTED CHLOROPYRIDINES BY SW-846 Method 8270C (µg/L)																				
2,6-Dichloropyridine	26	J	47	U	38	U	9	U	4	J	20	J	100	U	420	J	820		6200	J
2-Chloropyridine	330		47	U	38	U	9		61		180		67	J	2100		3900		51000	
3-Chloropyridine	6	J	47	U	38	U	9	U	9	U	47	U	100	U	500	U	130	J	1800	J
4-Chloropyridine	39	U	47	U	38	U	9	U	9	U	47	U	100	U	500	U	500	U	10000	U
p-Fluoroaniline	39	U	47	U	38	U	9	U	9	U	47	U	100	U	500	U	500	U	10000	U
Pyridine	98	U	120	U	94	U	24	U	24	U	120	U	250	U	1200	U	1200	U	25000	U

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

TABLE 2
SPRING 2008 GROUNDWATER MONITORING RESULTS
CHLOROPYRIDINES

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	BR-5A		BR-6A		BR-6A		BR-7A		BR-8		BR-9		E-1		E-3		MW-103		MW-104	
SAMPLE DATE:	06/05/08		06/03/08		06/03/08		06/05/08		06/05/08		06/05/08		06/04/08		06/05/08		06/06/08		06/10/08	
QC TYPE:	Sample		Duplicate		Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample	
SELECTED CHLOROPYRIDINES BY SW-846 Method 8270C (µg/L)																				
2,6-Dichloropyridine	30	J	1200		1300		6000		110		53	U	10000	U	47		10	U	9	U
2-Chloropyridine	480		16000		17000		48000		200		54		45000		120		10	U	9	U
3-Chloropyridine	47	U	290	J	320	J	2500	U	51	U	53	U	2100	J	5	J	10	U	9	U
4-Chloropyridine	47	U	500	U	500	U	2500	U	51	U	53	U	10000	U	10	U	10	U	9	U
p-Fluoroaniline	17	J	500	U	500	U	2500	U	14	J	53	U	10000	U	1	J	10	U	9	U
Pyridine	35	J	1200	U	1200	U	6200	U	130	U	130	U	25000	U	160		25	U	24	U

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

TABLE 2
SPRING 2008 GROUNDWATER MONITORING RESULTS
CHLOROPYRIDINES

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	MW-106		MW-114		MW-127		NESS-E		NESS-W		PW10		PW11		PW12		PW13		PW14	
SAMPLE DATE:	06/10/08		06/06/08		06/04/08		06/06/08		06/06/08		06/04/08		06/05/08		06/04/08		06/05/08		06/05/08	
QC TYPE:	Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample	
SELECTED CHLOROPYRIDINES BY SW-846 Method 8270C (µg/L)																				
2,6-Dichloropyridine	1600	J	10	U	550		48	U	50	U	10000	U	140	J	800	J	280	J	10000	U
2-Chloropyridine	5800		10	U	2700		53		50	U	25000		850		1800	J	3000		24000	
3-Chloropyridine	2500	U	10	U	500	U	48	U	50	U	10000	U	500	U	2000	U	500	U	10000	U
4-Chloropyridine	2500	U	10	U	500	U	48	U	50	U	10000	U	500	U	2000	U	500	U	10000	U
p-Fluoroaniline	210	J	10	U	500	U	48	U	50	U	10000	U	500	U	2000	U	500	U	10000	U
Pyridine	6200	U	24	U	1200	U	120	U	120	U	25000	U	1200	U	5000	U	1200	U	25000	U

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

TABLE 2
SPRING 2008 GROUNDWATER MONITORING RESULTS
CHLOROPYRIDINES

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	PW15		PZ-101		PZ-102		PZ-103		PZ-104		PZ-105		PZ-106		PZ-107		S-3		S-4	
SAMPLE DATE:	06/05/08		06/02/08		06/02/08		06/02/08		06/02/08		06/03/08		06/04/08		06/03/08		06/03/08		06/03/08	
QC TYPE:	Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample	
SELECTED CHLOROPYRIDINES BY SW-846 Method 8270C (µg/L)																				
2,6-Dichloropyridine	100000	U	16	J	350	J	2300		320	J	3200		13000		900		2000		34	J
2-Chloropyridine	220000		15	J	1000		8900		2800		35000		130000		5600		16000		170	
3-Chloropyridine	100000	U	47	U	500	U	370	J	500	U	540	J	10000	U	96	J	150	J	98	U
4-Chloropyridine	100000	U	47	U	500	U	1200	U	500	U	2500	U	10000	U	500	U	500	U	98	U
p-Fluoroaniline	100000	U	47	U	500	U	530	J	500	U	2500	U	10000	U	500	U	500	U	98	U
Pyridine	20000	J	120	U	1200	U	3100	U	1200	U	6200	U	6000	J	1200	U	99	J	240	U

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

TABLE 3
SPRING 2008 GROUNDWATER MONITORING RESULTS
VOLATILE ORGANIC COMPOUNDS

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	B-17	B-7	BR-103	BR-105	BR-105D	BR-106	BR-114	BR-126	BR-127	BR-3
SAMPLE DATE:	06/04/08	06/05/08	06/06/08	06/10/08	06/10/08	06/10/08	06/06/08	06/02/08	06/04/08	06/05/08
QC TYPE:	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample
VOCs BY SW-846 Method 8260/5ML (µg/L)										
1,1,1-Trichloroethane	400 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	5 U	2000 U
1,1,2,2-Tetrachloroethane	400 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	5 U	2000 U
1,1,2-Trichloroethane	400 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	5 U	2000 U
1,1-Dichloroethane	400 U	5 U	5 U	0.91 J	2.5 J	20 U	5 U	5 U	5 U	2000 U
1,1-Dichloroethene	400 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	5 U	2000 U
1,2,4-Trimethylbenzene	400 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	5 U	2000 U
1,2-Dichloroethane	400 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	5 U	2000 U
1,2-Dichloroethene (total)	800 U	0.95 J	3.7 J	26	8.5 J	40 U	1.2 J	10 U	2.3 J	4000 U
1,2-Dichloropropane	400 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	5 U	2000 U
1,3,5-Trimethylbenzene	400 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	5 U	2000 U
2-Butanone	2000 U	25 U	25 U	25 U	25 U	100 U	25 U	25 U	25 U	10000 U
2-Hexanone	2000 U	25 U	25 U	25 U	25 U	100 U	25 U	25 U	25 U	10000 U
4-Methyl-2-pentanone	2000 U	25 U	25 U	25 U	25 U	100 U	25 U	25 U	25 U	10000 U
Acetone	600 J	25 U	25 U	25 U	25 U	100 U	25 U	25 U	25 U	10000 U
Benzene	400 U	1.2 J	5 U	1.6 J	4.3 J	38	4.9 J	2.3 J	5.5	2000 U
Bromodichloromethane	400 U	5 U	5 U	5 U	5 U	20 U	0.52 J	5 U	5 U	2000 U
Bromoform	400 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	22	2000 U
Bromomethane	400 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	5 U	2000 U
Carbon disulfide	400 U	1.6 J	5 U	5 U	2 J	9.8 J	5 U	5 U	110 J	1100 J
Carbon tetrachloride	400 U	3.4 J	5 U	1.7 J	5 U	20 U	5 U	5 U	190 J	2200
Chlorobenzene	150 J	16	5 U	4.9 J	5 U	310	5 U	5 U	1.7 J	2000 U
Chlorodibromomethane	400 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	2.4 J	2000 U
Chloroethane	400 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	5 U	2000 U
Chloroform	4400	12	5 U	0.8 J	3.5 J	20 U	0.52 J	5 U	1100	29000
Chloromethane	400 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	5 U	2000 U
cis-1,3-Dichloropropene	400 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	5 U	2000 U
Ethyl benzene	400 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	0.58 J	2000 U
Methylene chloride	1000	5 U	5 U	5 U	5 U	20 U	5 U	5 U	5.6	6300
Styrene	400 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	5 U	2000 U
Tetrachloroethene	2000	2.1 J	5 U	1.1 J	5 U	20 U	5 U	5 U	9.9	1800 J
Toluene	470	2.4 J	5 U	5 U	5 U	5.3 J	5 U	5 U	1.9 J	1700 J
trans-1,3-Dichloropropene	400 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	5 U	2000 U
Trichloroethene	400 U	5 U	5 U	0.53 J	5 U	20 U	5 U	5 U	0.91 J	2000 U
Vinyl acetate	2000 U	25 U	25 U	25 U	25 U	100 U	25 U	25 U	25 U	10000 U
Vinyl chloride	400 U	0.87 J	13	17	5 U	20 U	5 U	5 U	1.6 J	2000 U
Xylenes, Total	1200 U	15 U	15 U	15 U	15 U	60 U	15 U	15 U	1.4 J	6000 U

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

Prepared/Date: BJS 08/11/08
Checked/Date: JEB 09/05/08

TABLE 3
SPRING 2008 GROUNDWATER MONITORING RESULTS
VOLATILE ORGANIC COMPOUNDS

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	BR-5A		BR-6A		BR-6A		BR-7A		BR-8		BR-9		E-1		E-3		MW-103		MW-106	
SAMPLE DATE:	06/05/08		06/03/08		06/03/08		06/05/08		06/05/08		06/05/08		06/04/08		06/05/08		06/06/08		06/10/08	
QC TYPE:	Sample		Duplicate		Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample	
VOCs BY SW-846 Method 8260/5ML (µg/L)																				
1,1,1-Trichloroethane	5	U	10	U	10	U	20	U	5	U	2	J	50	U	5	U	5	U	25	U
1,1,2,2-Tetrachloroethane	5	U	10	U	10	U	20	U	5	U	5	U	50	U	5	U	5	U	25	U
1,1,2-Trichloroethane	5	U	10	U	10	U	20	U	5	U	5	U	50	U	5	U	5	U	25	U
1,1-Dichloroethane	5	U	10	U	10	U	2.4	J	5	U	9.8		50	U	5	U	5	U	25	U
1,1-Dichloroethene	5	U	10	U	10	U	20	U	5	U	1.9	J	50	U	5	U	5	U	25	U
1,2,4-Trimethylbenzene	5	U	10	U	10	U	20	U	5	U	1.5	J	50	U	5	U	5	U	25	U
1,2-Dichloroethane	5	U	10	U	10	U	20	U	5	U	5	U	50	U	5	U	5	U	25	U
1,2-Dichloroethene (total)	14		15	J	14	J	6.8	J	10	U	190		13	J	10	U	10	U	50	U
1,2-Dichloropropane	5	U	10	U	10	U	20	U	5	U	5	U	50	U	5	U	5	U	25	U
1,3,5-Trimethylbenzene	5	U	10	U	10	U	20	U	5	U	5	U	50	U	5	U	5	U	25	U
2-Butanone	25	U	50	U	50	U	100	U	25	U	25	U	250	U	25	U	25	U	120	U
2-Hexanone	25	U	50	U	50	U	100	U	25	U	25	U	250	U	25	U	25	U	120	U
4-Methyl-2-pentanone	25	U	50	U	50	U	100	U	25	U	25	U	250	U	25	U	25	U	120	U
Acetone	2.6	J	50	U	50	U	100	U	25	U	25	U	27	J	2.4	J	25	U	120	U
Benzene	10		1.4	J	1.5	J	21		3.3	J	71		50	U	5	U	5	U	42	
Bromodichloromethane	5	U	10	U	10	U	20	U	5	U	5	U	50	U	5	U	5	U	25	U
Bromoform	5	U	10	U	10	U	20	U	0.36	J	5	U	9.3	J	0.92	J	5	U	25	U
Bromomethane	5	U	10	U	10	U	20	U	5	U	5	U	50	U	0.74	J	5	U	25	U
Carbon disulfide	1.3	J	7.3	J	7.8	J	4.7	J	2.2	J	0.67	J	74		4.9	J	5	U	2.7	J
Carbon tetrachloride	5	U	10	U	10	U	10	J	4.4	J	5	U	120		7.2		5	U	25	U
Chlorobenzene	13		14		14		270		270		5.6		19	J	2.5	J	5	U	400	
Chlorodibromomethane	5	U	10	U	10	U	20	U	5	U	5	U	50	U	5	U	5	U	25	U
Chloroethane	5	U	10	U	10	U	20	U	5	U	5	U	50	U	5	U	5	U	25	U
Chloroform	19		1.9	J	1.9	J	84		34		0.73	J	460		110		5	U	25	U
Chloromethane	5	U	10	U	10	U	20	U	5	U	5	U	50	U	5	U	5	U	25	U
cis-1,3-Dichloropropene	5	U	10	U	10	U	20	U	5	U	5	U	50	U	5	U	5	U	25	U
Ethyl benzene	5	U	10	U	10	U	20	U	5	U	8.1		50	U	5	U	5	U	25	U
Methylene chloride	12		10	U	10	U	140		5	U	5	U	10	J	15		5	U	25	U
Styrene	5	U	10	U	10	U	20	U	5	U	5	U	50	U	5	U	5	U	25	U
Tetrachloroethene	5	U	17		17		6.2	J	2.6	J	5	U	8.7	J	4	J	5	U	25	U
Toluene	4.3	J	3.1	J	3.2	J	6.8	J	4.4	J	2.6	J	50	U	6.6		5	U	6.1	J
trans-1,3-Dichloropropene	5	U	10	U	10	U	20	U	5	U	5	U	50	U	5	U	5	U	25	U
Trichloroethene	6.6		9.2	J	8.6	J	2.3	J	5	U	1.9	J	50	U	5	U	5	U	25	U
Vinyl acetate	25	U	50	U	50	U	100	U	25	U	25	U	250	U	25	U	25	U	120	U
Vinyl chloride	3.1	J	3.5	J	3.5	J	12	J	5	U	110		50	U	5	U	5	U	25	U
Xylenes, Total	15	U	30	U	30	U	60	U	1	J	4	J	150	U	15	U	15	U	75	U

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

J = Estimated value.

Prepared/Date: BJS 08/11/08
Checked/Date: JEB 09/05/08

TABLE 3
SPRING 2008 GROUNDWATER MONITORING RESULTS
VOLATILE ORGANIC COMPOUNDS

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	MW-114		MW-127		PW10		PW11		PW12		PW13		PW14		PW15		PZ-101		PZ-102	
SAMPLE DATE:	06/06/08		06/04/08		06/04/08		06/05/08		06/04/08		06/05/08		06/05/08		06/05/08		06/02/08		06/02/08	
QC TYPE:	Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample		Sample	
VOCs BY SW-846 Method 8260/5ML (µg/L)																				
1,1,1-Trichloroethane	5	U	5	U	40	U	20	U	1000	U	10	U	400	U	400	U	5	U	50	U
1,1,2,2-Tetrachloroethane	5	U	5	U	40	U	20	U	1000	U	10	U	400	U	400	U	5	U	50	U
1,1,2-Trichloroethane	5	U	5	U	40	U	20	U	1000	U	10	U	400	U	400	U	5	U	50	U
1,1-Dichloroethane	5	U	5	U	40	U	10	J	1000	U	7.4	J	400	U	400	U	5	U	50	U
1,1-Dichloroethene	5	U	5	U	40	U	20	U	1000	U	10	U	400	U	400	U	5	U	50	U
1,2,4-Trimethylbenzene	5	U	5	U	40	U	20	U	1000	U	10	U	400	U	400	U	5	U	50	U
1,2-Dichloroethane	5	U	5	U	40	U	20	U	1000	U	10	U	400	U	400	U	5	U	50	U
1,2-Dichloroethene (total)	10	U	10	U	80	U	63		2000	U	42		800	U	800	U	10	U	100	U
1,2-Dichloropropane	5	U	5	U	40	U	20	U	1000	U	10	U	400	U	400	U	5	U	50	U
1,3,5-Trimethylbenzene	5	U	5	U	40	U	20	U	1000	U	10	U	400	U	400	U	5	U	50	U
2-Butanone	25	U	25	U	200	U	100	U	5000	U	50	U	2000	U	2000	U	25	U	250	U
2-Hexanone	25	U	25	U	200	U	100	U	5000	U	50	U	2000	U	2000	U	25	U	250	U
4-Methyl-2-pentanone	25	U	25	U	200	U	100	U	5000	U	50	U	2000	U	2000	U	25	U	250	U
Acetone	25	U	2.9	J	210		100	U	5000	U	50	U	2000	U	2000	U	25	U	250	U
Benzene	5	U	1.8	J	4.6	J	27		1000	U	19		400	U	400	U	5	U	17	J
Bromodichloromethane	9.1		1	J	40	U	20	U	1000	U	10	U	400	U	400	U	5	U	50	U
Bromoform	5	U	98		16	J	20	U	1000	U	10	U	39	J	65	J	5	U	50	U
Bromomethane	5	U	5	U	40	U	20	U	1000	U	10	U	400	U	43	J	5	U	50	U
Carbon disulfide	5	U	530	J	320		4.6	J	1000	U	3.9	J	800		390	J	5	U	50	U
Carbon tetrachloride	0.3	J	490	J	220		5.3	J	1000	U	4.3	J	2600		1800		5	U	50	U
Chlorobenzene	5	U	1.2	J	34	J	220		8100		62		400	U	83	J	5	U	280	
Chlorodibromomethane	5	U	9.5		40	U	20	U	1000	U	10	U	400	U	400	U	5	U	50	U
Chloroethane	5	U	5	U	40	U	20	U	1000	U	10	U	400	U	400	U	5	U	50	U
Chloroform	9.1		4600		320		35		360	J	110		7300		5200		5	U	50	U
Chloromethane	5	U	5	U	40	U	20	U	1000	U	10	U	400	U	400	U	5	U	50	U
cis-1,3-Dichloropropene	5	U	5	U	40	U	20	U	1000	U	10	U	400	U	400	U	5	U	50	U
Ethyl benzene	5	U	5	U	4.1	J	3.4	J	710	J	10	U	400	U	400	U	5	U	50	U
Methylene chloride	5	U	69		43		20	U	400	J	110		650		380	J	5	U	8.4	J
Styrene	5	U	5	U	40	U	20	U	1000	U	10	U	400	U	400	U	5	U	50	U
Tetrachloroethene	2.5	J	23		480		5	J	1000	U	11		180	J	770		5	U	50	U
Toluene	5	U	4.8	J	68		7.5	J	14000		3.6	J	41	J	150	J	5	U	50	U
trans-1,3-Dichloropropene	5	U	5	U	40	U	20	U	1000	U	10	U	400	U	400	U	5	U	50	U
Trichloroethene	4.5	J	5	U	36	J	20	U	1000	U	2.8	J	400	U	84	J	5	U	50	U
Vinyl acetate	25	U	25	U	200	U	100	U	5000	U	50	U	2000	U	2000	U	25	U	250	U
Vinyl chloride	5	U	5	U	7.3	J	73		1000	U	77		400	U	400	U	5	U	50	U
Xylenes, Total	15	U	15	U	24	J	60	U	3800		30	U	1200	U	1200	U	15	U	150	U

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

J = Estimated value.

Prepared/Date: BJS 08/11/08
Checked/Date: JEB 09/05/08

TABLE 3
SPRING 2008 GROUNDWATER MONITORING RESULTS
VOLATILE ORGANIC COMPOUNDS

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	PZ-103		PZ-104		PZ-105		PZ-106		PZ-107		S-3		S-4	
SAMPLE DATE:	06/02/08		06/02/08		06/03/08		06/04/08		06/03/08		06/03/08		06/03/08	
QC TYPE:	Sample		Sample		Sample		Sample		Sample		Sample		Sample	
VOCs BY SW-846 Method 8260/5ML (µg/L)														
1,1,1-Trichloroethane	100	U	5	U	20	U	10000	U	25	U	10	U	5	U
1,1,2,2-Tetrachloroethane	100	U	5	U	20	U	10000	U	25	U	10	U	5	U
1,1,2-Trichloroethane	100	U	5	U	20	U	10000	U	25	U	10	U	5	U
1,1-Dichloroethane	100	U	5	U	20	U	10000	U	25	U	5.2	J	5	U
1,1-Dichloroethene	100	U	5	U	20	U	10000	U	25	U	10	U	5	U
1,2,4-Trimethylbenzene	100	U	5	U	20	U	10000	U	25	U	10	U	5	U
1,2-Dichloroethane	100	U	5	U	20	U	10000	U	25	U	10	U	5	U
1,2-Dichloroethene (total)	200	U	2.6	J	40	U	20000	U	50	U	46		10	U
1,2-Dichloropropane	100	U	5	U	20	U	10000	U	25	U	10	U	5	U
1,3,5-Trimethylbenzene	100	U	5	U	20	U	10000	U	25	U	10	U	5	U
2-Butanone	500	U	25	U	100	U	50000	U	120	U	50	U	25	U
2-Hexanone	500	U	25	U	100	U	50000	U	120	U	50	U	25	U
4-Methyl-2-pentanone	500	U	25	U	100	U	50000	U	120	U	50	U	25	U
Acetone	500	U	25	U	100	U	50000	U	120	U	50	U	2.6	J
Benzene	140		2.6	J	8.8	J	10000	U	3.8	J	23		5	U
Bromodichloromethane	100	U	5	U	20	U	10000	U	25	U	10	U	5	U
Bromoform	100	U	5	U	20	U	5900	J	25	U	10	U	5	U
Bromomethane	100	U	5	U	20	U	10000	U	25	U	10	U	5	U
Carbon disulfide	48	J	5	U	3.3	J	120000		25	U	4	J	5	U
Carbon tetrachloride	100	U	5	U	20	U	89000		25	U	1.5	J	5	U
Chlorobenzene	1500		13		90		10000	U	25	U	120		0.88	J
Chlorodibromomethane	100	U	5	U	20	U	10000	U	25	U	10	U	5	U
Chloroethane	100	U	5	U	20	U	10000	U	25	U	10	U	5	U
Chloroform	100	U	5	U	8.8	J	520000		25	U	74		5	U
Chloromethane	100	U	5	U	20	U	10000	U	25	U	10	U	5	U
cis-1,3-Dichloropropene	100	U	5	U	20	U	10000	U	25	U	10	U	5	U
Ethyl benzene	100	U	5	U	20	U	10000	U	25	U	1.8	J	5	U
Methylene chloride	13	J	5	U	20	U	15000		25	U	18		5	U
Styrene	100	U	5	U	20	U	10000	U	25	U	10	U	5	U
Tetrachloroethene	100	U	5	U	20	U	2300	J	25	U	7.1	J	5	U
Toluene	21	J	5	U	3.1	J	10000	U	25	U	4.4	J	5	U
trans-1,3-Dichloropropene	100	U	5	U	20	U	10000	U	25	U	10	U	5	U
Trichloroethene	100	U	5	U	20	U	10000	U	3.1	J	2.7	J	5	U
Vinyl acetate	500	U	25	U	100	U	50000	U	120	U	50	U	25	U
Vinyl chloride	100	U	2.7	J	2.9	J	10000	U	25	U	55		5	U
Xylenes, Total	300	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.

Prepared/Date: BJS 08/11/08
Checked/Date: JEB 09/05/08

TABLE 4
COMPARISON OF SPRING 2008
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	JUN-2008 RESULT	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	JUN-2008 RESULT
ON-SITE WELLS/LOCATIONS								
B-17	5	28,000,000	310,000	**360,000**	5	345,000	21,000	7,400
B-7	5	9,100	2,700	1,500	5	256	28	18
BR-127	7	4,700	2,300	**4,900**	7	3	2	**1,300**
BR-3	5	6,500,000	80,000	59,000	5	920,000	450,000	39,000
BR-5A	10	1,700	500	**560**	10	9,400	55	38
BR-6A	10	144,500	19,000	19,000	10	26,000	2,900	28
BR-7A	10	510,000	13,000	**54,000**	10	3,000	200	**240**
BR-8	5	57,000	290	**320**	5	6,900	5.2	**41**
BR-9	10	720	170	54	10	160	15	2.6
E-1	10	171,680	52,000	47,000	10	5,300	34	**600**
E-3	5	600	100	**330**	5	12,000	ND	140
MW-127	7	15,000	6,400	3,300	7	180	26	**5,200**
PW10	10	244,000	120,000	25,000	10	120,000	18,000	1,100
PW11	10	27,000	1,800	990	10	30,000	1,200	45
PW12	10	15,000	2,400	**2,600**	10	120,000	1,400	760
PW13	7	7,500	2,100	**3,300**	7	920	250	240
PW14	6	29,000	28,000	24,000	6	160,000	40,000	11,000
PW15	2	729,000	550,000	240,000	2	7,800	6700	**8,200**
PZ-105	8	190,000	8,900	**39,000**	8	9,700	690	8.8
PZ-106	8	124,000	64,000	**150,000**	8	1,359,000	600,000	**630,000**
PZ-107	10	11,000	6,200	**6,600**	10	12,000	170	3.1
S-3	10	21,000	7,500	**18,000**	10	2,500	32	**100**
S-4	10	3,200	130	**200**	10	870	ND	ND
OFF-SITE WELLS/LOCATIONS								
BR-103	5	400	11	1	5	38	7.6	ND
BR-104	5	3,100	5.4	ND		9		
BR-105	10	24,000	980	810	10	310	4	**4.1**
BR-105D	10	10,000	1,300	330	10	230	5.4	3.5
BR-106	10	24,600	4,600	**6,600**	10	6,300	8.7	ND
BR-108	5	1,700	29	**38**		ND		
BR-112D	5	310	27	**35**		4.3		
BR-113D	5	490	36	12		2.8		
BR-114	5	520	240	**360**	5	12	0.35	**0.52**
BR-116	5	12	ND	ND		84		
BR-116D	5	710	19	ND		120		
BR-117D	5	80	13	9		1.9		
BR-118D	5	330	89	65		6.6		
BR-122D	5	650	140	**200**		ND		
BR-123D	5	860	110	67		4		
BR-126	5	9,000	4,700	2,500	5	230	110	ND
MW-103	5	97	19	ND	5	750	17	ND
MW-104	5	180	4	ND		1		

TABLE 4
COMPARISON OF SPRING 2008
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	JUN-2008 RESULT	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	JUN-2008 RESULT
MW-106	10	130,000	7,200	**7,600**	10	453	46	ND
MW-114	5	18	ND	ND	5	24	17	16
MW-126	1	63	63		1	ND	ND	
MW-16	5	360	80		1	8	8	
NESS-E	5	5,000	260	53		700		
NESS-W	5	2,100	130	ND		89		
PZ-101	10	27,000	610	31	10	6.1	0.86	ND
PZ-102	10	58,000	2,000	1,400	10	10,000	3	**8.4**
PZ-103	10	73,000	7,800	**12,000**	10	44,300	830	13
PZ-104	10	9,100	2,700	**3,100**	10	40	0.91	ND
QD-1	6	11	2	**11**	2	ND	ND	
QO-2	11	380	2.8	**10**	4	ND	ND	
QO-2S1	11	27	0.18	ND	4	ND	ND	
QS-4	14	3,400	220	180	6	ND	ND	

Note:

1) Number of samples and mean reflect 5-year sampling period from May 2003 through November 2007. Historic maximum based on all available results from March 1990 through November 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** - June 2008 exceeds 5-year mean.
5) NA = Not analyzed or not applicable
   ND = Not detected
   BLANK = Not sampled

TABLE 5
SPRING 2008 QUARRY SEEP AND OUTFALL WATER SAMPLE RESULTS
CHLOROPYRIDINES

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	QD-1		QO-2		QO-2S1		QS-4	
SAMPLE DATE:	06/02/08		06/02/08		06/02/08		06/02/08	
QC TYPE:	Sample		Sample		Sample		Sample	
SELECTED CHLOROPYRIDINES BY SW-846 Method 8270C (µg/L)								
2,6-Dichloropyridine	4	J	4	J	9	U	38	J
2-Chloropyridine	7	J	6	J	9	U	140	
3-Chloropyridine	10	U	10	U	9	U	50	U
4-Chloropyridine	10	U	10	U	9	U	50	U
p-Fluoroaniline	10	U	10	U	9	U	50	U
Pyridine	24	U	24	U	24	U	120	U

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

TABLE 6
EXTRACTION WELL WEEKLY FLOW MEASUREMENTS - DECEMBER 2007 THROUGH MAY 2008

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.]	PW-15 [Gal./Wk.]	Total [Gal.]
Dec '07								
12/09/07	50,264	75,893	27,328 **	84,216	3,243 **	6,018		246,962
12/16/07	52,678 *	57,092	37,829 **	113,511	51,949	8,828		321,887
12/23/07	43,200 *	42,457	47,427	86,514	8,519 **	6,862		234,979
12/30/07	46,027	64,335	46,050	37,523	8,662 **	7,546		210,143
						Total [Gal.]		1,013,971
Jan '08								
01/06/08	52,929	82,972	58,234	63,416	26,653	11,800		296,004
01/13/08	50,821	74,433	52,596	55,093	25,322	3,567 **		261,832
01/20/08	56,137	63,474	57,390	89,304	33,823	13,009 **		313,137
01/27/08	51,212	70,262	50,305	81,933	29,621	19,743		303,076
						Total [Gal.]		1,174,049
Feb '08								
02/03/08	49,740	64,451	51,304	97,627	20,704 **	18,361		302,187
02/10/08	50,670	68,716	42,468	30,240 *	13,679 **	18,644		224,417
02/17/08	52,944	78,629	63,122	30,240 *	25,016	4,079 **		254,030
02/24/08	51,625	59,943	67,132	46,260	18,213 **	660 **		243,833
						Total [Gal.]		1,024,467
Mar '08								
03/02/08	50,091	74,800	62,149	40,458	9,257 **	18,146		254,901
03/09/08	16,767 **	64,856	70,433	30,882	26,592	18,033		227,563
03/16/08	22,332 **	54,335	71,881	46,013	23,470 **	18,014		236,045
03/23/08	59,764	60,086	69,674	40,183	37,239	16,758		283,704
03/30/08	64,113	59,556	74,895	30,240 *	39,142	15,141		283,087
						Total [Gal.]		1,285,300
Apr '08								
04/06/08	66,888	48,739	74,895	30,240 *	19,770 **	14,307	18,387	273,226
04/13/08	62,457	46,179	72,249	30,240 *	40,019	14,057	43,972	309,173
04/20/08	61,681	49,638	73,503	30,240 *	36,731	6,977 **	41,734	300,504
04/27/08	56,917	56,502	83,308	30,240 *	13,314 **	6,026 **	40,223	286,530
						Total [Gal.]		1,169,433
May '08								
05/04/08	55,198	48,390	100,089	30,240 *	87,234	5,432 **	3,737 **	330,320
05/11/08	45,123	51,200	69,736	30,240 *	89,661	4,382 **	1,952 **	292,294
05/18/08	39,930	60,991	70,112	30,240 *	80,674	3,869 **	23,370 **	309,186
05/25/08	36,474	95,889	71,745	30,240 *	33,117 **	20,650	51,744	339,859
						Total [Gal.]		1,271,659
Total 6 Mo. Removal (Gal.)	1,245,982	1,573,818	1,565,854	1,245,573	801,624	280,909	225,119	6,938,879

Notes:
1) * - Flow rate is estimated due to a meter failure or reading error
2) ** - Flow rate adversely affected by pump failure or pluggage in discharge line

TABLE 7

MASS REMOVAL SUMMARY
PERIOD: DECEMBER 2007 - MAY 2008

ARCH ROCHESTER
SPRING 2008 GROUNDWATER MONITORING REPORT

Well	Total Vol. Pumped (gallons)	Avg. VOC Conc. (ppm)	Avg. PYR. Conc. (ppm)	VOCs Removed (pounds)	PYR. Removed (pounds)
BR-5A	1,246,000	0.020	0.40	0.21	4.2
BR-7A	1,574,000	0.31	40	4.1	526
BR-9	1,566,000	0.003	0.079	0.039	1.0
PW-11	1,246,000	0.024	0.79	0.24	8.2
PW-13	802,000	0.32	2.8	2.1	19
PW-14	281,000	11	34	25	80
PW-15	225,000	6.9	310	13	581
Totals:	6,940,000			45	1220

Note: VOC and pyridine concentrations used in this table are an average of the analytical results from the Fall 2007 and Spring 2008 sampling events for each well

Appendix A

Groundwater Field Sampling Data Sheets

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

FIELD REPORT

REMEDIAL INVESTIGATION SAMPLING
ARCH CHEMICAL
ROCHESTER, NEW YORK

SPRING 2008 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: 2-24-08

1.0 INTRODUCTION

This report describes the sampling of the following points:

- Fourty-nine (49) 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 June 2-10, 2008 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.

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

SAMPLE POINT	DATE	DEPTH TO WATER	CASING ELEVATION	GW ELEVATION	TIME	Comments
B-1	05/30/08	9.16		-9.16	1205	NO L-NAPL ; NO D-NAPL
B-10		7.31		-7.31	1058	NO L-NAPL ; NO D-NAPL
B-11		4.52		-4.52	1100	NO L-NAPL
B-13		12.13		-12.13	1248	
B-14		7.58		-7.58	1250	
B-15		4.12		-4.12	1252	
B-16		4.40		-4.40	1254	
B-17		7.54		-7.54	1040	NO L-NAPL ; NO D-NAPL
B-2		9.88		-9.88	1203	NO L-NAPL ; NO D-NAPL
B-3		4.14		-4.14	1156	NO L-NAPL ; NO D-NAPL
B-4		11.14		-11.14	1210	NO L-NAPL ; NO D-NAPL
B-5		8.94		-8.94	1213	NO L-NAPL ; NO D-NAPL
B-7		13.24		-13.24	1233	NO L-NAPL ; NO D-NAPL
B-8		7.96		-7.96	1118	NO L-NAPL ; NO D-NAPL
BR-1		8.24		-8.24	1140	NO L-NAPL ; NO D-NAPL
BR-102		22.65		-22.65	1155	
BR-103		6.01		-6.01	1323	
MW-103		1.51		-1.51	1324	
BR-104		10.85		-10.85	1333	
MW-104		7.63		-7.63	1334	
BR-105		23.04		-23.04	1351	
BR-105D		25.53		-25.53	1352	
MW-105		DRY		#VALUE!	1353	
BR-106		22.97		-22.97	1356	
MW-106		9.89		-9.89	1357	
BR-108		29.56		-29.56	1405	
MW-108		12.58		-12.58	1406	
BR-111		28.79		-28.79	1402	
BR-111D		29.04		-29.04	1403	
BR-112A		27.45		-27.45	1358	
BR-112D		36.64		-36.64	1354	
BR-113		31.61		-31.61	1346	

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

SAMPLE POINT	DATE	DEPTH TO WATER	CASING ELEVATION	GW ELEVATION	TIME	Comments
BR-113D	05/30/08	31.68		-31.68	1345	
BR-114		13.72		-13.72	1330	
MW-114		10.28		-10.28	1329	
BR-116		27.45		-27.45	1308	
BR-116D		36.01		-36.01	1310	
BR-117		24.00		-24.00	1230	
BR-117D		50.27		-50.27	1232	
BR-118		37.29		-37.29	1240	
BR-118D		49.18		-49.18	1241	
BR-122D		45.27		-45.27	1250	
BR-123D		45.68		-45.68	1255	
BR-124D		31.48		-31.48	1300	
BR-126		7.65		-7.65	1245	
MW-126						NOT LOCATED
BR-127		4.37			1108	NO L-NAPL ; NO D-NAPL
MW-127		5.02			1107	NO L-NAPL ; NO D-NAPL
BR-2		7.91		-7.91	1036	NO L-NAPL ; NO D-NAPL
BR-2A		8.72		-8.72	1035	NO L-NAPL ; NO D-NAPL
BR-2D		0.04		-0.04	1038	NO L-NAPL ; NO D-NAPL
BR-3		6.58		-6.58	1047	NO L-NAPL
BR-3D		60.16		-60.16	1046	NO L-NAPL ; NO D-NAPL
BR-4		7.90		-7.90	1104	NO L-NAPL
BR-5		13.69			1131	NO L-NAPL ; NO D-NAPL
BR-5A		29.83		-29.83	1132	0.00 GPM
BR-6		11.46		-11.46	1121	NO L-NAPL ; NO D-NAPL
BR-6A		10.39		-10.39	1122	
BR-7		26.18		-26.18	1235	
BR-7A		19.97		-19.97	1236	NO L-NAPL ; NO D-NAPL
BR-8		8.80		-8.80	1212	NO L-NAPL ; NO D-NAPL
BR-9		28.99		-28.99	1157	0.00 GPM
C-2A		8.02		-8.02	1037	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
	05/30/08			0.00		
C-5		8.62		-8.62	1048	NO L-NAPL ; NO D-NAPL
E-1		2.06		-2.06	1102	NO L-NAPL
E-2		5.98		-5.98	1105	NO L-NAPL ; NO D-NAPL
E-3		9.20		-9.20	1130	NO L-NAPL ; NO D-NAPL
E-4				0.00	1135	OBSTRUCTED AT 2.60
E-5		6.81		-6.81	1136	NO L-NAPL ; NO D-NAPL
EC-1		17.44		-17.44	1405	
EC-2				0.00	1347	DRY AT 12.79 '
ERIE CANAL		33.28		-33.28	1408	
MW-16		11.39		-11.39	1320	
MW-3						NOT LOCATED
MW-G6		5.02		-5.02	1421	
MW-G7						NOT LOCATED
MW-G8		8.29		-8.29	1427	
MW-G9		10.83		-10.83	1432	
N-1				0.00	1141	OBSTRUCTED
N-2		4.09		-4.09	1144	NO L-NAPL ; NO D-NAPL
N-3		6.69		-6.69	1207	NO L-NAPL
NESS-E		7.20		-7.20	1415	
NESS-W		31.90		-31.90	1423	
PW-10		7.29		-7.29	1041	NO L-NAPL
PW-11		13.82		-13.82	1215	NO L-NAPL
PW-12		5.86		-5.86	1146	
PW-13		23.45		-23.45	1238	L-NAPL= TRACE; NO D NAPL
PW-14		5.39		-5.39	1052	NO L-NAPL
PW-15		7.36		-7.36	1045	NO L-NAPL; NO D-NAPL
PZ-101		12.51		-12.51	1218	
PZ-102		15.12		-15.12	1300	
PZ-103		11.33		-11.33	1303	
PZ-104		13.16		-13.16	1305	
PZ-105		7.88		-7.88	1115	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	05/30/08	9.82		-9.82	1053	NO L-NAPL ; NO D-NAPL
PZ-107	05/30/08	6.74		-6.74	1057	NO L-NAPL ; NO D-NAPL
PZ-109		7.51		-7.51	1046	NO L-NAPL; NO D-NAPL
S-1		3.18		-3.18	1117	NO L-NAPL ; NO D-NAPL
S-2		3.28		-3.28	1119	NO L-NAPL
S-3		0.93		-0.93	1125	NO L-NAPL ; NO D-NAPL
S-4		0.70		-0.70	1059	
W-1				0.00	1236	OBSTRUCTED
W-2		11.03		-11.03	1200	NO L-NAPL ; NO D-NAPL
W-3		2.71		-2.71	1217	NO L-NAPL ; NO D-NAPL
W-4		7.98		-7.98	1211	NO L-NAPL ; NO D-NAPL
W-5		6.49		-6.49	1236	NO L-NAPL ; NO D-NAPL
W-6		6.98		-6.98	1232	NO L-NAPL ; NO D-NAPL

Sampling Summary Table
ARCH CHEMICAL
JUNE 2008
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	
B-17	06/04/2008	929	8.48	N/A	N/A	06/04/2008	958	13.49	17780	14.2	27.30	EH(mv)= -304	DO(ppm)= 0.91
B-7	06/05/2008	1308	13.30	N/A	N/A	06/05/2008	1335	7.18	1581	17.9	27.30	EH(mv)= -91	DO(ppm)= 1.05
BR-103	06/06/2008	1323	6.38	N/A	N/A	06/06/2008	1410	7.80	627	18.0	5.61	EH(mv)= -115	DO(ppm)= 0.86
BR-104	06/10/2008	1203	10.37	N/A	N/A	06/10/2008	1245	7.39	547	16.9	42.30	EH(mv)= -138	DO(ppm)= 0.55
BR-105	06/10/2008	1330	23.59	N/A	N/A	06/10/2008	1405	7.41	1787	13.9	3.56	EH(mv)= -123	DO(ppm)= 0.46
BR-105D	06/10/2008	1420	26.58	N/A	N/A	06/10/2008	1450	6.84	11970	12.9	3.28	EH(mv)= -302	DO(ppm)= 0.44
BR-106	06/10/2008	1245	23.77	N/A	N/A	06/10/2008	1315	6.86	3834	12.3	38.10	EH(mv)= -247	DO(ppm)= 0.65
BR-108	06/10/2008	1305	28.29	N/A	29.00	06/10/2008	1437	7.06	1483	17.6	264.00	EH(mv)= 22	
BR-112D	06/10/2008	1340	36.75	N/A	72.26	06/10/2008	1417	7.21	2214	15.6	23.30	EH(mv)= -116	
BR-113D	06/05/2008	1300	31.73	N/A	79.25	06/05/2008	1405	7.33	2166	13.5	10.20	EH(mv)= -192	
BR-114	06/06/2008	1222	13.81	N/A	N/A	06/06/2008	1255	7.09	1822	17.5	0.94	EH(mv)= -100	DO(ppm)= 0.20
BR-116	06/05/2008	1105	27.71	N/A	N/A	06/05/2008	1135	6.86	1822	19.1	17.90	EH(mv)= -57	DO(ppm)= 0.47
BR-116D	06/05/2008	1103	36.15	N/A	N/A	06/05/2008	1210	10.08	1653	18.7	29.40	EH(mv)= -215	DO(ppm)= 0.37
BR-117D	06/02/2008	1115	50.31	N/A	N/A	06/02/2008	1145	7.79	763	11.3	39.30	EH(mv)= -109	DO(ppm)= 0.30
BR-118D	06/02/2008	1205	49.46	N/A	N/A	06/02/2008	1235	7.16	2283	11.7	11.30	EH(mv)= -291	DO(ppm)= 0.17
BR-122D	06/02/2008	1300	45.20	N/A	N/A	06/02/2008	1330	6.97	2315	12.6	0.85	EH(mv)= -281	DO(ppm)= 0.31
BR-123D	06/02/2008	1350	45.62	N/A	N/A	06/02/2008	1415	7.84	2202	12.5	11.10	EH(mv)= -272	DO(ppm)= 0.16
BR-127	06/04/2008	1246	4.71	N/A	N/A	06/04/2008	1332	7.90	3318	15.7	0.32	EH(mv)= -235	DO(ppm)= 1.11
BR-3	06/05/2008	1008	7.44	N/A	N/A	06/05/2008	1035	7.49	9442	16.2	82.10	EH(mv)= -175	DO(ppm)= 0.88
BR-5A	06/05/2008	1123	12.78	N/A	N/A	06/05/2008	1127	7.87	1549	15.0	19.80	EH(mv)= -127	
BR-6A	06/03/2008	1135	10.21	N/A	N/A	06/03/2008	1208	10.02	1402	14.9	2.34	EH(mv)= -197	DO(ppm)= 1.06
BR-7A	06/05/2008	1342	30.76	N/A	N/A	06/05/2008	1350	7.54	3288	18.5	98.50	EH(mv)= -145	
BR-8	06/05/2008	1200	8.92	N/A	N/A	06/05/2008	1225	7.69	5089	16.4	6.77	EH(mv)= -225	DO(ppm)= 0.88
BR-9	06/05/2008	1415	35.53	N/A	N/A	06/05/2008	1420	7.73	1964	17.4	56.00	EH(mv)= -166	
E-1	06/04/2008	1340	1.35	N/A	N/A	06/04/2008	1410	9.12	10900	16.0	51.90	EH(mv)= -303	DO(ppm)= 0.82
E-3	06/04/2008	1509	9.02	N/A	N/A	06/05/2008	1138	7.54	3012	15.6	23.90	EH(mv)= -52	DO(ppm)= 1.27
MW-103	06/06/2008	1310	1.43	N/A	N/A	06/06/2008	1335	7.60	582	21.6	0.90	EH(mv)= -1	DO(ppm)= 0.95
MW-104	06/10/2008	1130	7.63	N/A	N/A	06/10/2008	1200	7.02	938	16.8	126.00	EH(mv)= -136	DO(ppm)= 0.80
MW-106	06/10/2008	1155	10.25	N/A	N/A	06/10/2008	1230	6.97	3304	13.2	56.20	EH(mv)= -164	DO(ppm)= 0.50
MW-114	06/06/2008	1155	10.78	N/A	N/A	06/06/2008	1220	7.25	1588	18.9	7.61	EH(mv)= 50	DO(ppm)= 0.80
MW-127	06/04/2008	1215	4.73	N/A	N/A	06/04/2008	1240	8.02	3243	15.7	0.92	EH(mv)= -166	DO(ppm)= 0.99
NESS-E	06/06/2008	1053	7.20	N/A	N/A	06/06/2008	1120	6.40	2668	22.6	21.30	EH(mv)= -9	DO(ppm)= 0.38

SG - Specific Gravity
EH - Redox
DO - Dissolved Oxygen

* From Top of Riser
** Elevation Above Sea Level

Sampling Summary Table
ARCH CHEMICAL
JUNE 2008
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
NESS-W	06/06/2008	1015	31.98	N/A	N/A	06/06/2008	1040	7.17	2017	16.6	4.90	EH(mv)= -219 DO(ppm)= 0.15
PW-10	06/04/2008	1004	7.53	N/A	N/A	06/04/2008	1058	10.65	8157	13.9	568.00	EH(mv)= -429 DO(ppm)= 0.91
PW-11	06/05/2008	1245	14.92	N/A	N/A	06/05/2008	1248	7.20	4152	17.6	68.40	EH(mv)= -147
PW-12(BR-101)	06/04/2008	1428	5.93	N/A	N/A	06/04/2008	1450	7.06	2839	15.6	0.98	EH(mv)= -78 DO(ppm)= 1.03
PW-13	06/05/2008	1358	23.40	N/A	N/A	06/05/2008	1405	7.75	2186	19.2	11.20	EH(mv)= -183
PW-14	06/05/2008	1109	23.43	N/A	N/A	06/05/2008	1115	8.82	5010	18.9	17.00	EH(mv)= -183
PW-15	06/05/2008	1054	18.78	N/A	N/A	06/05/2008	1059	10.35	7489	14.6	6.62	EH(mv)= -265
PZ-101	06/02/2008	1125	12.73	N/A	N/A	06/02/2008	1150	7.01	2780	13.3	3.07	EH(mv)= 55 DO(ppm)= 1.00
PZ-102	06/02/2008	1202	15.94	N/A	N/A	06/02/2008	1225	7.25	4226	13.4	0.97	EH(mv)= -118 DO(ppm)= 0.90
PZ-103	06/02/2008	1240	11.55	N/A	N/A	06/02/2008	1305	7.35	4777	15.7	0.21	EH(mv)= -183 DO(ppm)= 0.95
PZ-104	06/02/2008	1320	13.23	N/A	N/A	06/02/2008	1345	7.38	1488	15.0	0.44	EH(mv)= -157 DO(ppm)= 0.90
PZ-105	06/03/2008	1101	7.71	N/A	N/A	06/03/2008	1130	8.02	3083	15.2	73.10	EH(mv)= -195 DO(ppm)= 0.92
PZ-106	06/04/2008	1122	14.03	N/A	N/A	06/04/2008	1155	6.24	10420	13.9	14.20	EH(mv)= 22 DO(ppm)= 1.03
PZ-107	06/03/2008	1300	6.57	N/A	N/A	06/03/2008	1332	8.02	2376	11.9	0.79	EH(mv)= -159 DO(ppm)= 1.06
QD-1	06/02/2008	1140	0.00	N/A	N/A	06/02/2008	1145	7.73	2184	16.1	2.05	EH(mv)= 121
QO-2	06/02/2008	1430	0.00	N/A	N/A	06/02/2008	1434	7.04	2221	19.5	2.84	EH(mv)= -168
QO-2S1	06/02/2008	1440	0.00	N/A	N/A	06/02/2008	1445	7.49	502	17.9	3.77	EH(mv)= -164
QS-4	06/02/2008	1050	0.00	N/A	N/A	06/02/2008	1055	7.25	1794	13.2	1.39	EH(mv)= 32
S-3	06/03/2008	1215	0.83	N/A	N/A	06/03/2008	1255	7.57	2611	14.6	14.30	EH(mv)= -122 DO(ppm)= 0.9
S-4	06/03/2008	1340	0.75	N/A	N/A	06/03/2008	1410	8.38	1370	12.8	15.90	EH(mv)= -195 DO(ppm)= 1.00

SG - Specific Gravity
EH - Redox
DO - Dissolved Oxygen

* From Top of Riser
** Elevation Above Sea Level

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: MW-103

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-6-08 / 1310

Cond of seal: (Y) 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: 6-6-08 / 1315

Date / Time Completed: 6-6-08 / 1335

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 1.43

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: Peristaltic

One (1) Riser Volume, Gal:

Dedicated: (Y) / N

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: LOW FLOW

Start Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	M/m	WL							
1320	150	1.90		23.7	7.55	647	1.63	-8	1.11
1325	140	1.94		21.7	7.63	598	1.06	-5	1.06
1330	↓	↓		21.2	7.59	590	0.96	-3	0.99
1335	↓	↓		21.6	7.60	582	0.90	-1	0.95

SAMPLE AT 1325
6-6-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR-103

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-6-08 / 1323

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: 6-6-08 / 1350

Date / Time Completed: 6-6-08 / 1410

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 6.38

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: Peristaltic

One (1) Riser Volume, Gal:

Dedicated: (Y) / N

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: LOW FLOW

Start Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	ML/M	WL							
1355	200	6.40		21.1	7.52	618	13.9	-124	0.93
1400				19.2	7.66	620	9.63	-120	0.90
1405				18.7	7.77	627	8.55	-117	0.87
1410				18.0	7.80	627	5.61	-115	0.86

STOP @ 1410
6-6-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: MW-104

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-10-08 / 1130

Cond of seal: (N) 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: 6-10-08 / 1135

Date / Time Completed: 6-10-08 / 1200

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 7.63

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: PERISTALTIC

One (1) Riser Volume, Gal:

Dedicated: Y / (N)

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: LOW FLOW

Start TURB.0 Finish SL TURBID

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	mL/m	mL							
1140	160	8.05		17.0	7.01	1080	155	-153	1.01
1145	↓	↓		16.4	6.98	960	148	-149	0.87
1150				16.9	6.98	949	127	-140	0.95
1155				16.9	7.00	940	125	-138	0.93
1200	↓	↓		16.8	7.02	938	126	-136	0.80

SAMPLE AT 1200 6-10-08 PL SAM

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR-104

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-10-08 / 1203

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: 6-10-08 / 1225

Date / Time Completed: 6-10-08 / 1245

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 10.37

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: Peristaltic

One (1) Riser Volume, Gal:

Dedicated: (Y) / N

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: Low Flow

Start SL TURBID Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1230	ML/min 150	WL 10.41		18.0	7.47	571	65.2 ~~+3~~	-137	0.62
1235	↓	↓		17.5	7.43	557	56.9	-139	0.60
1240				17.0	7.39	550	45.8	-138	0.57
1245				16.9	7.39	547	42.3	-138	0.55

SAMPLE AT 1245
6-10-08
RS 2nd

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR-105

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-10-08 / 1330

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

Prot. Casing/riser height: —

Cond of prot. Casing/riser: ( ) Unlocked (X) 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: 6-10-08 / 1335

Date / Time Completed: 6-10-08 / 1405

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 23.59

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: BLADDER PUMP

One (1) Riser Volume, Gal:

Dedicated: Y (N)

Total Volume Purged, Gal:

Purged To Dryness Y (N)

Purge Observations: LO-FLO

Start SL. TURBID Finish CLEAR

PURGE DATA: (if applicable)

Time	Purge Rate ~~(gpm/htz)~~	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1345	250 ML/MIN / WL 23.70		13.6	7.49	1792	9.87	-149	0.98
1350	250 / 23.72		13.8	7.44	1790	3.92	-133	0.52
1355	250 / 23.75		13.9	7.42	1785	3.56	-125	0.49
1400	↓ / 23.75		13.9	7.41	1787	3.48	-127	0.47
1405	↓ / 23.75		13.9	7.41	1787	3.56	-123	0.46

SAMPLED AT 1410 / 6-10-08

BJ

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR - 105 D

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-10-08 1420

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: 6-10-08 1425

Date / Time Completed: 6-10-08 1450

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 26.58

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: BLADDER PUMP

One (1) Riser Volume, Gal:

Dedicated: Y / (N)

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: LO-FLO

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
1435	ml/min 150	WL 26.65		12.8	6.97	10,470	5.51	-289	0.59
1440	150	26.65		13.0	6.86	11,320	3.20	-297	0.48
1445	150	26.65		12.9	6.84	11,680	3.23	-299	0.46
1450	150	26.65		12.9	~~11,970~~	11,970	3.28	-302	0.44
					6.84				

SAMPLED AT 1455/6-10-08

Field Form
Revision 0
03/14/02

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: MW-106

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-10-08, 1155

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: 6-10-08, 1200

Date / Time Completed: 6-10-08, 1230

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 10.25

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: BLADDER PUMP

One (1) Riser Volume, Gal:

Dedicated: Y / (N)

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: LO-FLO

Start TURBID BLACK Finish SL. TURB.

PURGE DATA: (if applicable)

Time	Purge Rate ~~(gpm/htz)~~	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1210	100 ml/MIN WL 10.62		13.5	7.10	3417	67.3	-157	0.93
1215	10.60		13.2	7.00	3362	58.9	-162	0.52
1225	10.80		13.2	6.99	3327	56.0	-164	0.49
1230	10.60		13.2	6.97	3304	56.2	-164	0.50

SAMPLED AT 1235/6-10-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BG-106

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-10-08 / 1245

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: 6-10-08 / 1250

Date / Time Completed: 6-10-08 / 1315

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 23.77

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: BLADDER PUMP

One (1) Riser Volume, Gal:

Dedicated: Y / (N)

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: LO-FLO

Start SL. TURB Finish CLEAR, BLACK PARTICLES

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/mn	WL							
1300	210	23.80		12.5	6.82	39x47	44.7	-230	1.02
1305	↓	23.80		12.3	6.84	3902	39.8	-242	0.59
1310		23.80		12.3	6.85	3863	38.6	-245	0.62
1315	↓	23.80		12.3	6.86	3834	38.1	-247	0.65

SAMPLED AT 1320 / 6-10-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR-108

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-10-08 / 1305

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: 6-10-08 / 1307

Date / Time Completed: 6-10-08 / 1313

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 28.29

Elevation. G/W MSL:

Well Total Depth, Feet: 29.75

Method of Well Purge: SP BAILER

One (1) Riser Volume, Gal: ~~.24~~ .95

Dedicated: (Y) / N

Total Volume Purged, Gal: 1.0 TO DRY

Purged To Dryness (Y) / N

Purge Observations:

Start TURBID ORANGE Finish TURBID ORANGE

PURGE DATA: (if applicable)

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

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID BA-108

Date/Time 6-16-08, 1435 Water Level @ Sampling, Feet: 28.32

Method of Sampling: S/S BAILER 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 ( )
1437	17.6	7.06	1483	264	22	

INSTRUMENT CHECK DATA:

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

Solutions: _____

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

Solutions: _____

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

Solutions: _____

GENERAL INFORMATION:

Weather conditions @ time of sampling: SUN 85°

Sample Characteristics: TURBID ORANGE

COMMENTS AND OBSERVATIONS:

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

Date: 6/16/08 By: [signature] Company: TEST AMERICA

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR-112D

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-10-08 1340

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

Prot. Casing/riser height: —

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

If prot.casing; depth to riser below: —

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

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

PURGE INFORMATION:

Date / Time Initiated: 6-10-08 1341

Date / Time Completed: 6-10-08 1410

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 36.75

Elevation. G/W MSL: ____

Well Total Depth, Feet: 72.26

Method of Well Purge: Teflon Bailer

One (1) Riser Volume, Gal: 5.80

Dedicated: Y / (N)

Total Volume Purged, Gal: 18.0

Purged To Dryness Y / (N)

Purge Observations: ____

Start Clear Finish Clear

PURGE DATA: (if applicable)

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

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID: BA-112D

Date/Time: 6-10-08, 1415 Water Level @ Sampling, Feet: 36.78

Method of Sampling: Teflon Bailer 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	15.6	7.21	2214	23.3	-116	

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 Hazy 85

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

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

Date: 6/10/08 By: _____ Company: TEST AMERICA

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR 113 D

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-05-08, 1300

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: 6-05-08, 1310

Date / Time Completed: 6-05-08, 1335

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 31.73

Elevation. G/W MSL: ____

Well Total Depth, Feet: 79.25

Method of Well Purge: TEFLON BAILER

One (1) Riser Volume, Gal: 7.76

Dedicated: Y (N)

Total Volume Purged, Gal: 24.0

Purged To Dryness Y (N)

Purge Observations: ____

Start Clear Finish SL. Turbid

PURGE DATA: (if applicable)

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

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID: BR-113D

Date/Time: 6-05-08 / 1400 Water Level @ Sampling, Feet: 32.75

Method of Sampling: TEFLON BAILER 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 ( )
1405	13.5	7.33	2166	10.2	-192	

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: SUNNY, 80°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: 6/05/08 By: _____ Company: TEST AMERICA

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: MW-114

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-6-08 1155

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: 6-6-08 1200

Date / Time Completed: 6-6-08 1220

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 10.78

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: Peristaltic

One (1) Riser Volume, Gal:

Dedicated: (Y) / N

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: LOW FLOW

Start Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1205	m/m 75	wl 10.85		18.1	6.99	1649	14.0	34	0.91
1210	↓	↓		18.3	7.16	1593	12.40	38	0.87
1215	↓	↓		18.7	7.22	1590	10.51	41	0.84
1220	↓	↓		18.9	7.25	1588	7.61	50	0.86

SAMPLED AT 1220
6-6-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR-114

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-6-08 1 1222

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: 6-6-08 1235

Date / Time Completed: 6-6-08 1255

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 13.81

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: PERISTALTIC

One (1) Riser Volume, Gal:

Dedicated: (Y) / N 1/52

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: Low Flow

Start clear Finish clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	ML/MIN	WL							
1240	200	13.85		18.3	7.21	1802	4.48	-118	0.27
1245	↓	↓		17.1	7.17	1814	2.89	-109	0.25
1250				17.9	7.17	1818	1.06	-106	0.22
1255	↓	↓		17.5	7.09	1822	0.94	-100	0.20

SAMPLE AT 1255

6-6-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR-116

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-05-08 / 1105

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: 6-05-08 / 1110

Date / Time Completed: 6-05-08 / 1135

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 27.71

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: BLADDER PUMP

One (1) Riser Volume, Gal:

Dedicated: Y / (N)

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: LO-FLOW

Start SL. TINT Finish CLEAR

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	ml/min	WL							
1120	180	27.91		18.8	7.13	1885	39.7	-71	0.63
1125	180	27.90		18.9	6.95	1837	20.3	-63	0.49
1130	180	27.90		19.0	6.90	1828	18.5	-61	0.45
1135	180	27.90		19.1	6.86	1822	17.9	-57	0.47

SAMPLED AT 1140/6-05-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR-116 D

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-05-08 / 1103

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: 6-05-08 / 1145

Date / Time Completed: 6-05-08 / 1210

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 36.15

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: BLADDER PUMP

One (1) Riser Volume, Gal:

Dedicated: Y / (N)

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: LOW-FLOW

Start 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
	gpm/htz	WL							
1155	180	36.33		18.8	9.59	1637	28.3	-139	0.67
1200	180	36.35		18.7	9.98	1655	28.9	-208	0.35
1205	↓	36.35		18.7	10.07	1656	29.7	-213	0.32
1210	↓	36.35		18.7	10.08	1653	29.4	-215	0.37

SAMPLED AT 1215 / 6-05-08

BJ

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BG-117 D

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-02-08 / 1115

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: 6-02-08 / 1120

Date / Time Completed: 6-02-08 / 1145

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 50.31

Elevation. G/W MSL: ____

Well Total Depth, Feet: ____

Method of Well Purge: BLADDER PUMP

One (1) Riser Volume, Gal: ____

Dedicated: Y / (N)

Total Volume Purged, Gal: ____

Purged To Dryness Y / (N)

Purge Observations: LOW FLOW

Start SL TINT Finish CLEAR

PURGE DATA: (if applicable)

Time	Purge Rate ~~(gpm/htz)~~	WL	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1130	150 ml/min	50.45		11.3	7.80	776	38.9	-105	0.39
1135	↓	50.45		11.2	7.69	778	36.1	-103	0.31
1140		50.45		11.4	7.75	763	40.5	-107	0.29
1145		50.45		11.3	7.79	763	39.3	-109	0.30

BG

SAMPLED AT 1150/6-02-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR-118D

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-02-08 / 1205

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: 6-02-08 / 1210

Date / Time Completed: 6-02-08 / 1235

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 49.46

Elevation. G/W MSL: ____

Well Total Depth, Feet: ____

Method of Well Purge: BLADDER PUMP

One (1) Riser Volume, Gal: ____

Dedicated: Y / (N)

Total Volume Purged, Gal: ____

Purged To Dryness Y / (N)

Purge Observations: LO-FLOW

Start SL. TINT Finish CLEAR

PURGE DATA: (if applicable)

Time	Purge Rate ~~(gpm/hfz)~~ mL/min	WL	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1220	150	49.61		11.7	7.31	2481	16.2	-276	0.28
1225	↓	49.60		11.9	7.19	2375	10.8	-281	0.20
1230		49.60		11.8	7.17	2296	11.0	-288	0.18
1235	↓	49.60		11.7	7.16	2283	11.3	-291	0.17

SAMPLED AT 1240 / 6-02-08

BJ

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BG-122 D

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-02-08 / 1300

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: 6-02-08 / 1305

Date / Time Completed: 6-02-08 / 1330

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 45.20

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: BLADDER PUMP

One (1) Riser Volume, Gal:

Dedicated: Y / (N)

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: LO-FLOW

Start BLACK TINT Finish CLEAR

PURGE DATA: (if applicable)

Time	Purge Rate ~~(gpm/htz)~~ (ml/min)	WL	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1315	150	45.33		12.3	6.97	2301	0.65	-282	0.39
1320	150	45.33		12.5	6.96	2308	0.76	-280	0.34
1325	150	45.33		12.6	6.95	2312	0.82	-280	0.28
1330	150	45.33		12.6	6.97	2315	0.85	-281	0.31

SAMPLED AT 1335/6-02-08

BJ

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR-123D

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-02-08 / 1350

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: 6-02-08 / 1355

Date / Time Completed: 6-02-08 / 1415

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 45.62

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: BLADDER PUMP

One (1) Riser Volume, Gal:

Dedicated: Y / (N)

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: LO-FLOW

Start BLACK TINT Finish CLEAR

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1400	ml/min 200 WL 45.72		12.4	7.82	2174	10.7	-278	0.25
1405	↓ 45.72		12.5	7.81	2186	10.8	-275	0.19
1410	45.72		12.5	7.82	2197	10.9	-273	0.17
1415	↓ 45.72		12.5	7.84	2202	11.1	-272	0.16

SAMPLED AT 1420/6-02-08

BJ

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: MW-E

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-6-08 1053

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: 6-6-08 1100

Date / Time Completed: 6-6-08

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 7.20

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: Bladder Pump

One (1) Riser Volume, Gal:

Dedicated: Y / (N)

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: LOW FLOW

Start 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/m	mL							
1105	140	7.29		23.1	6.72	2780	18.32	-26	0.51
1110	↓	↓		22.7	6.51	2690	21.9	-14	0.47
1115				22.1	6.47	2671	21.7	-10	0.40
1120				22.6	6.40	2668	21.3	-9	0.38

SAMPLE AT 1120
C-606

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: ~~Nest West~~ Ness W

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-6-08 / 1015

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: 6-6-08 / 1020

Date / Time Completed: 6-6-08 / 1040

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 31.98

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: Bladder Pump

One (1) Riser Volume, Gal:

Dedicated: Y / (N)

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: Low Flow

Start Slightly [illegible] 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/m	mL							
1025	200	32.06		16.2	7.06	2024	6.81	-210	0.22
1030	↓	↓		16.9	7.11	2020	6.28	-219	0.19
1035	↓	↓		17.0	7.17	2020	5.97	-218	0.17
1040	↓	↓		16.6	7.17	2017	4.90	-219	0.15

Sample AT 1040
6-6-08

[illegible signature]

Field Form
Revision 0
03/14/02

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: MW-101

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-2-08 / 1125

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: 6-2-08 / 1130 Date / Time Completed: 6-2-08 / 1150

Surf. Meas. Pt: ( ) Prot. Casing (X) Riser Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 12.73 Elevation. G/W MSL: ____

Well Total Depth, Feet: ____ Method of Well Purge: Peristaltic

One (1) Riser Volume, Gal: ____ Dedicated: (Y) / N

Total Volume Purged, Gal: ____ Purged To Dryness Y / (N)

Purge Observations: Low Flow Start Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1135	ml/m 150 / WL 27.80		14.2	7.29	2817	10.05	50	1.10
1140	↓		13.0	7.07	2790	9.37	55	1.07
1145	↓		13.2	7.06	2786	5.11	54	1.05
1150	↓		13.3	7.01	2780	3.07	55	1.00

SAMPLE AT 1150
6-2-08
JM 2 TAL

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: PZ-102

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-2-08 / 1202

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: 6-2-08 / 1205

Date / Time Completed: 6-2-08

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 15.94

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: PERISTALTIC

One (1) Riser Volume, Gal:

Dedicated: (Y) / N

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: LOW FLOW

Start Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	MP/M	VC							
1210	100	16.03		14.8	7.28	4013	3.06	-121	1.01
1215	↓	↓		14.6	7.28	4117	2.02	-119	0.97
1220				13.9	7.25	4190	1.07	-118	0.94
1225	↓	↓		13.4	7.25	4226	0.97	-118	0.90

SAMPLE AT 1225
6-2-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: PZ-103

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-2-08 / 1240

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

Prot. Casing/riser height: —

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

If prot.casing; depth to riser below: —

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

% LEL: — / —

Vol. Organic Meter (Calibration/Reading):

Volatiles (ppm) — / —

PURGE INFORMATION:

Date / Time Initiated: 6-2-08 / 1245

Date / Time Completed: 6-2-08 / 1305

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 11.55

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: Peristaltic

One (1) Riser Volume, Gal:

Dedicated: (Y) / N

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: LOW FLOW

Start Clear Black Specks Finish Clear 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
1250	ml/m 150 / wl 11.70		16.3	7.43	4745	0.25	-164	1.11
1255	↓ / 11.76		15.9	7.39	4759	0.27	-177	1.01
1300	↓ / 11.80		15.9	7.37	4768	0.24	-180	0.98
1305	↓ / 11.80		15.7	7.35	4777	0.21	-183	0.95

SAMPLE AT 1305

6-2-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: PZ-104

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-2-08 / 1320

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: 6-2-08 / 1325

Date / Time Completed: 6-2-08 / 1345

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 13.23

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: Peristaltic

One (1) Riser Volume, Gal:

Dedicated: (Y) / N

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: LOW FLOW

Start Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	ml/m	WL							
1330	200	13.30		17.1	7.60	1538	2.32	-151	1.02
1335	↓	↓		15.4	7.45	1506	0.54	-154	0.97
1340				15.6	7.40	1497	0.50	-156	0.93
1345	↓	↓		15.0	7.38	1480	0.44	-157	0.90

Sample @ 1345
6-2-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR-126

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-2-08 / 1040

Cond of seal: ( ) Good ( ) Cracked NO WELL COVER % ( ) None (X) Buried NO J PLUG

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: 6-2-08 / 1045

Date / Time Completed: 6-2-08 / 1110

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 7.68

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: LOW FLOW

Start Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	ML/m	WL							
1050	200	7.70		16.3	7.15	1022	59.9	-123	0.67
1055				16.1	7.17	1122	48.6	-129	0.60
1100				15.9	7.22	1129	44.3	-133	0.58
1105				15.7	7.22	1133	38.8	-134	0.55
1110				15.1	7.21	1138	27.4	-134	0.50

SAMPLE AT 1110
6-2-08
THL

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: PZ-107

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-03 -08, 1300

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

Prot. Casing/riser height: —

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

If prot.casing; depth to riser below: —

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

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

PURGE INFORMATION:

Date / Time Initiated: 6-03 -08, 1312

Date / Time Completed: 6-03 -08, 1332

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

Riser Diameter, Inches: 20

Initial Water Level, Feet: 6.57

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: COW FCOW

Start Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz) ml/mm	W.L	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1317	200	7.04		12.1	8.06	2322	2.39	-157	~~2.67~~ 1.21
1322		7.07		12.0	8.08	2356	1.55	-150	1.10
1327				12.0	8.05	2374	0.90	-155	1.08
1332				11.9	8.02	2376	0.79	-159	1.06

Sampled @ 1332 on 6-3-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: PZ-106

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-04-08, 1122

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

Prot. Casing/riser height: —

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

If prot.casing; depth to riser below: —

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

% LEL: — / —

Vol. Organic Meter (Calibration/Reading):

Volatiles (ppm) — / —

PURGE INFORMATION:

Date / Time Initiated: 6-04-08, 1125

Date / Time Completed: 6-04-08, 1155

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 14.03

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 FLOW

Start SI Turbid Yellow → Turbid Brown ↗ Finish Clear w/ Blacks Specks + Yellow tint

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	milliamp	WL							
1130	100	14.89		14.3	7.05	15070	379	-60	1.21
1135	80	15.13	13.9	~~13.9~~ TP	6.85	10 680	333	-2	1.10
1140	↓	15.22		13.8	6.72	10 340	25.7	-3	1.05
1145	↓	15.31		13.8	6.28	10 380	15.7	19	1.06
1150	↓	15.33		13.9	6.32	10 360	13.2	22	1.04
1155	↓	↓		13.9	6.24	10 420	14.2	22	1.03

Sampled @ 1155 on 6-4-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: PZ-105

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-03-08, 1101

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: 6-03-08, 1105

Date / Time Completed: 6-03-08, 1130

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 7.71

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 Flow Sampler

Start TP Clear SI-Turbid Finish Turbid

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	gal/min	w.l.							
1110		8.41		15.6	7.20	2846	66.1	-28	1.03
1115		8.65		15.4	7.74	2941	76.8	-184	.95
1120		8.77		15.3	7.93	3017	72.7	-189	.93
1125		8.83		15.3	8.01	3064	69.0	-196	.94
1130		8.85		15.2	8.02	3083	73.1	-195	.92

Sampled @ 1130 on 6-3-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR-127

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-04-08, 1246

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: 6-04-08, 1312

Date / Time Completed: 6-04-08, 1332

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

Riser Diameter, Inches: ____

Initial Water Level, Feet: 4.71

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 FLOW

Start Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	ml/min	WL							
1317	180	4.73		15.9	7.57	3323	0.50	-224	1.21
1322	"	"		15.8	7.81	3324	0.28	-229	1.13
1327	"	"		15.8	7.88	3329	0.36	-233	1.10
1332	"	"		15.7	7.90	3318	0.32	-235	1.11

Sampled @ 1332 on 6-4-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR-3

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-05-08 1008

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

Prot. Casing/riser height: —

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

If prot.casing; depth to riser below: —

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

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

PURGE INFORMATION:

Date / Time Initiated: 6-05-08 1015

Date / Time Completed: 6-05-08 1035

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 7.44

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: COW FCOW

Start Sl. Turbid Yellow Finish Sl. Turbid Yellow

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz) ml/min	WL	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other D.O.
1020	100	7.81		16.3	7.24	9409	100.3	-168	1.05
1025	|	7.94		16.3	7.41	9599	93.6	-164	0.92
1030	|	8.02		16.1	7.45	9431	82.3	-171	0.89
1035	|	8.04		16.2	7.49	9442	82.1	-175	0.88

Sampled @ 1035 on 6-5-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR-8

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-05-081 1200

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: 6-05-081 1205

Date / Time Completed: 6-05-081 1225

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

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 8.92

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 flow

Start Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz) ml/mm	Purge Rate (gpm/htz) ml	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1210	150	9.00		16.8	7.78	5041	8.55	-207	1.01
1215		9.01		16.5	7.77	5080	5.74	-239	0.93
1220				16.5	7.75	5093	6.79	-227	0.90
1225				16.4	7.69	5089	6.77	-225	0.88

Sampled @ 1225 on 6-5-08

LeachField Form
Revision 0
March, 15 2002

FIELD OBSERVATIONS

Facility: Arch Chemical

Sample Point ID: BR-9A

Field Personnel: TP, JS

Sample Matrix: GW

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 6-5-08 , 1415

Water Level @ Sampling, Feet: 35.53

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 ( )
1420	17.4	7.73	1964	560	-166	

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: Hazy, 82°

Sample Characteristics: Sl. Cloudy, yellow tint

COMMENTS AND OBSERVATIONS:

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

Date: 6/5/08 By: [signature] Company: Test America

LeachField Form
Revision 0
March, 15 2002

FIELD OBSERVATIONS

Facility: Arch Chemical

Sample Point ID: BR-SA

Field Personnel: TP, JS

Sample Matrix: GW

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 6-5-08 / 1123

Water Level @ Sampling, Feet: 1278

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 ( )
1127	15.0	7.87	1549	19.8	-127	

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

Sample Characteristics: Clear, slight yellow tint

COMMENTS AND OBSERVATIONS: _____

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

Date: 6,5,08 By: _____ Company: TAC

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: BR-6A

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

* Former Pumping Well

MONITORTING WELL INSPECTION:

Date/Time 6-03-08 1135

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

Prot. Casing/riser height: —

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

If prot.casing; depth to riser below: —

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

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

PURGE INFORMATION:

Date / Time Initiated: 6-03-08 1153

Date / Time Completed: 6-03-08 1208

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

Riser Diameter, Inches:

Initial Water Level, Feet: 10.21

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 Flow

Start Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz) ml/min	WL	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other
1158	200	10.42		15.1	9.92	1429	2.44	-198	1.14
1203	↓	10.47		14.9	10.00	1398	2.30	-196	1.09
1208	↓	10.48		14.9	10.02	1402	2.34	-197	1.06

Sampled @ 1208 on 6-3-08

LeachField Form
Revision 0
March, 15 2002

FIELD OBSERVATIONS

Facility: Arch Chemical

Sample Point ID: BR-7A

Field Personnel: TP, JS

Sample Matrix: GW

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 6-5-08 / 1342

Water Level @ Sampling, Feet: 30.76

Method of Sampling: Sample PA

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 ( )
1350	18.5	7.54	3288	98.5	-145	

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: Hazy

Sample Characteristics: Cloudy, with white specks

COMMENTS AND OBSERVATIONS: _____

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

Date: 6/5/08 By: _____ Company: _____

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: B-17

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-04-08, 929

Cond of seal: ( ) Good (X) 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: 6-04-08, 933

Date / Time Completed: 6-04-08,

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 8.48

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 FLOW

Start Sl. Turbid Dark Amber

Finish Sl. Turbid Dark 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
	ml/mn	WL							
938	100	8.56		14.8	13.58	17540	40.5	-306	0.99
943	120	8.58		14.4	13.43	17750	40.2	-299	0.95
948				14.3	13.47	17830	29.4	-298	0.94
953				14.3	13.51	17820	28.6	-302	0.92
958				14.2	13.49	17780	27.3	-304	0.91

Sampled @ 958 on 6-4-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: B-7

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-05-08, 1308

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

Prot. Casing/riser height: —

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

If prot.casing; depth to riser below: —

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

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

PURGE INFORMATION:

Date / Time Initiated: 6-05-08, 1310

Date / Time Completed: 6-05-08, 1335

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

Riser Diameter, Inches: 2.0

Initial Water Level, Feet: 13.30

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 flow

Start Turbid Brown Finish Sl Turbid, yellow tint

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/hfz) ml/min	WL	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1315	100	14.89		18.1	7.23	1590	73.5	-66	1.14
1320		15.24		17.9	7.15	1559	59.8	-85	1.09
1325		15.31		17.9	7.17	1568	40.3	-87	1.08
1330		15.32		17.8	7.20	15.76	26.1	-89	1.07
1335				17.9	7.18	1581	27.3	-91	1.05

Sampled @ 1335 on 6-5-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: S-3

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

* Vault

Date/Time 6-03-08, 1215

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

Prot. Casing/riser height: ——

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

If prot.casing; depth to riser below: ——

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

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

PURGE INFORMATION:

Date / Time Initiated: 6-03-08, 1235

Date / Time Completed: 6-03-08, 1255

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

Riser Diameter, Inches:

Initial Water Level, Feet: 0.83

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 FLOW

Start: Clear w/ Black Specks Finish: Clear w/ Black Specks

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz) ml/min	W.L.	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1240	200	0.83		14.7	7.80	2635	16.9	-145	0.96
1245	|	0.84		14.7	7.62	2632	22.7	-129	0.91
1250	|	|		14.6	7.59	2625	15.1	-124	0.89
1255	|	|		14.6	7.57	2611	14.3	-122	0.90

Sampled @ 1255 on 6-3-08

[signatures]

Field Form
Revision 0
03/14/02

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: S4

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

* Vault

Date/Time 6-03-08, 1340

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

Prot. Casing/riser height: —

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

If prot.casing; depth to riser below: —

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

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

PURGE INFORMATION:

Date / Time Initiated: 6-03-08, 1350

Date / Time Completed: 6-03-08, 1410

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

Riser Diameter, Inches:

Initial Water Level, Feet: 0.75

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 FLOW

Start Clear w/ orange specks 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
1355	200	0.75		12.7	8.36	1459	24.5	-190	1.27
1400				12.7	8.30	1388	16.8	-187	1.05
1405				12.8	8.30	1376	18.3	-191	1.02
1410				12.8	8.38	1370	15.9	-195	1.00

Sampled @ 1410 on 6-3-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: E-1

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Vault

Date/Time 6-04-08, 1340

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

Prot. Casing/riser height: —

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

If prot.casing; depth to riser below: —

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

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

PURGE INFORMATION:

Date / Time Initiated: 6-04-08, 1350

Date / Time Completed: 6-04-08, 1410

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

Riser Diameter, Inches: ____

Initial Water Level, Feet: 1.35

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 flow

Start Turbid Yellow Tint

Finish Sl. Turbid w/ Black specks & Yellow tint

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
1355	200	1.35		16.0	9.18	10,720	57.8	-303	0.95
1400				16.1	9.20	10,890	65.7	-303	0.87
1405				16.0	9.15	10,920	58.3	-304	0.85
1410				16.0	9.12	10,900	51.9	-303	0.82

Sampled @ 1410 on 6-4-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: E-3

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-04-08, 1509

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

Prot. Casing/riser height: —

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

If prot.casing; depth to riser below: —

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

% LEL: — / —

Vol. Organic Meter (Calibration/Reading):

Volatiles (ppm) — / —

PURGE INFORMATION:

Date / Time Initiated: 6-04-08, 1512

Date / Time Completed: 6-04-08, 1520

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

Riser Diameter, Inches:

Initial Water Level, Feet: 9.02

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: TO DRY

Start Turbid orange Finish Turbid

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1517	60 ml/min ↓		16.1	7.16	2945	523	184	1.51
1520	— Dry							

FIELD OBSERVATIONS (continued)

SAMPLING INFORMATION: POINT ID: E-3

Date/Time: 6-05-08, 1135 Water Level @ Sampling, Feet: 9.11

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)
1138	15.6	7.54	3012	23.9	-52	1.27

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: Hazy

Sample Characteristics: Clear with orange specks

COMMENTS AND OBSERVATIONS:

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

Date: 6/09/08 By: _____ Company: TEST AMERICA

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: MW-127

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

Date/Time 6-04-08, 1215

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

Prot. Casing/riser height: ____

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

If prot.casing; depth to riser below: ____

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

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

PURGE INFORMATION:

Date / Time Initiated: 6-04-08, 1225

Date / Time Completed: 6-04-08, 1240

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

Riser Diameter, Inches: 2

Initial Water Level, Feet: 4.73

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 Flow

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
1230	60	5.31		15.7	7.94	3275	1.56	-171	1.08
1235	"	5.33		15.8	8.00	3280	1.01	-168	1.01
1240	"	"		15.7	8.02	3243	0.92	-166	0.99

Sampled @ 1240 on 6-4-08

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: PW-10

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

MONITORTING WELL INSPECTION:

*former pumping well

Date/Time 6-04-08, 1004

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

Prot. Casing/riser height: —

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

If prot.casing; depth to riser below: —

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

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

PURGE INFORMATION:

Date / Time Initiated: 6-04-08, 1023

Date / Time Completed: 6-04-08,

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

Riser Diameter, Inches: 6.0

Initial Water Level, Feet: 7.53

Elevation. G/W MSL:

Well Total Depth, Feet:

Method of Well Purge: Peristaltic Pump

One (1) Riser Volume, Gal:

Dedicated: (Y) / N

Total Volume Purged, Gal:

Purged To Dryness Y / (N)

Purge Observations: Low Flow

Start Clear Yellow Tint Finish Very Turbid Brown

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz) ml/min	Purge Rate (gpm/htz) ml	Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
1028	200	7.68		14.1	8.99	4299	2.44	-235	1.13
1033				13.8	9.26	4467	2.00	-252	1.08
1038				13.8	9.30	4450	2.18	-255	1.06
1043				13.8	10.66	7762	684	-414	0.95
1048				13.8	10.62	7816	602	-414	0.96
1053				13.8	10.70	8204	561	-425	0.94

Sampled @ ~~1043~~ 1058 TP on 6-4-08

Over to Back

LeachField Form
Revision 0
March, 15 2002

FIELD OBSERVATIONS

Facility: Arch Chemical

Sample Point ID: PW-11

Field Personnel: TP, JS

Sample Matrix: GW

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 6.5.08 / 1245

Water Level @ Sampling, Feet: 14.92

Method of Sampling: Peristaltic Pump

Dedicated: (Y) / N

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

If YES: ( ) light ( ) heavy

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other (ORP)	Other ( )
1248	17.6	7.20	4152	68.4	-147	

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: Mostly Cloudy

Sample Characteristics: Turbid, gray with black specks

COMMENTS AND OBSERVATIONS: _____

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

Date: 6,5,08 By: [signature] Company: Test America

FIELD OBSERVATIONS

Facility: ARCH

Sample Point ID: PW-12

Field Personnel: RS/PL TP/JS

Sample Matrix: G/W

* Former Pumping Well

MONITORTING WELL INSPECTION:

Date/Time 6-04-08, 1428

Cond of seal: ( ) 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: 6-04-08, 1430

Date / Time Completed: 6-04-08, 1458

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

Riser Diameter, Inches: ____

Initial Water Level, Feet: 5.93

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 Flow

Start Clear Finish Clear

PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	Other ORP	Other DO
	ml/min	w							
1435	200	6.13		15.8	6.95	2852	1.23	-52	1.17
1440		6.14		15.7	7.09	2858	2.23	-69	1.08
1445				15.7	7.03	2851	1.61	-76	1.05
1450				15.6	7.06	2839	0.98	-78	1.03

Sampled @ 1450 on 6-4-08

LeachField Form
Revision 0
March, 15 2002

FIELD OBSERVATIONS

Facility: Arch Chemical

Sample Point ID: PW-13

Field Personnel: TP, JS

Sample Matrix: GW

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 6-5-08 / 1358

Water Level @ Sampling, Feet: 23,45

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 ( )
1405	19.2	7.75	2186	11.2	-183	

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: Hazy, 82°

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

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

Date: 6,5,08 By: _____ Company: Test America

LeachField Form
Revision 0
March, 15 2002

FIELD OBSERVATIONS

Facility: Arch Chemical

Sample Point ID: PW-14

Field Personnel: TP, JS

Sample Matrix: GW

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 6-5-08 / 1109

Water Level @ Sampling, Feet: 23.43

Method of Sampling: Sample Port

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 ( )
1113	18.9	9.82	5010	17.0	-183	

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

Sample Characteristics: Clear w/ white speck & Yellow tint

COMMENTS AND OBSERVATIONS: _____

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

Date: 6,5,08 By: [signature] Company: _____

LeachField Form
Revision 0
March, 15 2002

FIELD OBSERVATIONS

Facility: Arch Chemical

Sample Point ID: PW-15

Field Personnel: TP, JS

Sample Matrix: GW

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 6-5-08 / 1054

Water Level @ Sampling, Feet: 18.78

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 ( )
1059	14.6	10.35	7489	6.62	-265	

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, Clear.

Sample Characteristics: Dark Amber

COMMENTS AND OBSERVATIONS:

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

Date: 6/5/08 By: [signature] Company: Test America

LeachField Form
Revision 1
January 29, 2003

FIELD OBSERVATIONS

Facility: ARCH **Sample Point ID:** QS-4

Field Personnel: RS/SS **Sample Matrix:** S/W

~~(X)~~ Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 6-02-08 / 1050 **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 (ORP)	Other ( )
Grab 1	1055	13.2	7.25	1794	1.39	32	
Grab 2							
Grab 3							

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: SUNNY, 65°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: 6/02/08 **By:** _____ **Company:** TAL

LeachField Form
Revision 1
January 29, 2003

FIELD OBSERVATIONS

Facility: ARCH **Sample Point ID:** SD-1

Field Personnel: RS/JS **Sample Matrix:** S/W

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 6-02-08 / 1140 **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 (ORP)	Other ( )
Grab 1	1145	16.1	7.73	2184	2.05	121	
Grab 2							
Grab 3							

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: Sunny, 65°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: 6/02/08 **By:** _____ **Company:** JAC

LeachField Form
Revision 1
January 29, 2003

FIELD OBSERVATIONS

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

Field Personnel: RS/JS/PL **Sample Matrix:** S/W

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 6-02-08 1430 **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 (ORP)	Other ( )
Grab 1	1434	19.5	7.04	2221	2.84	-168	
Grab 2							
Grab 3							

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: SUNNY, 75°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: 6/02/08 **By:** _____ **Company:** _____

LeachField Form
Revision 1
January 29, 2003

FIELD OBSERVATIONS

Facility: ARCH **Sample Point ID:** QO-2 51

Field Personnel: RS / DC / JS **Sample Matrix:** S/W

(X) Grab ( ) Composite

SAMPLING INFORMATION:

Date/Time 6-02-08 1440 **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 (ORP)	Other ( )
Grab 1	1445	17.9	7.49	502	3.77	-164	
Grab 2							
Grab 3							

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: SUNNY, 75°F

Sample Characteristics: CLEAR

COMMENTS AND OBSERVATIONS: _____

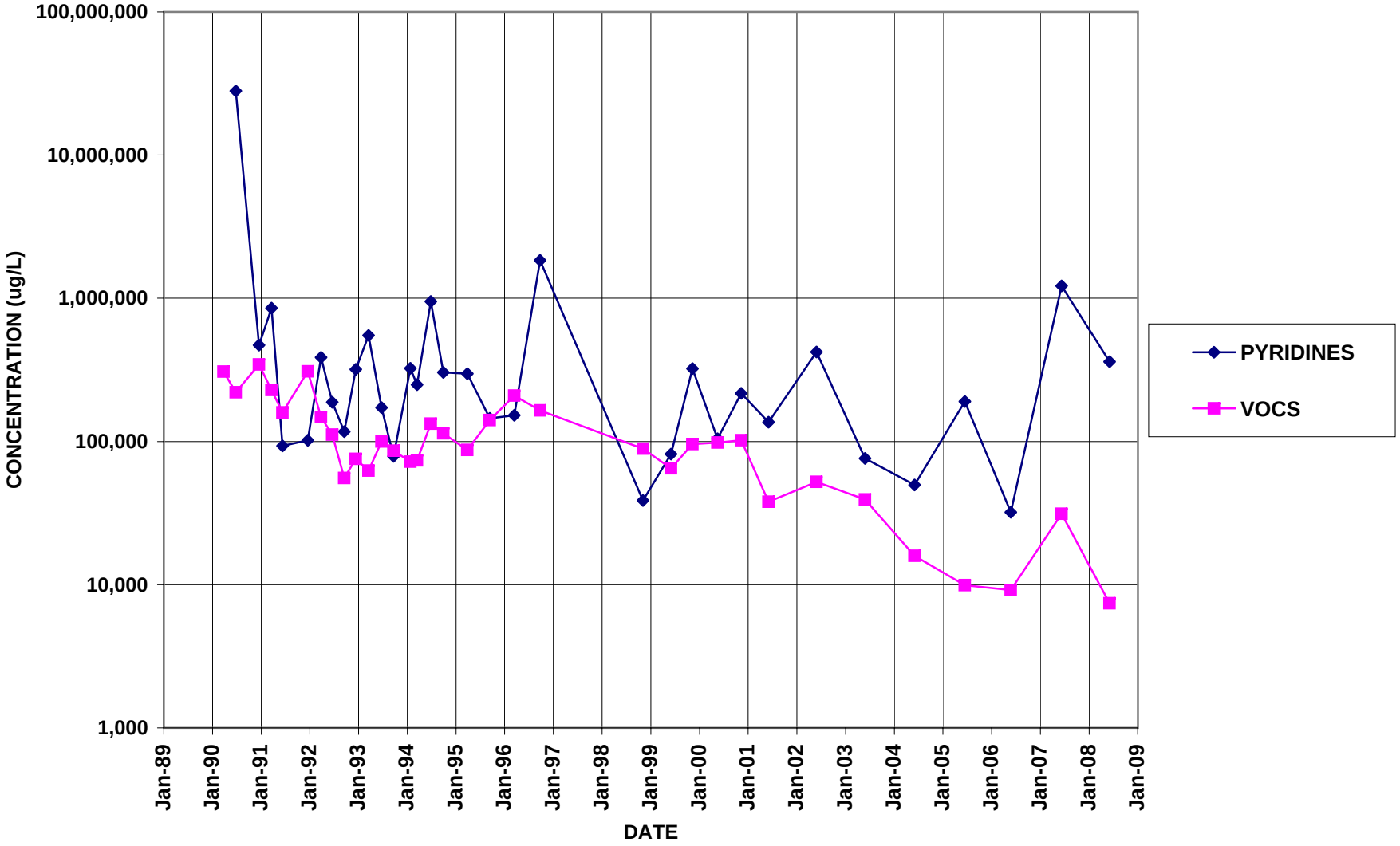
I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocals.

Date: 6/02/08 **By:** _____ **Company:** JAC

Appendix B

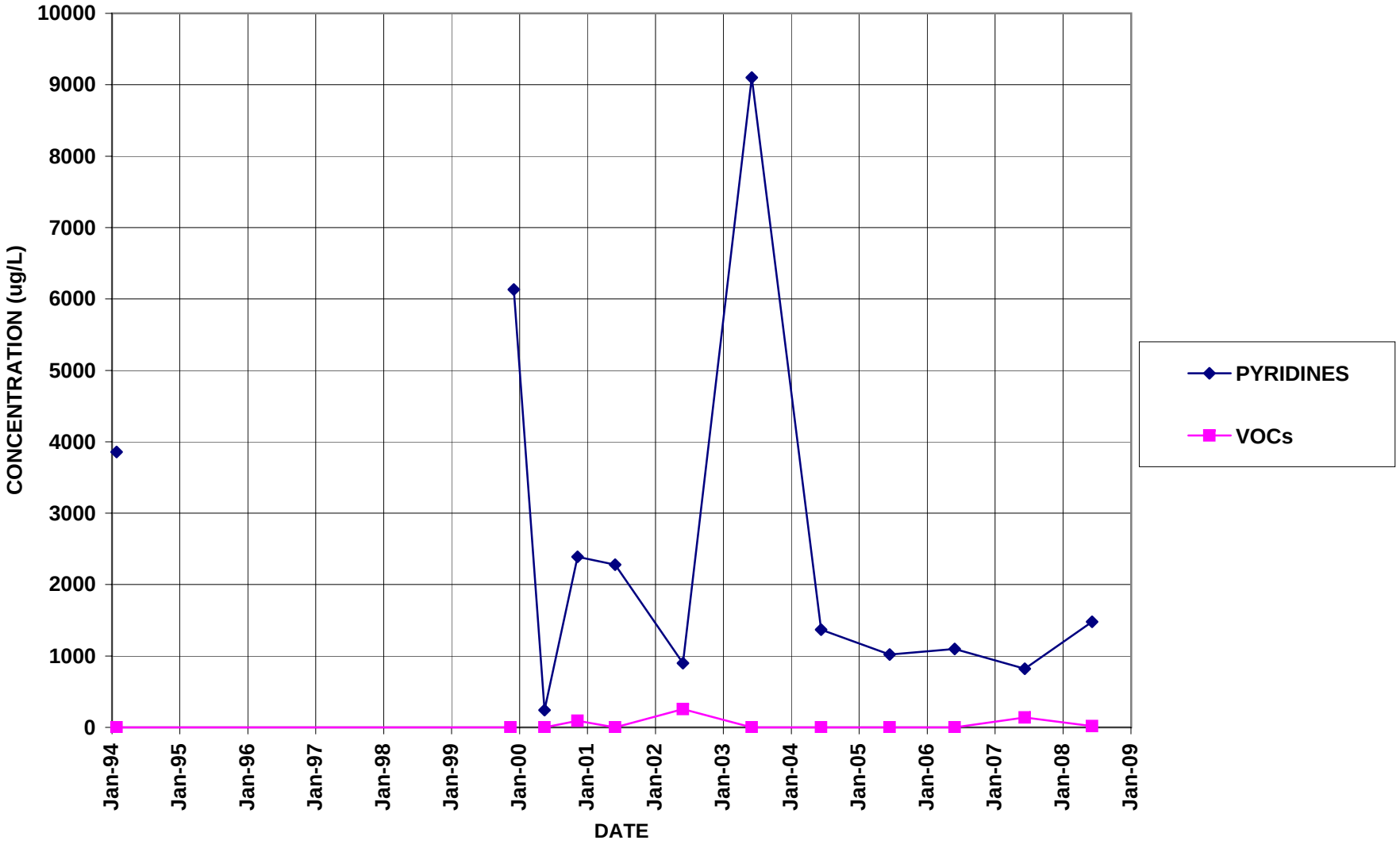
Well Trend Data

B-17



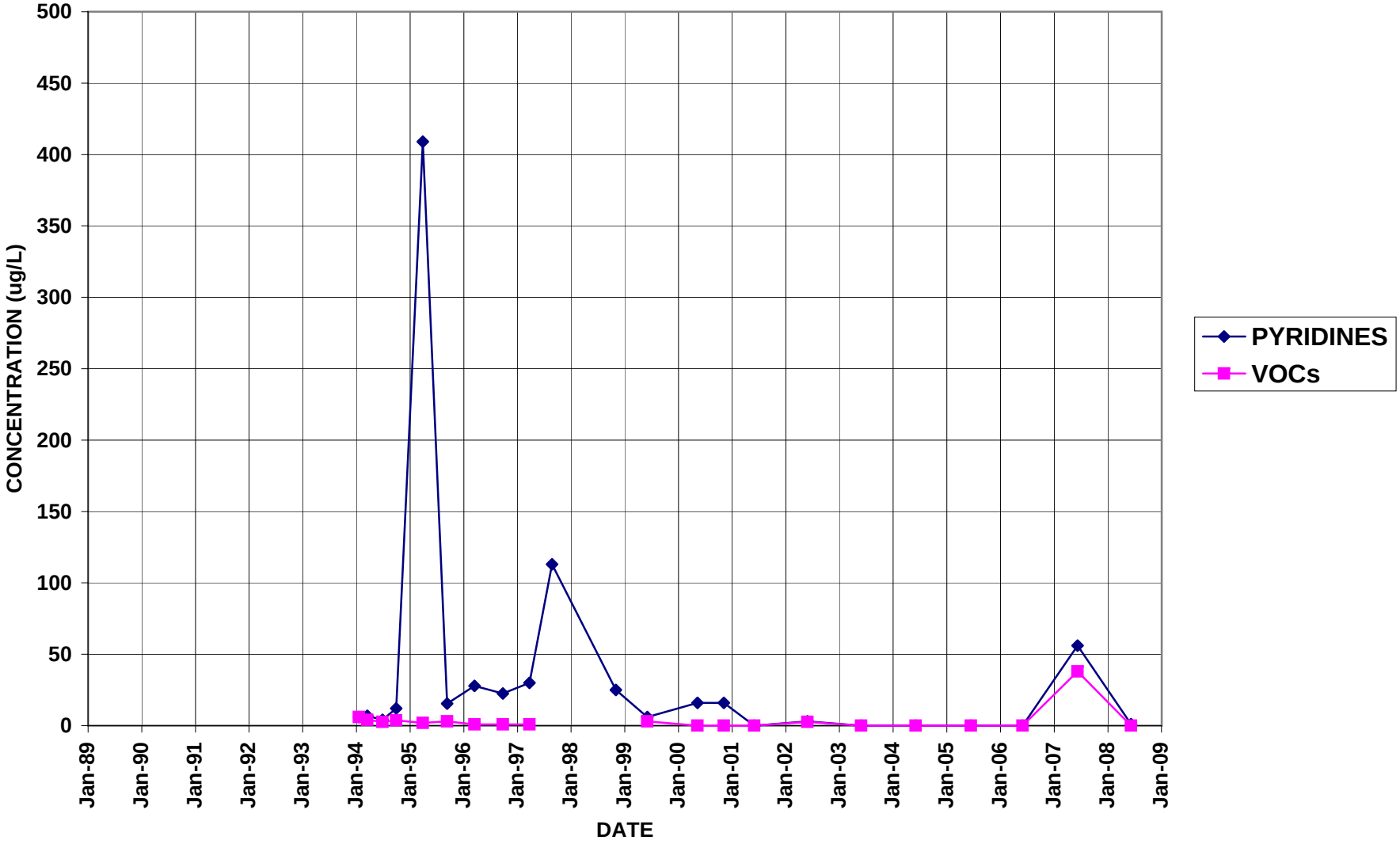
Prepared by: nmb
Reviewed by: jeb

B-7



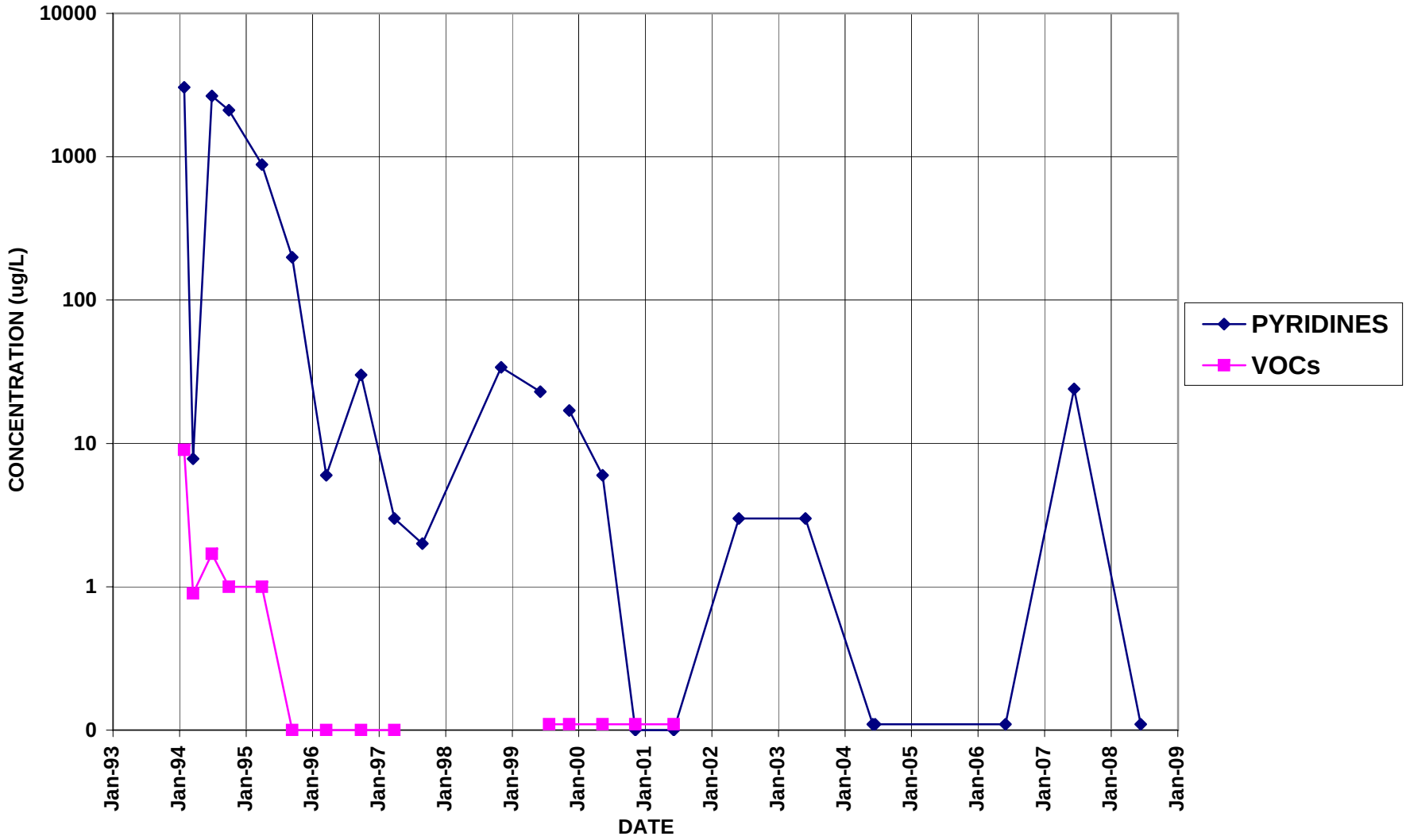
Prepared by: nmb
Reviewed by: jeb

BR-103

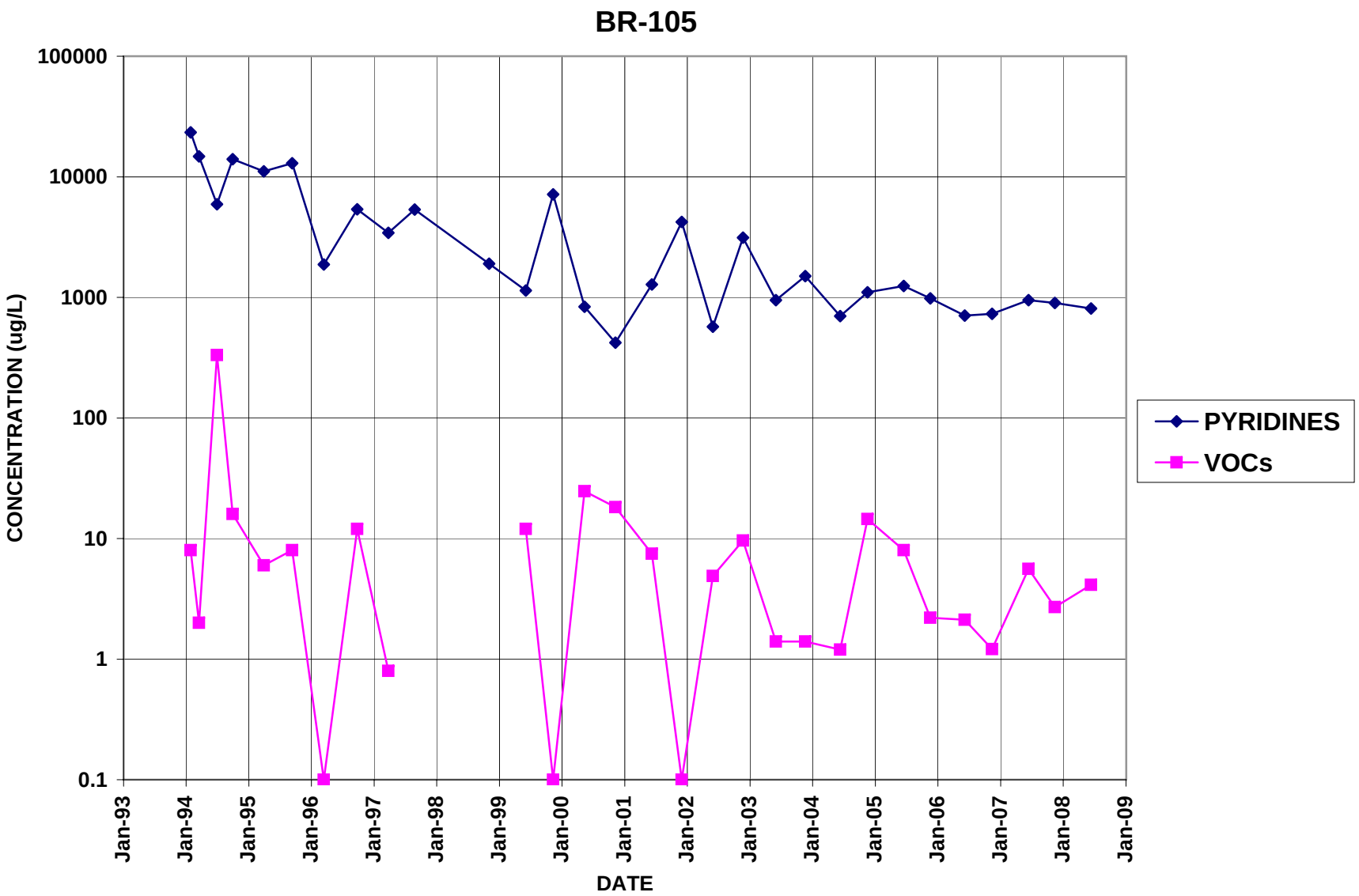


Prepared by: nmb
Reviewed by: jeb

BR-104

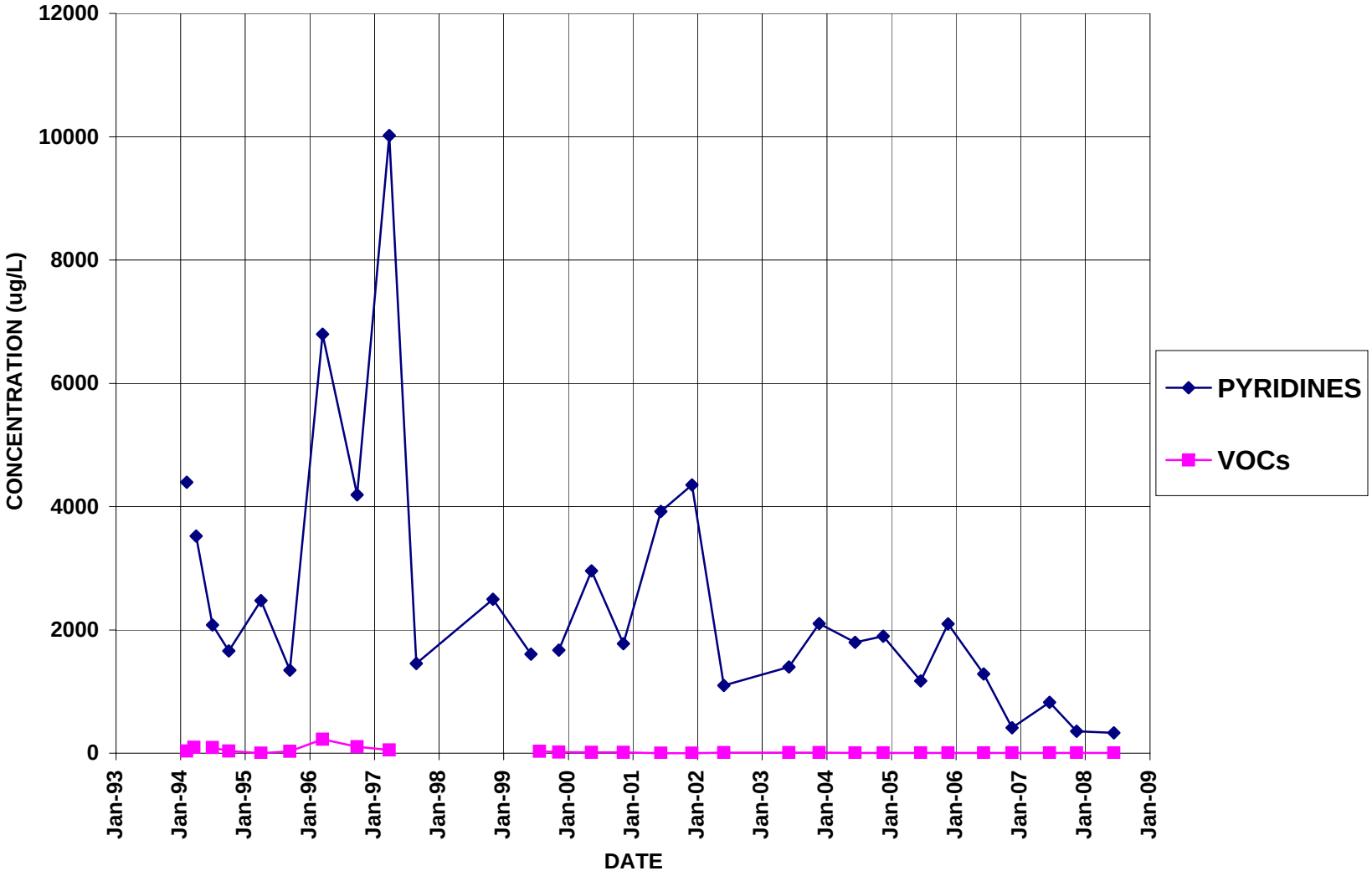


Prepared by: nmb
Reviewed by: jeb



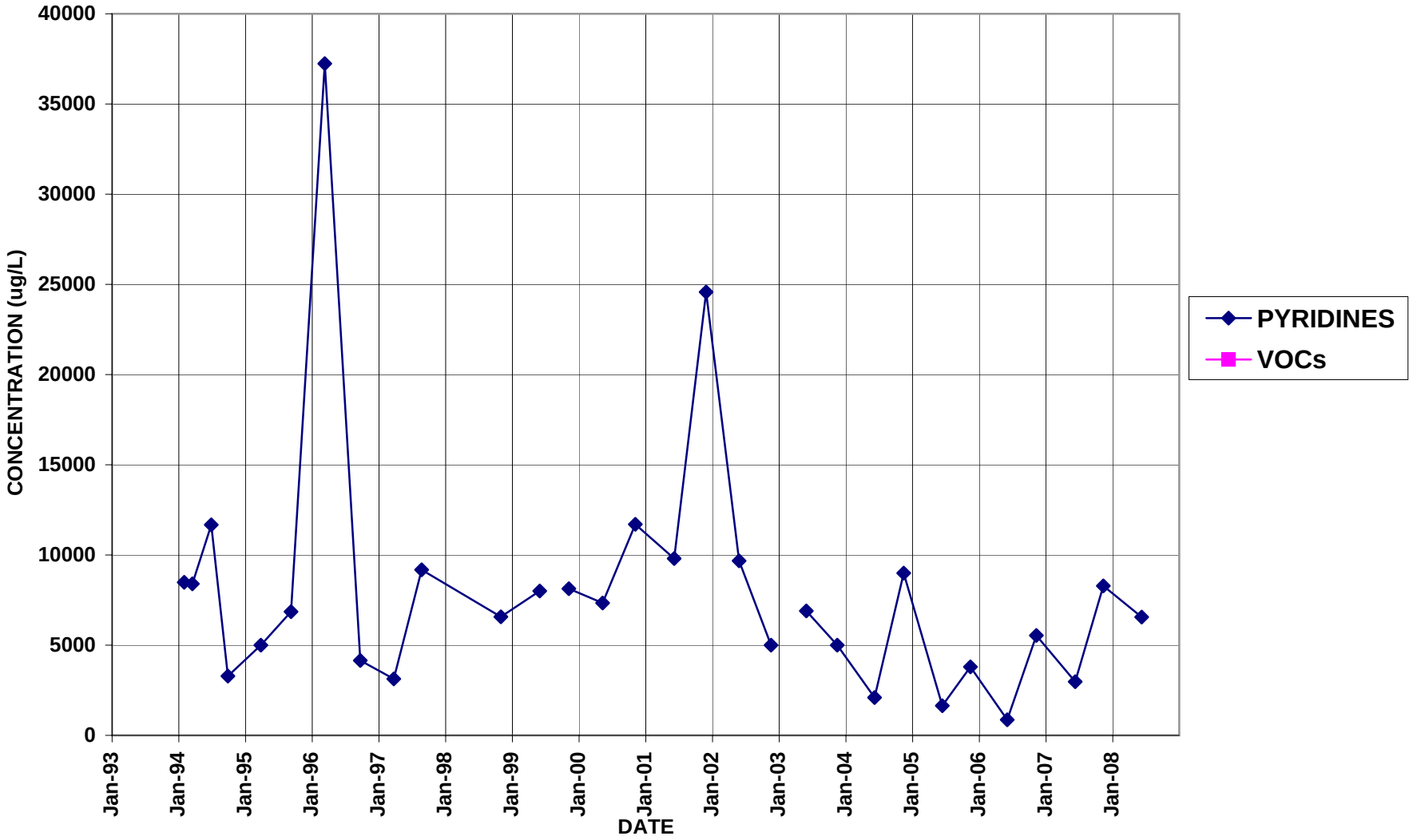
Prepared by: nmb
Reviewed by: jeb

BR-105D



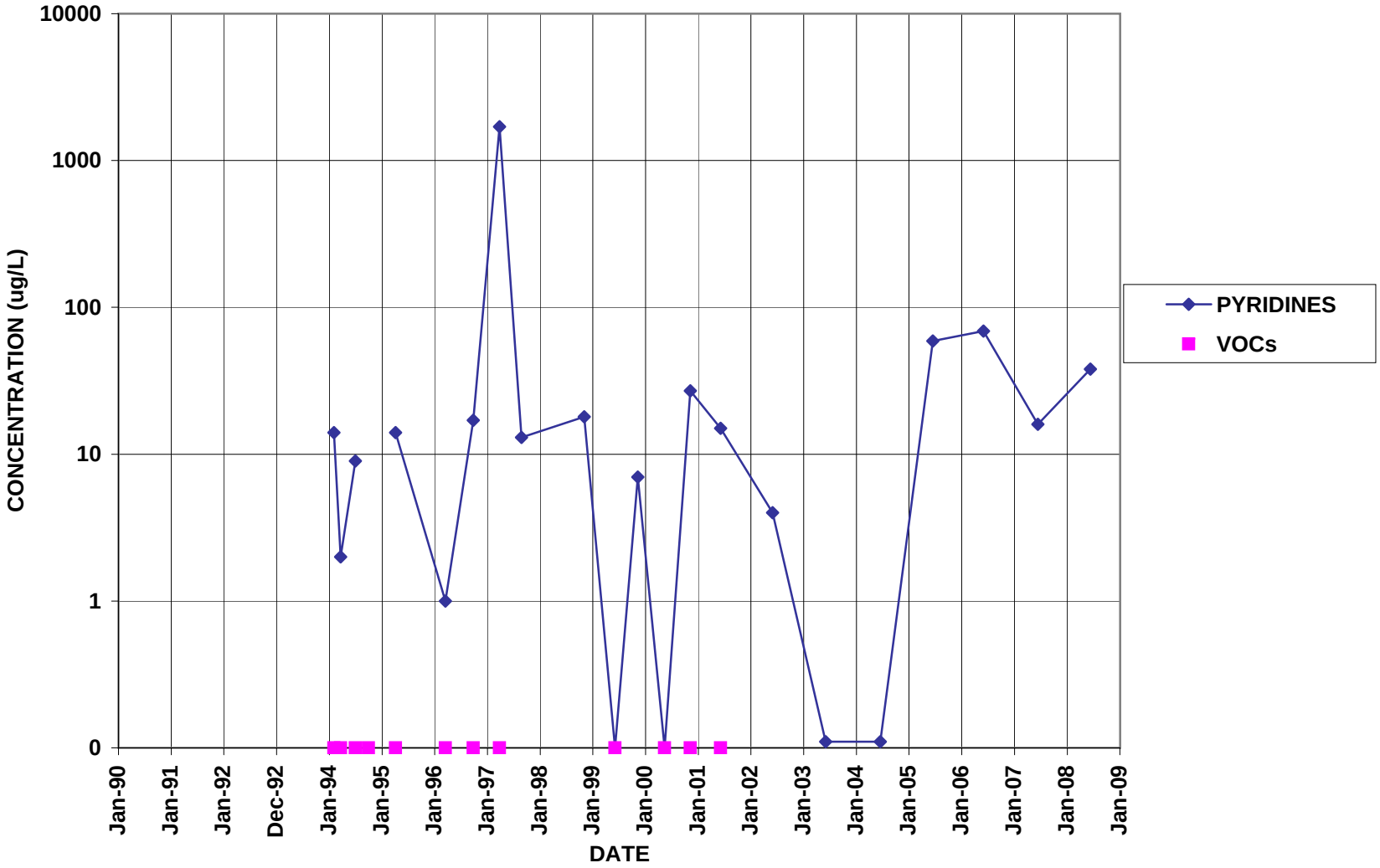
Prepared by: nmb
Reviewed by: jeb

BR-106



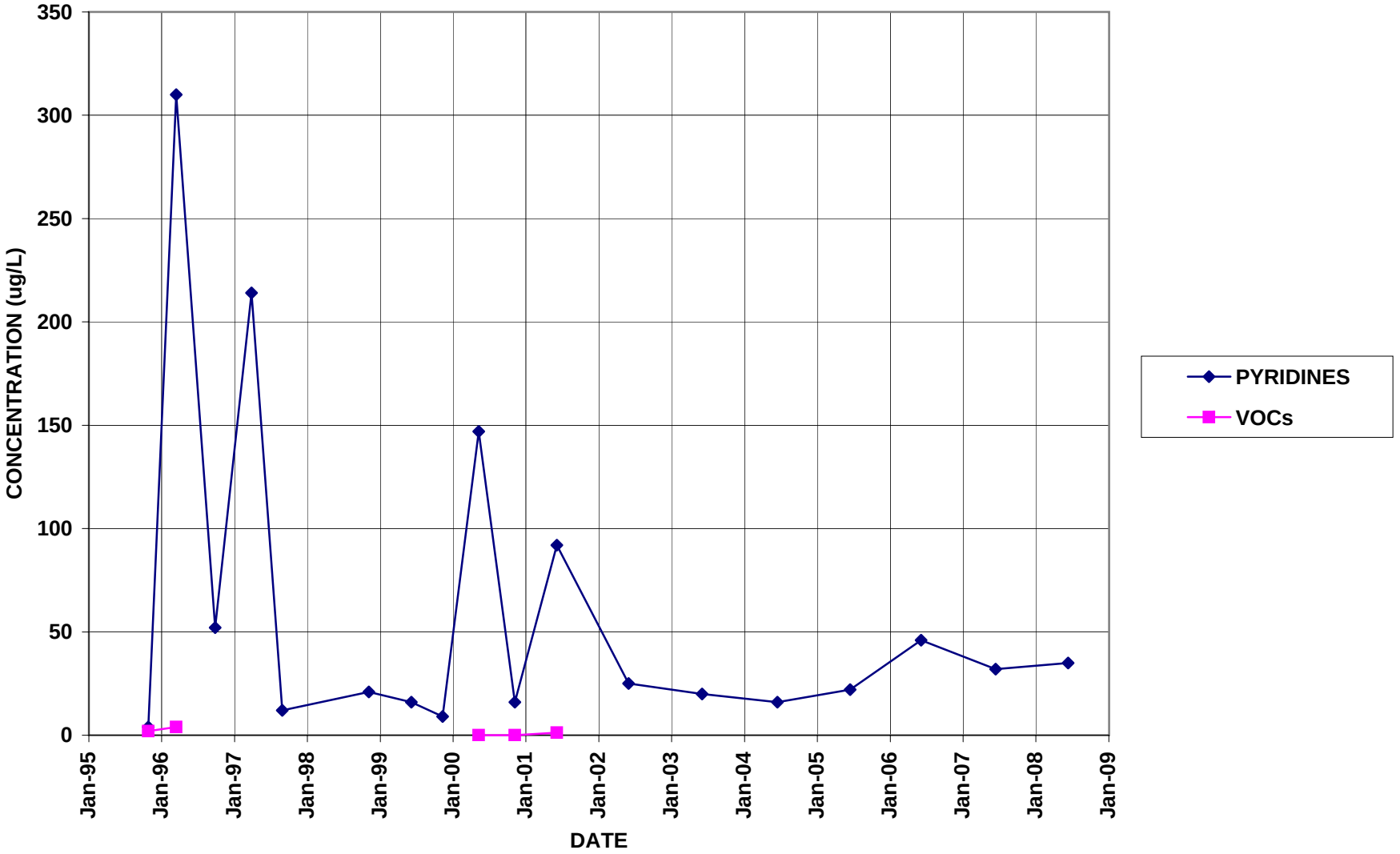
Prepared by: nmb
Reviewed by: jeb

BR-108



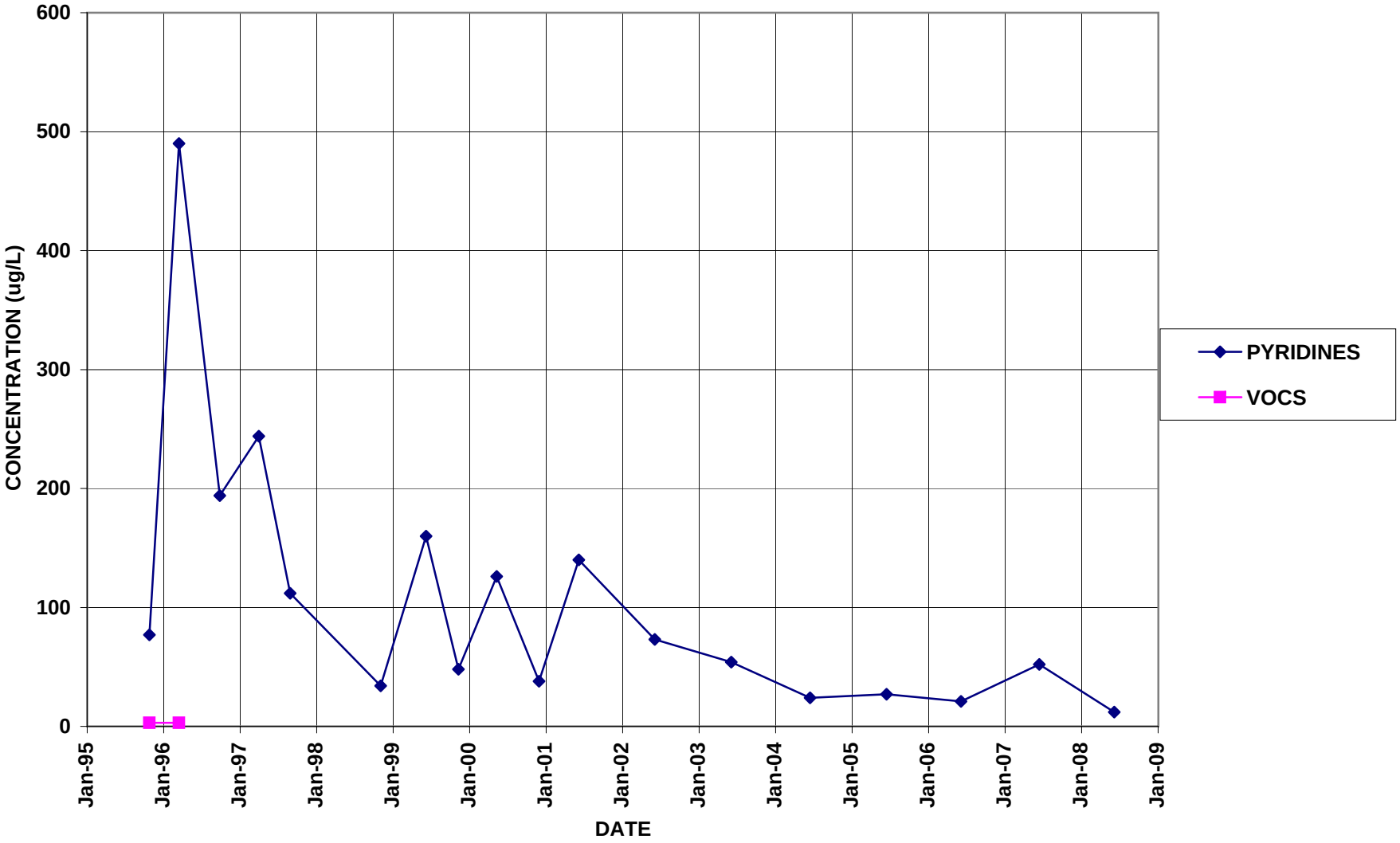
Prepared by: nmb
Reviewed by: jeb

BR-112D



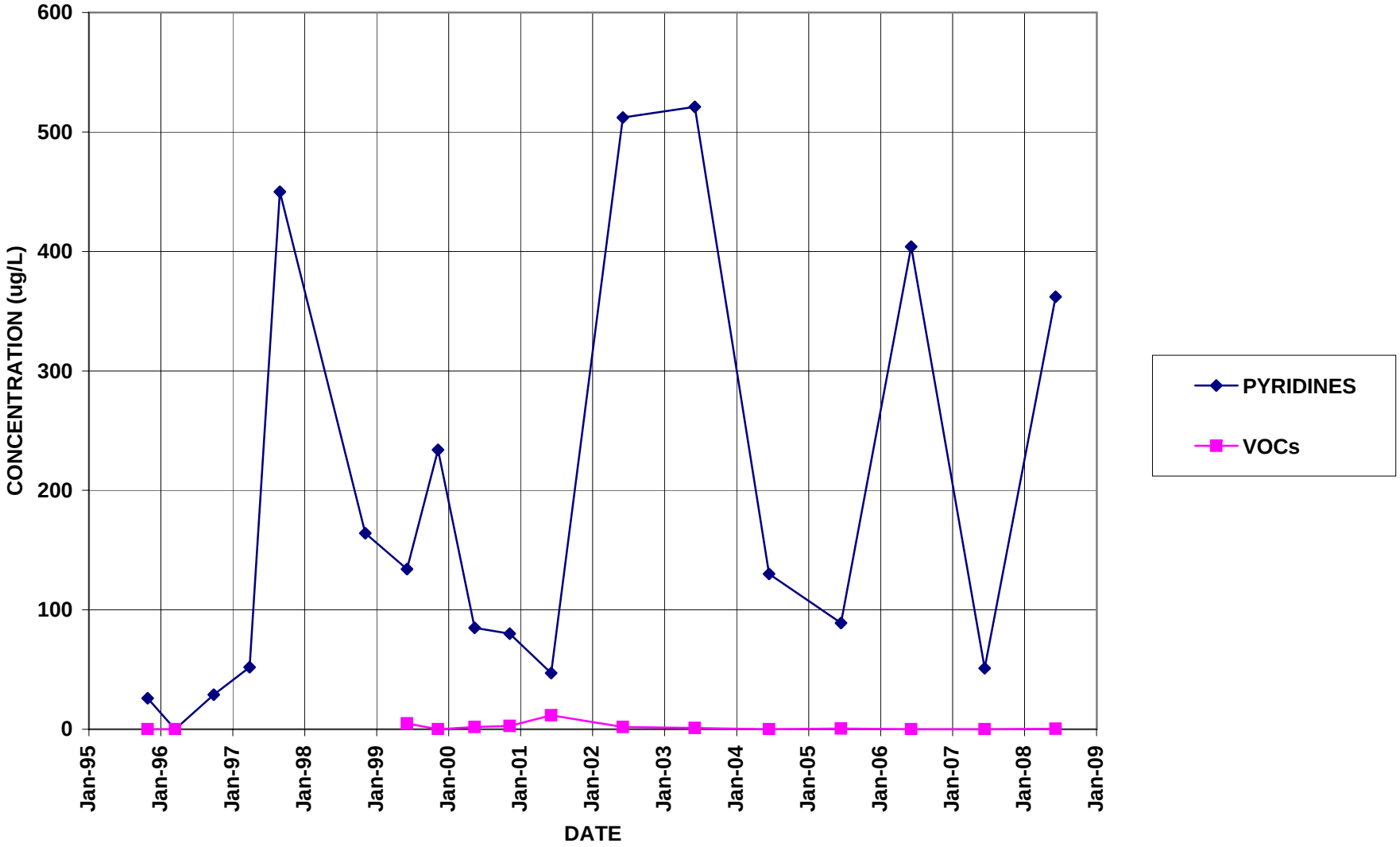
Prepared by: nmb
Reviewed by: jeb

BR-113D



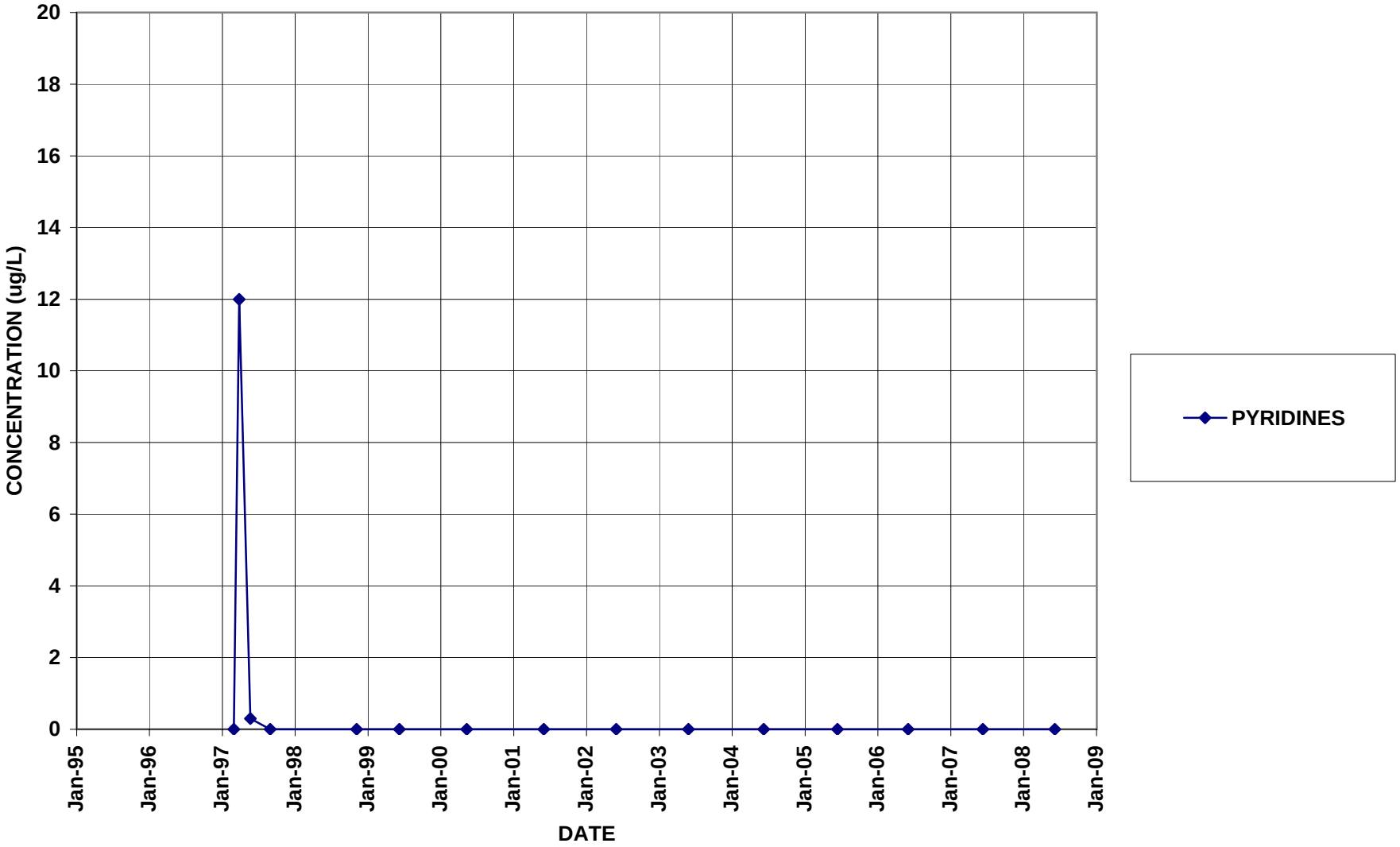
Prepared by: nmb
Reviewed by: jeb

BR-114



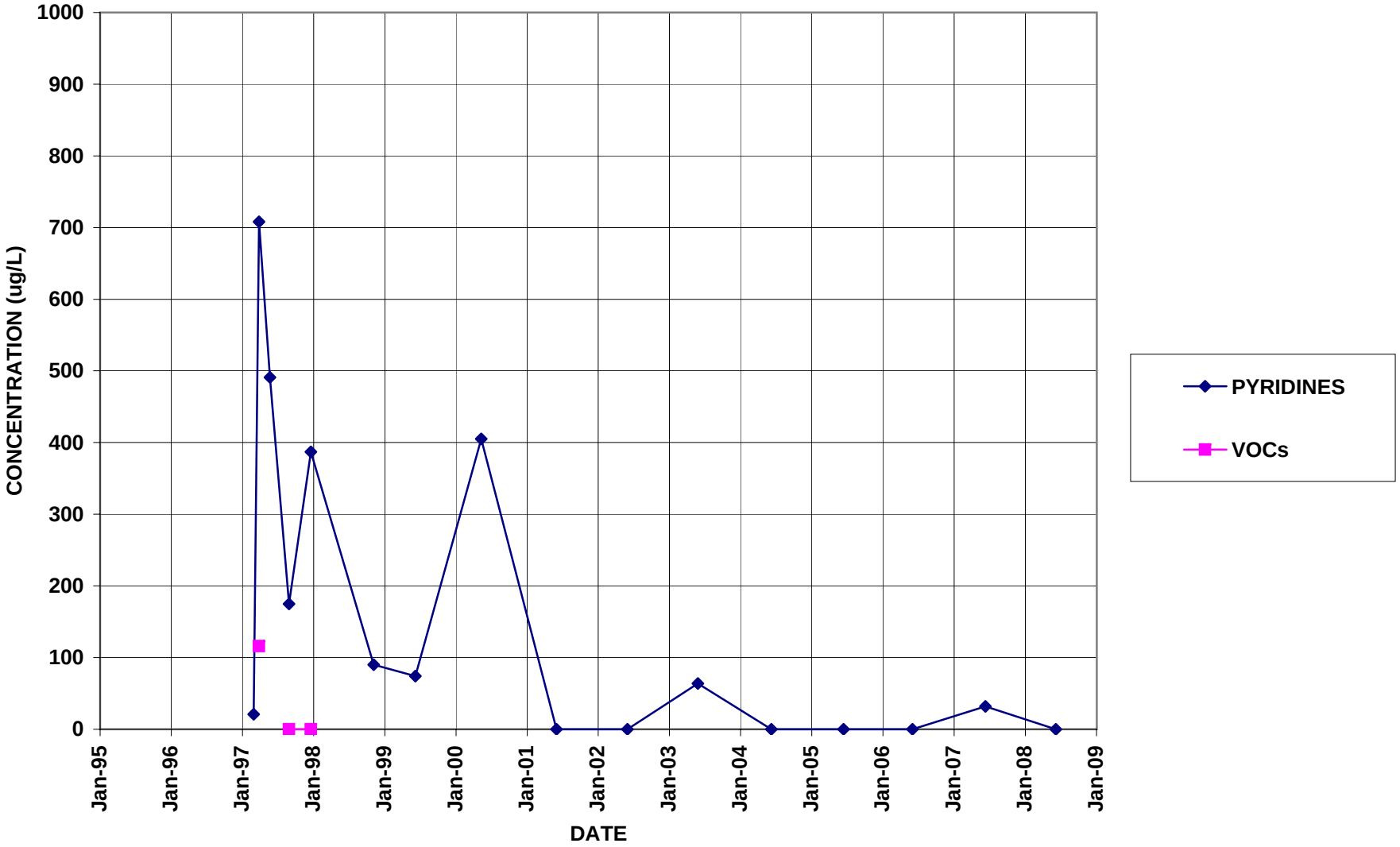
Prepared by: nmb
Reviewed by: jeb

BR-116



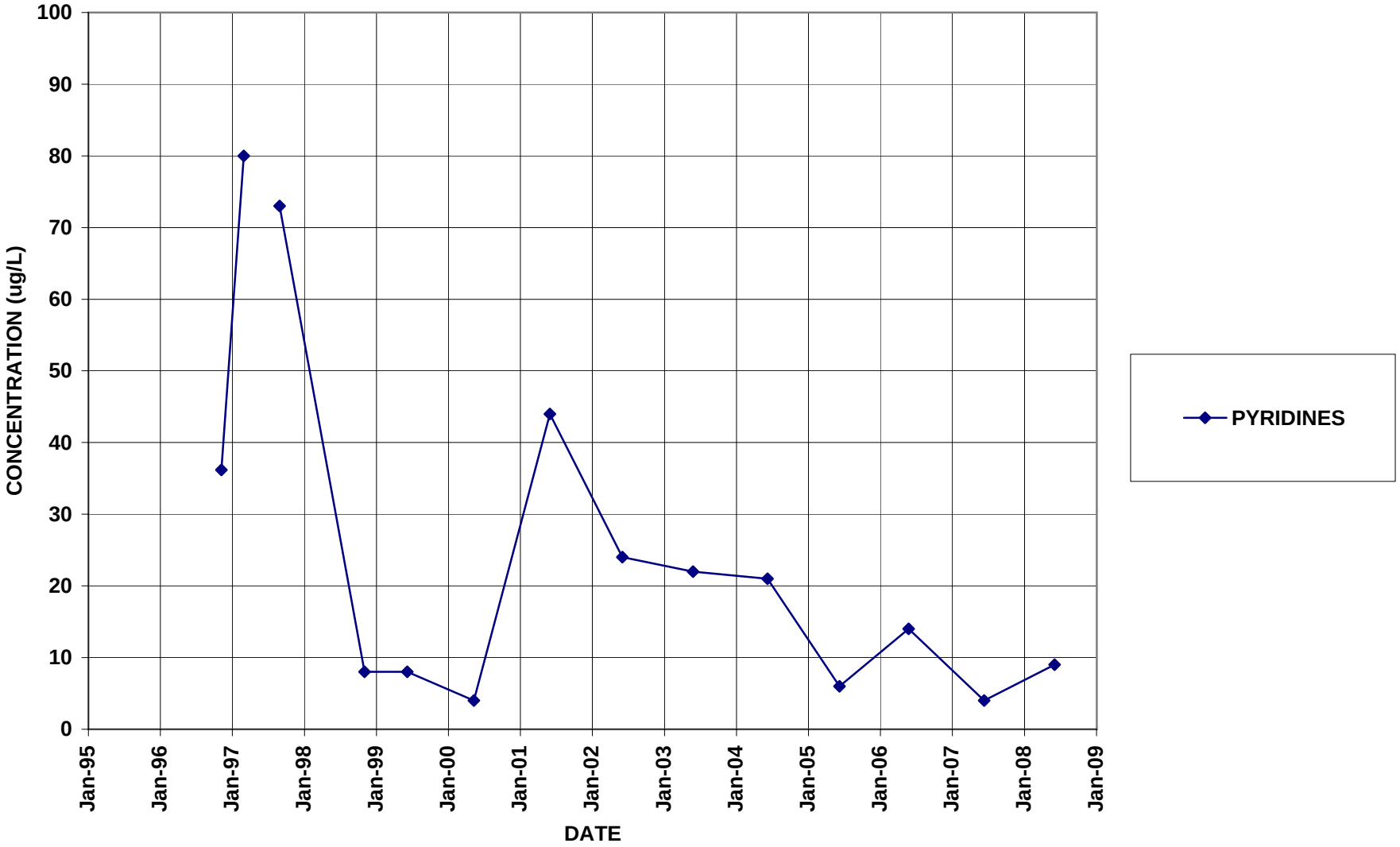
Prepared by: nmb
Reviewed by: jeb

BR-116D



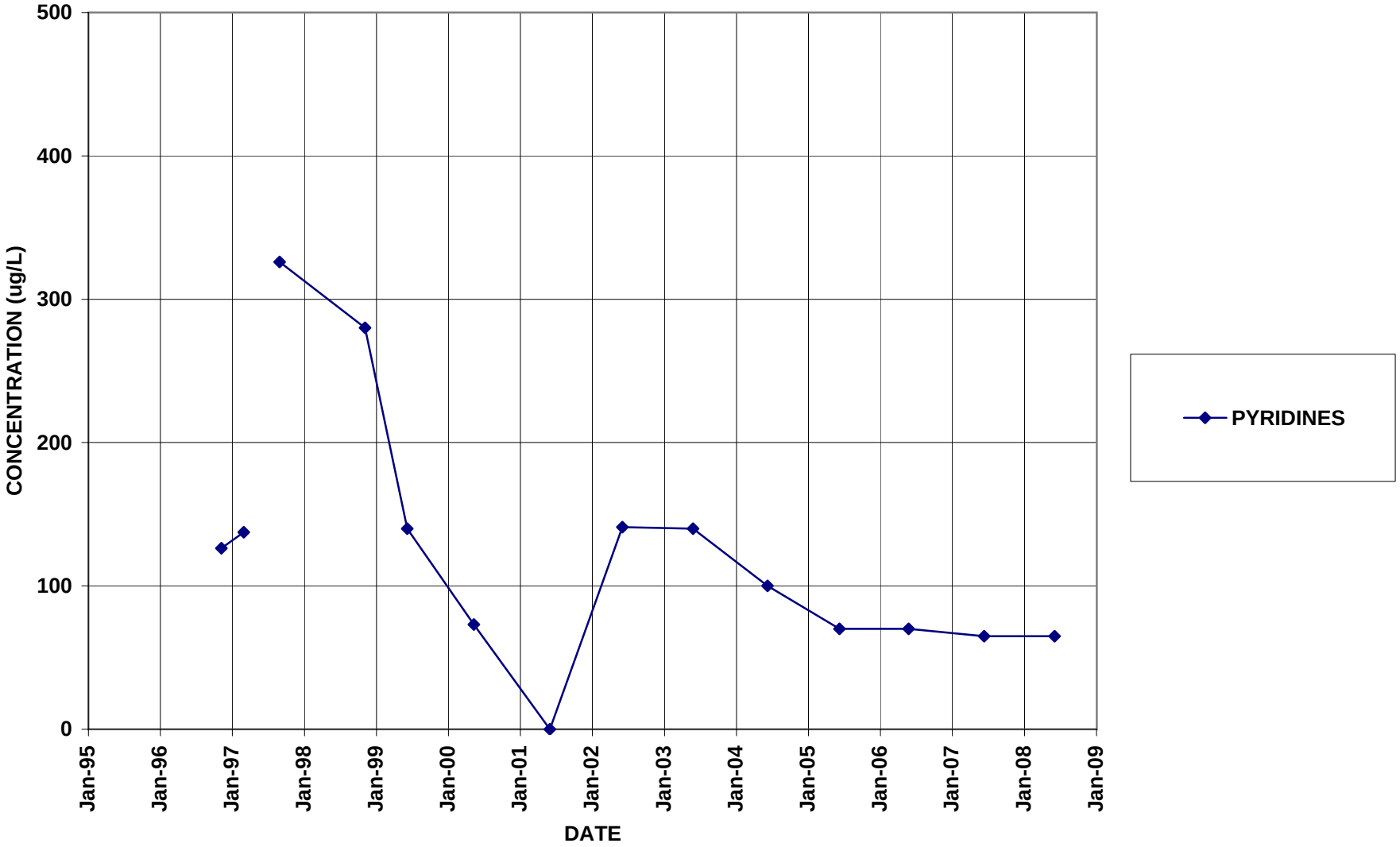
Prepared by: nmb
Reviewed by: jeb

BR-117D



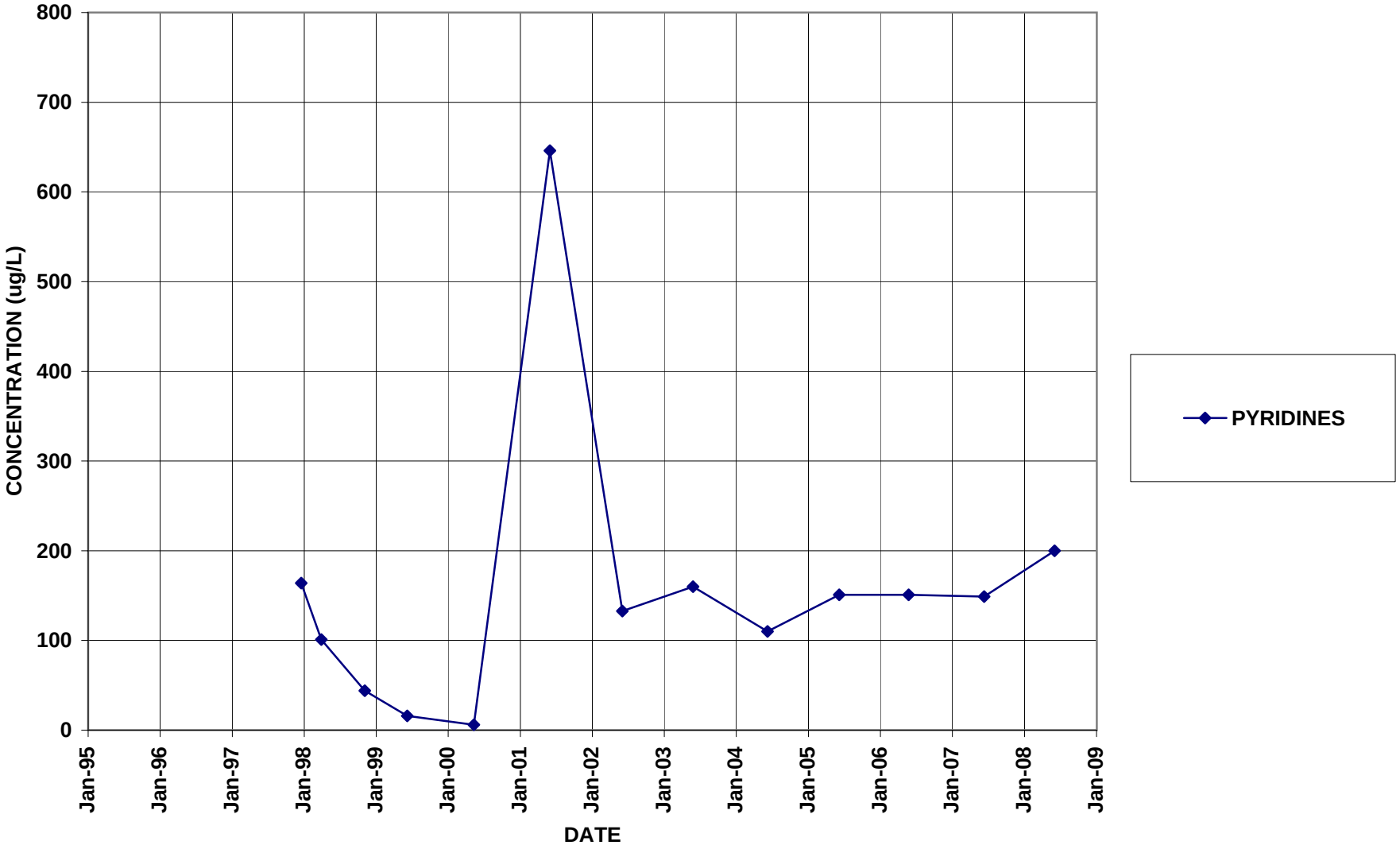
Prepared by: nmb
Reviewed by: jeb

BR-118D



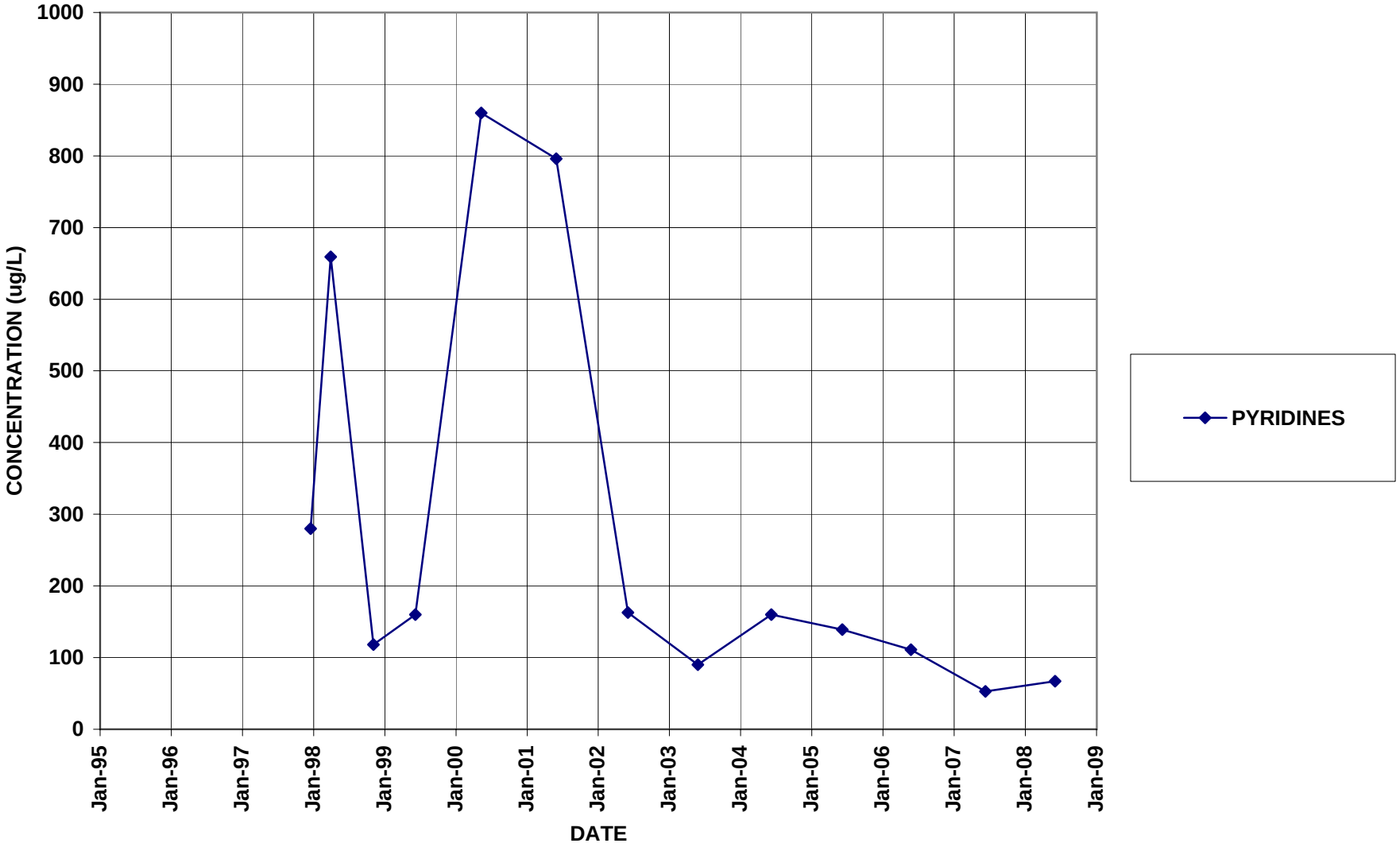
Prepared by: nmb
Reviewed by: jeb

BR-122D



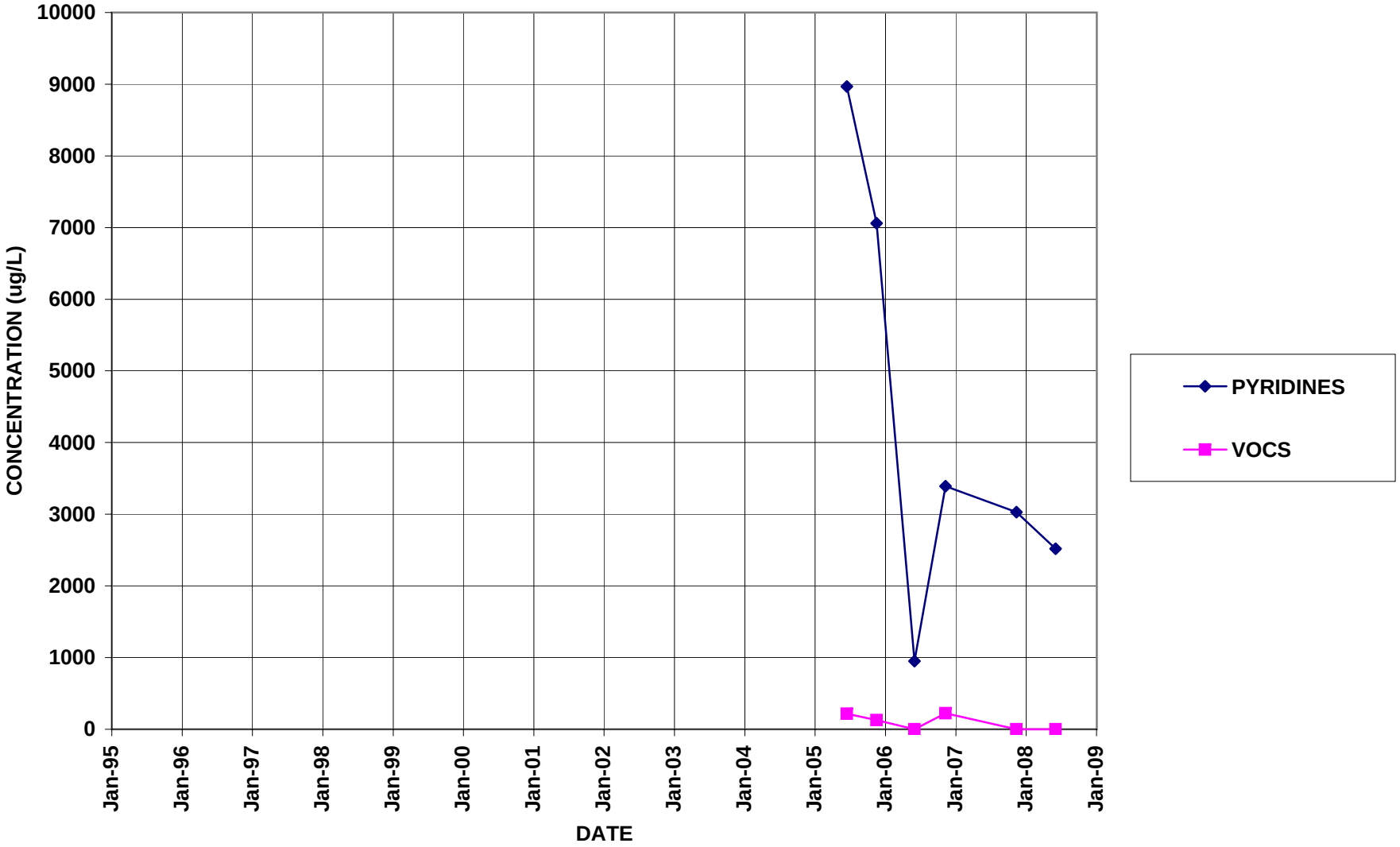
Prepared by: nmb
Reviewed by: jeb

BR-123D



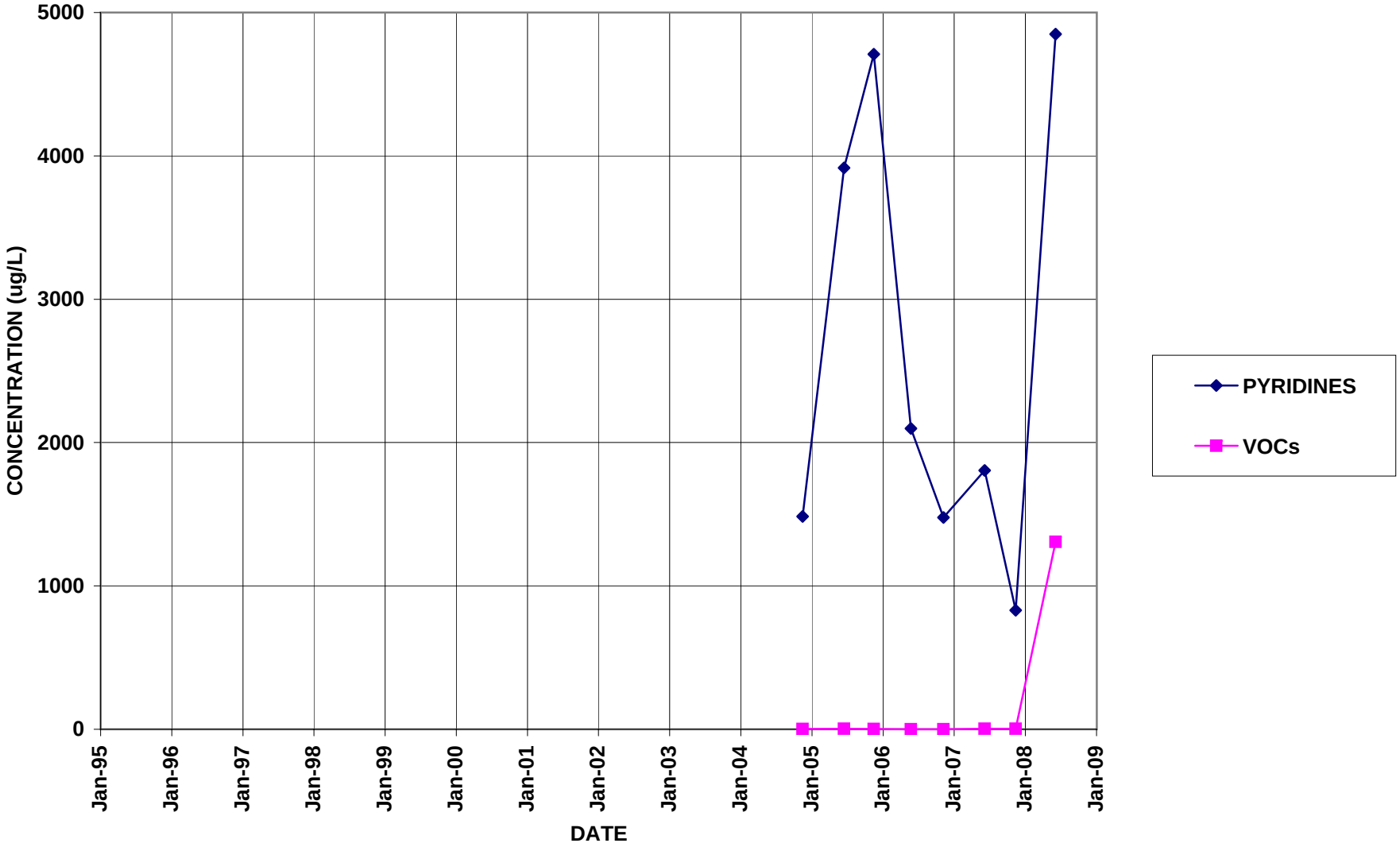
Prepared by: nmb
Reviewed by: jeb

BR-126

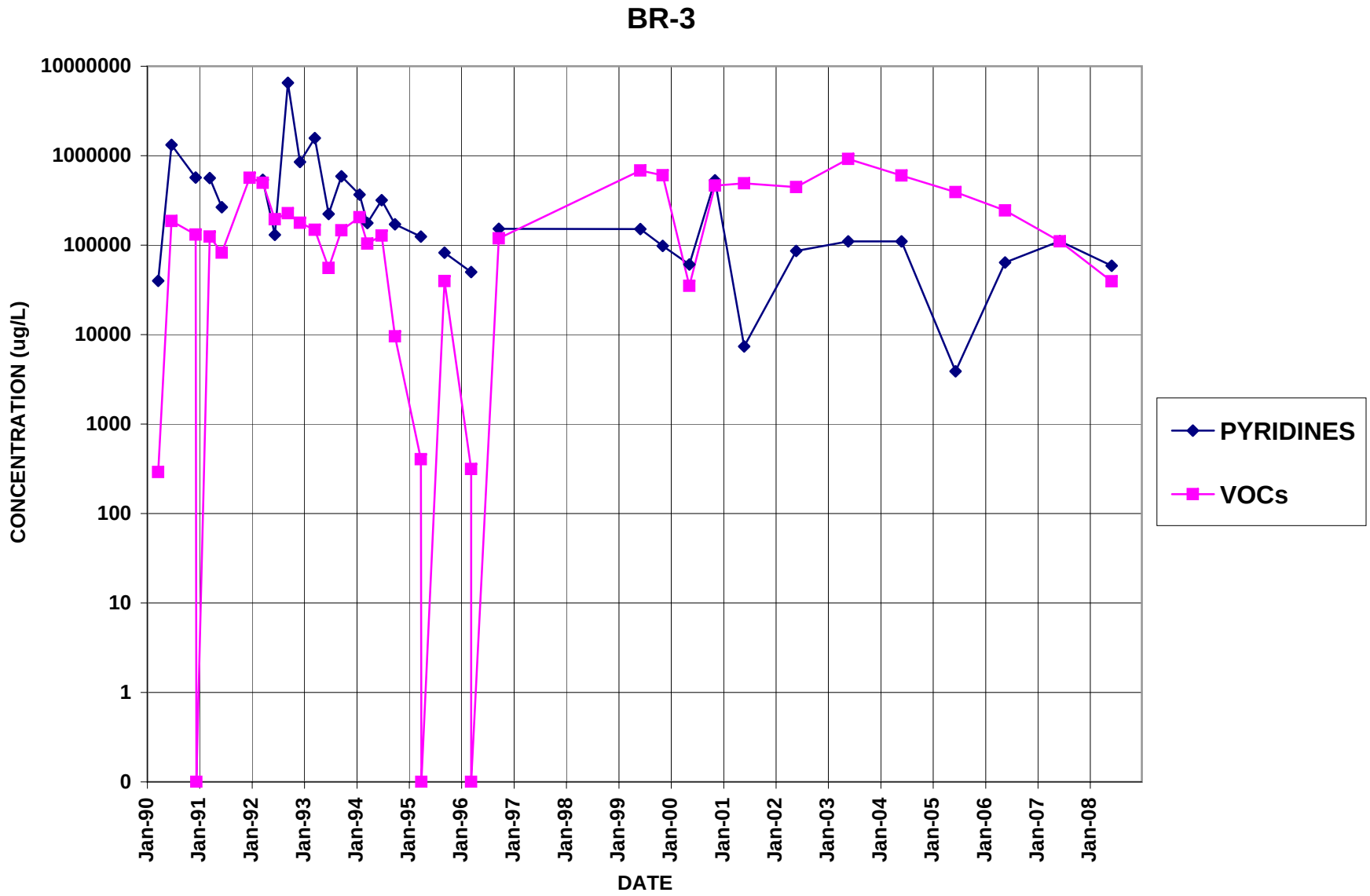


Prepared by: nmb
Reviewed by: jeb

BR-127

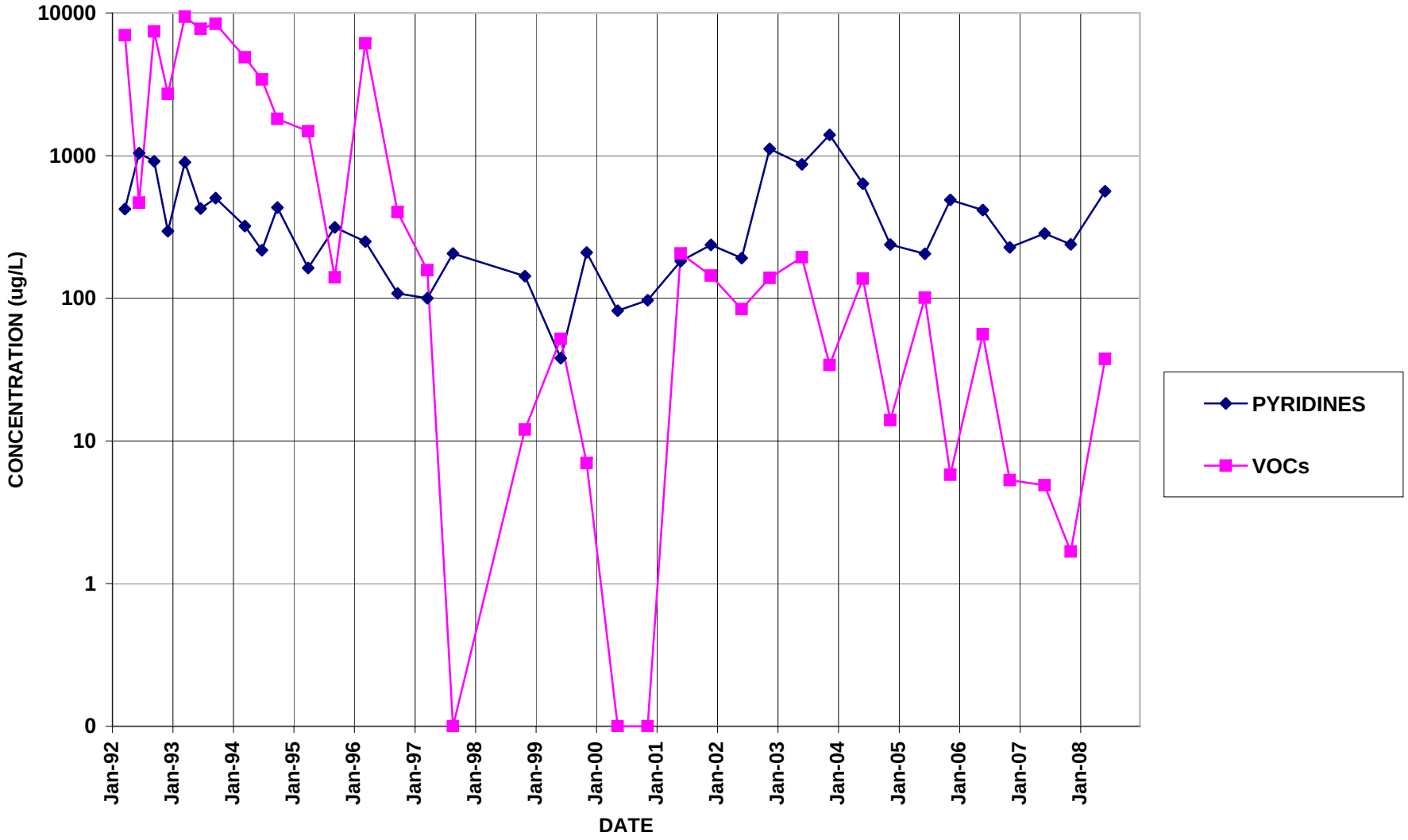


Prepared by: nmb
Reviewed by: jeb



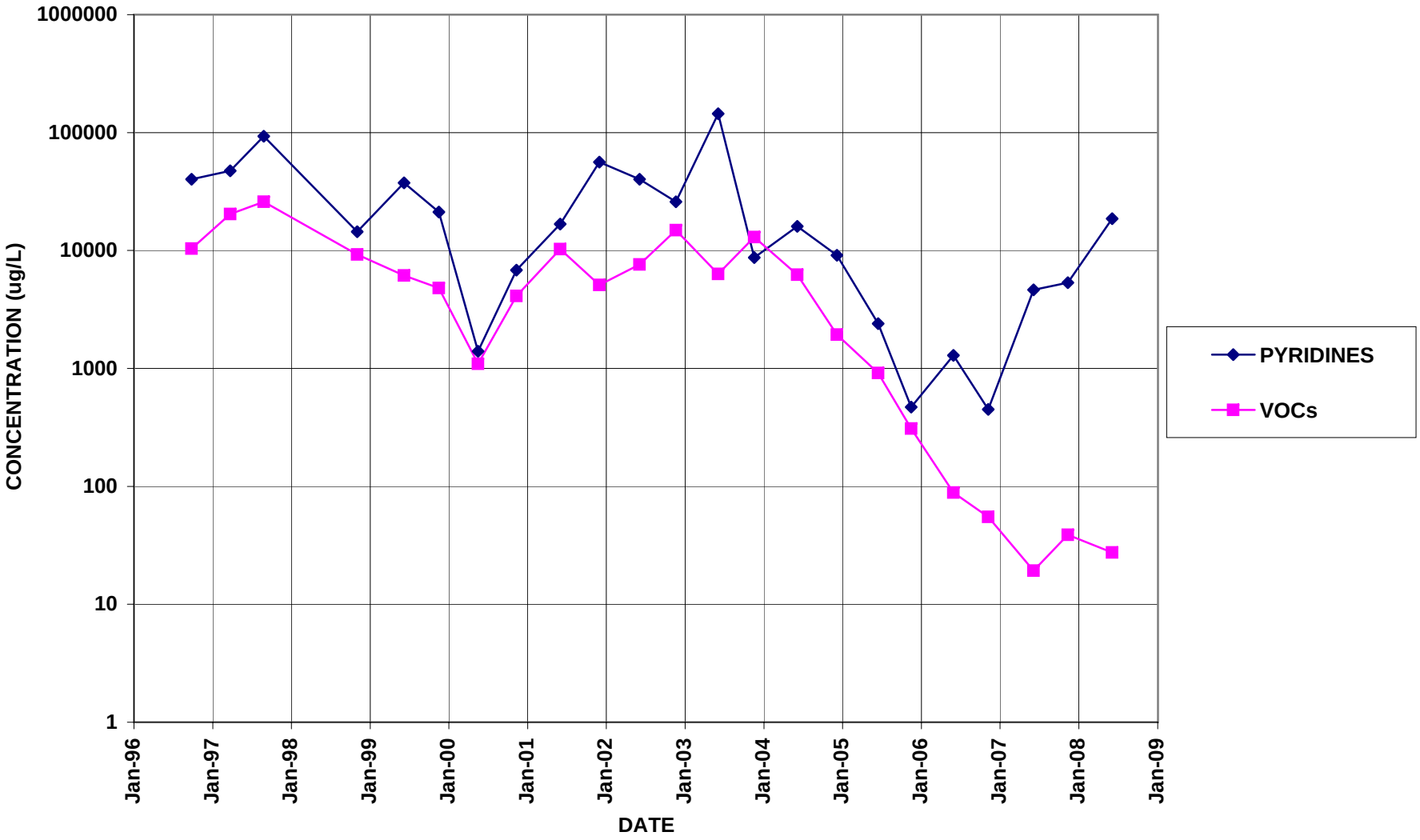
Prepared by: nmb
Reviewed by: jeb

BR-5A



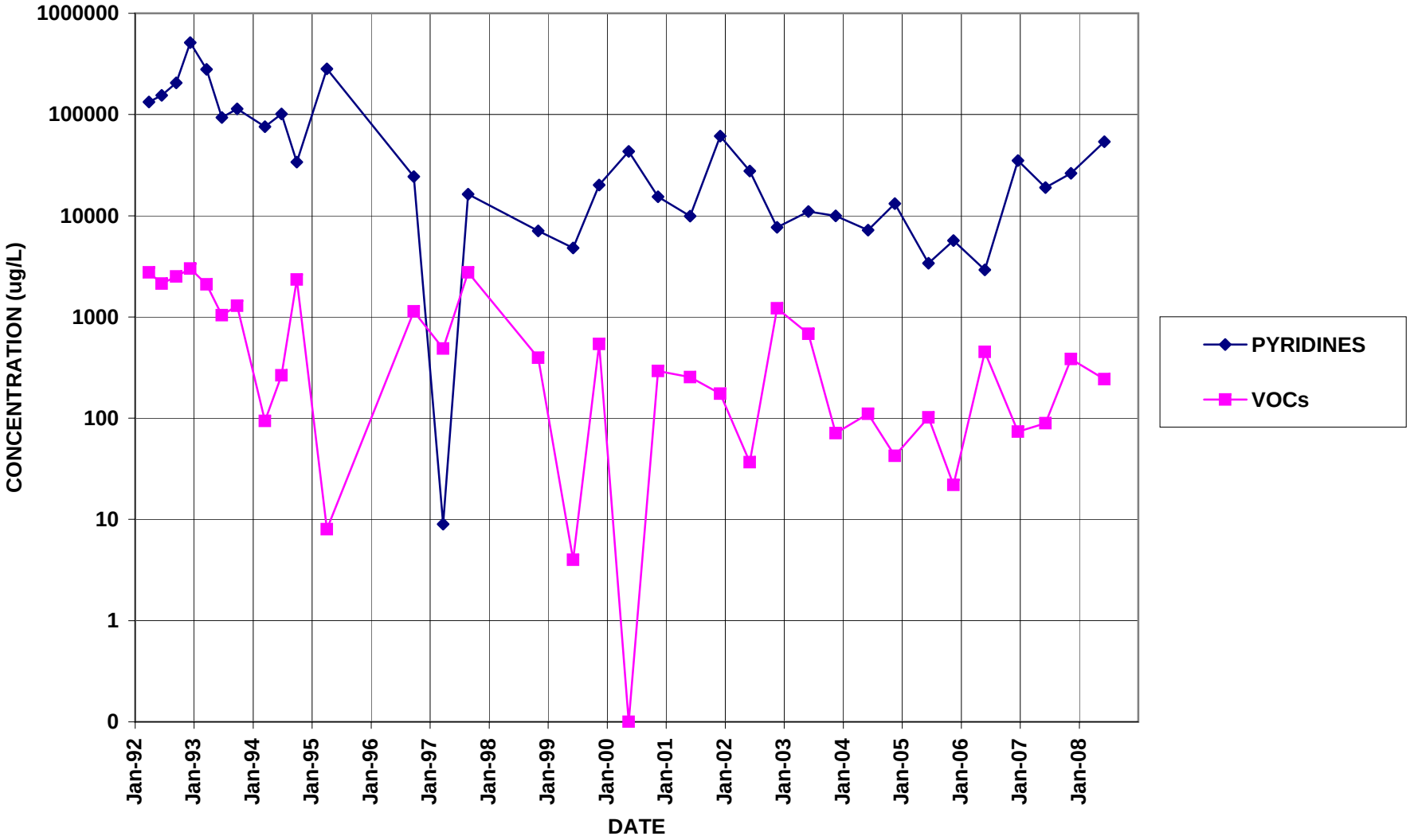
Prepared by: nmb
Reviewed by: jeb

BR-6A



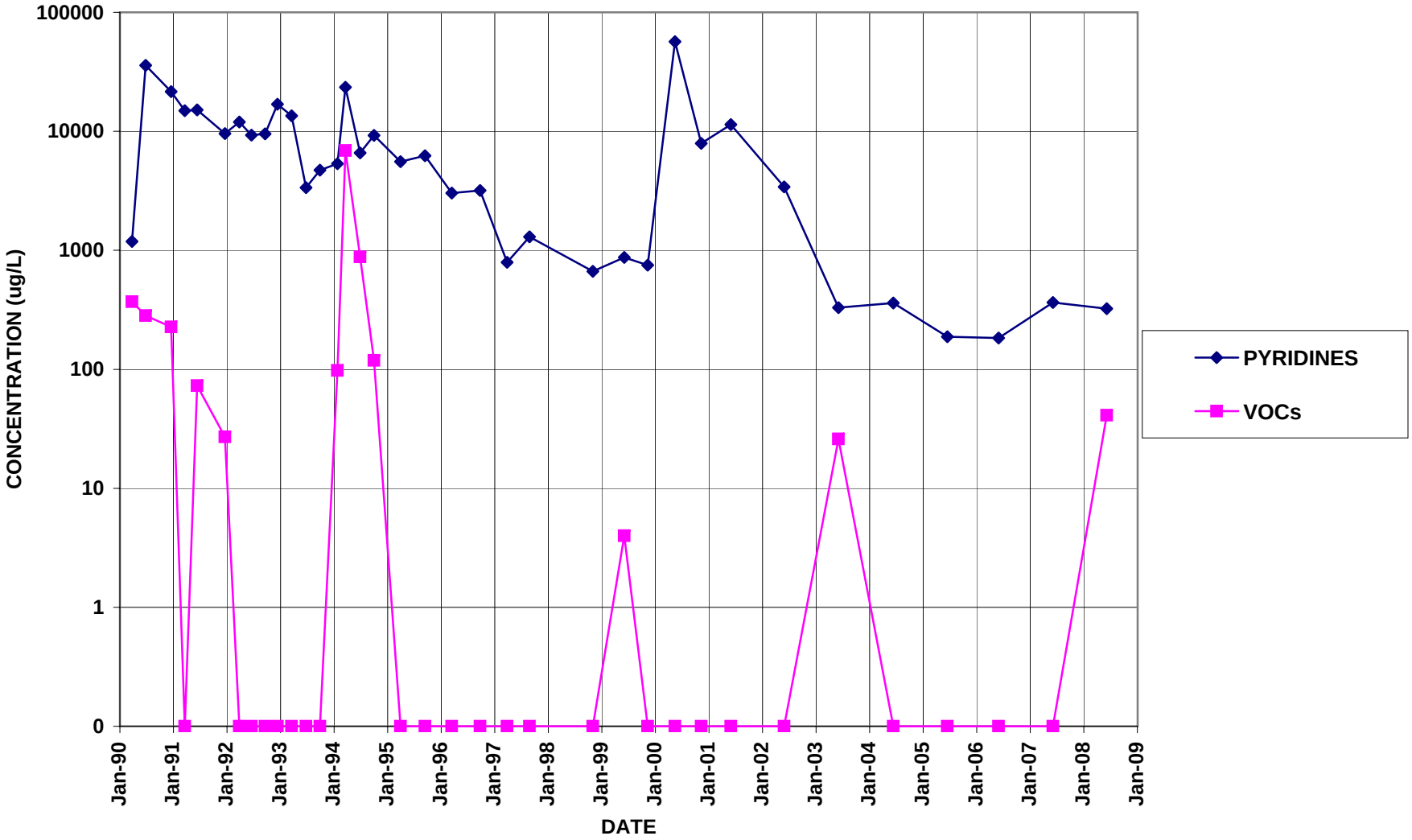
Prepared by: nmb
Reviewed by: jeb

BR-7A



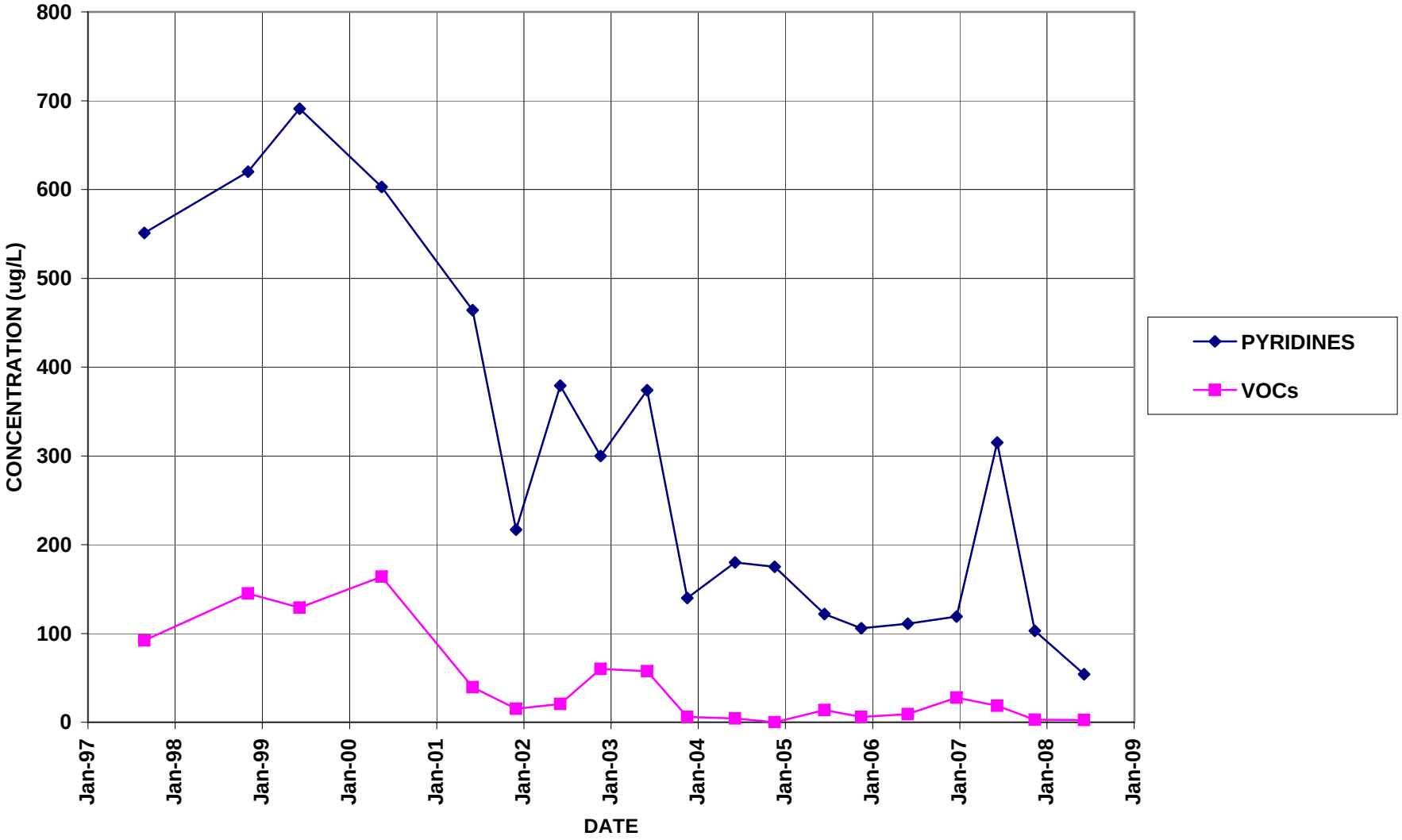
Prepared by: nmb
Reviewed by: jeb

BR-8



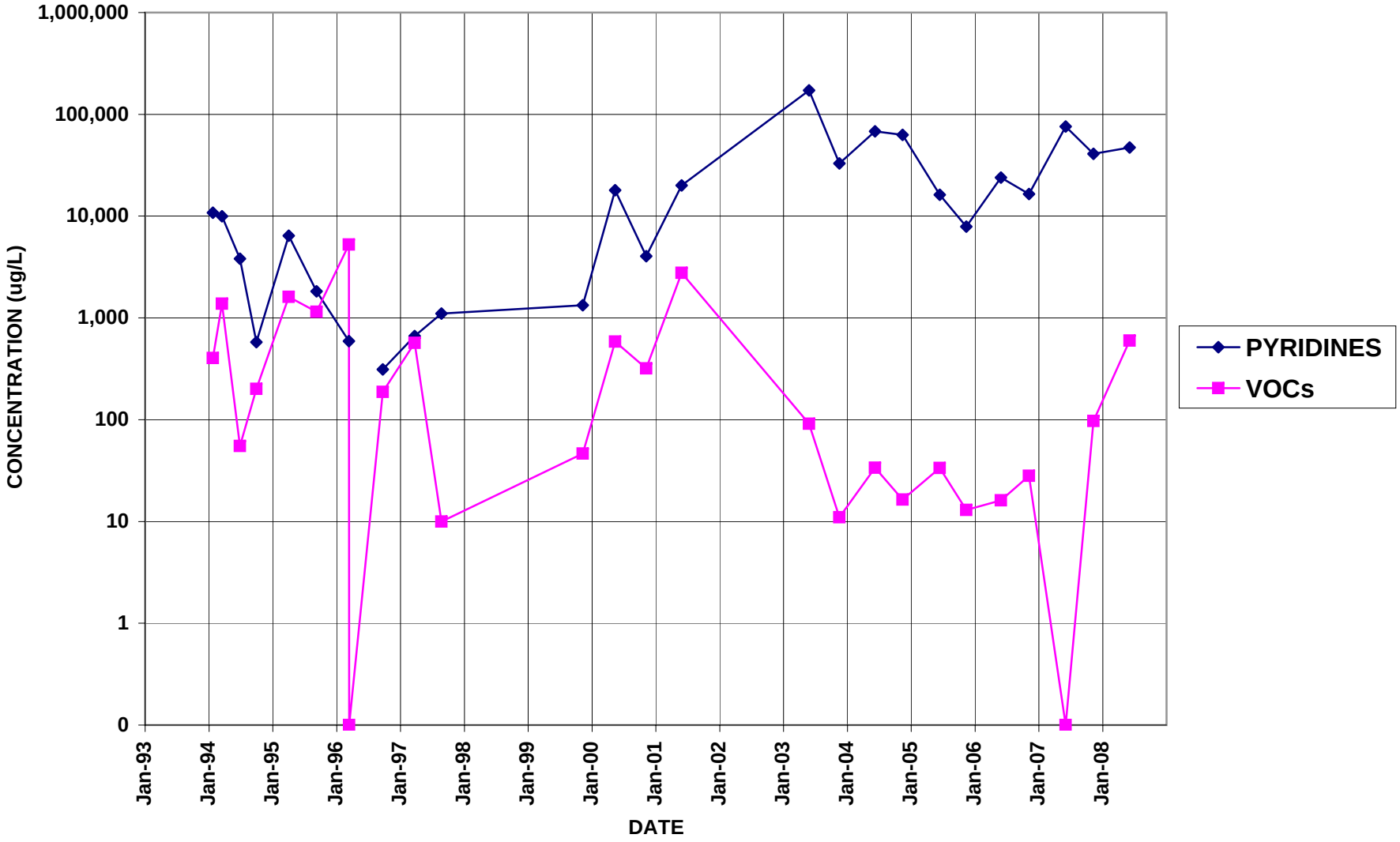
Prepared by: nmb
Reviewed by: jeb

BR-9



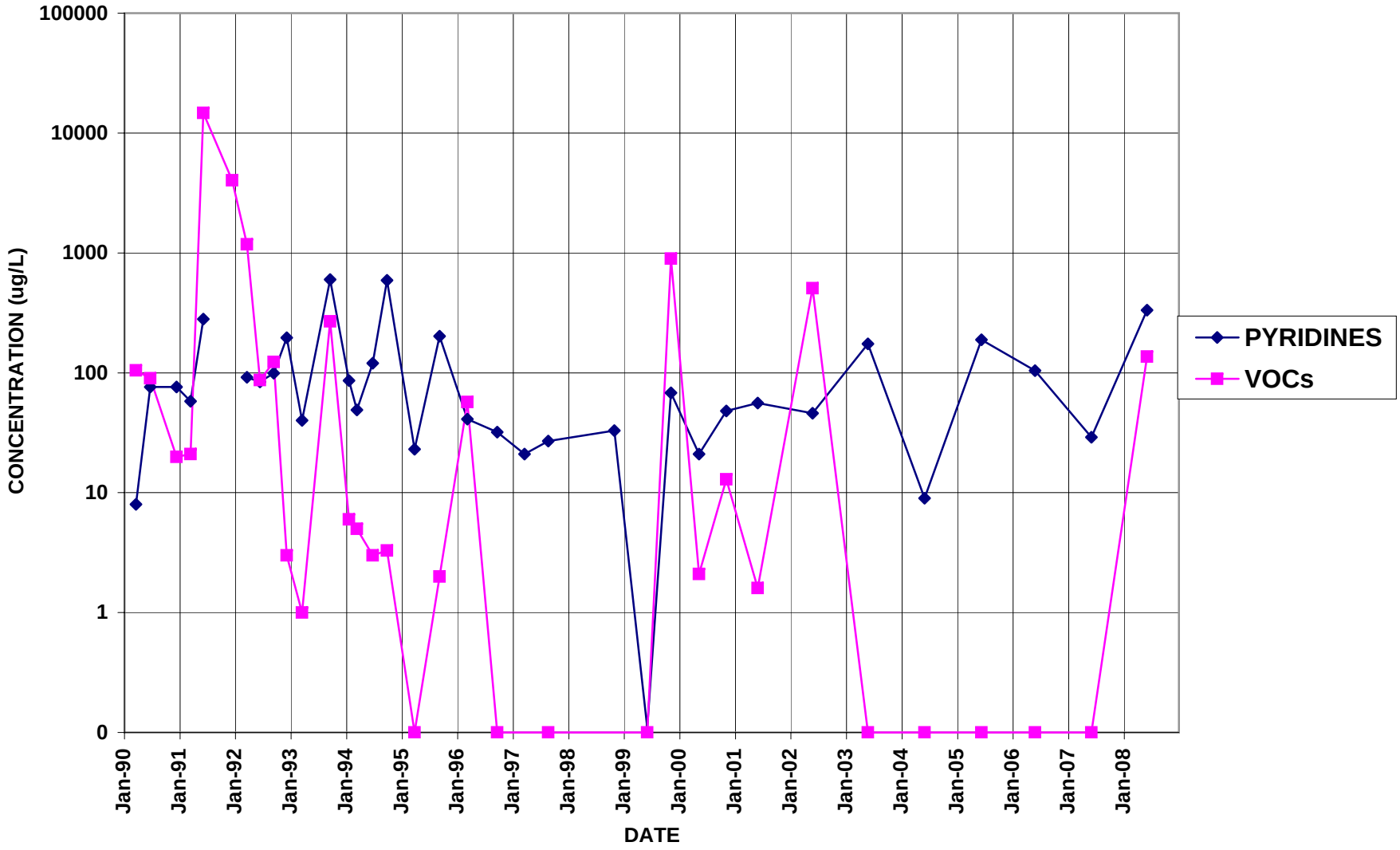
Prepared by: nmb
Reviewed by: jeb

E-1



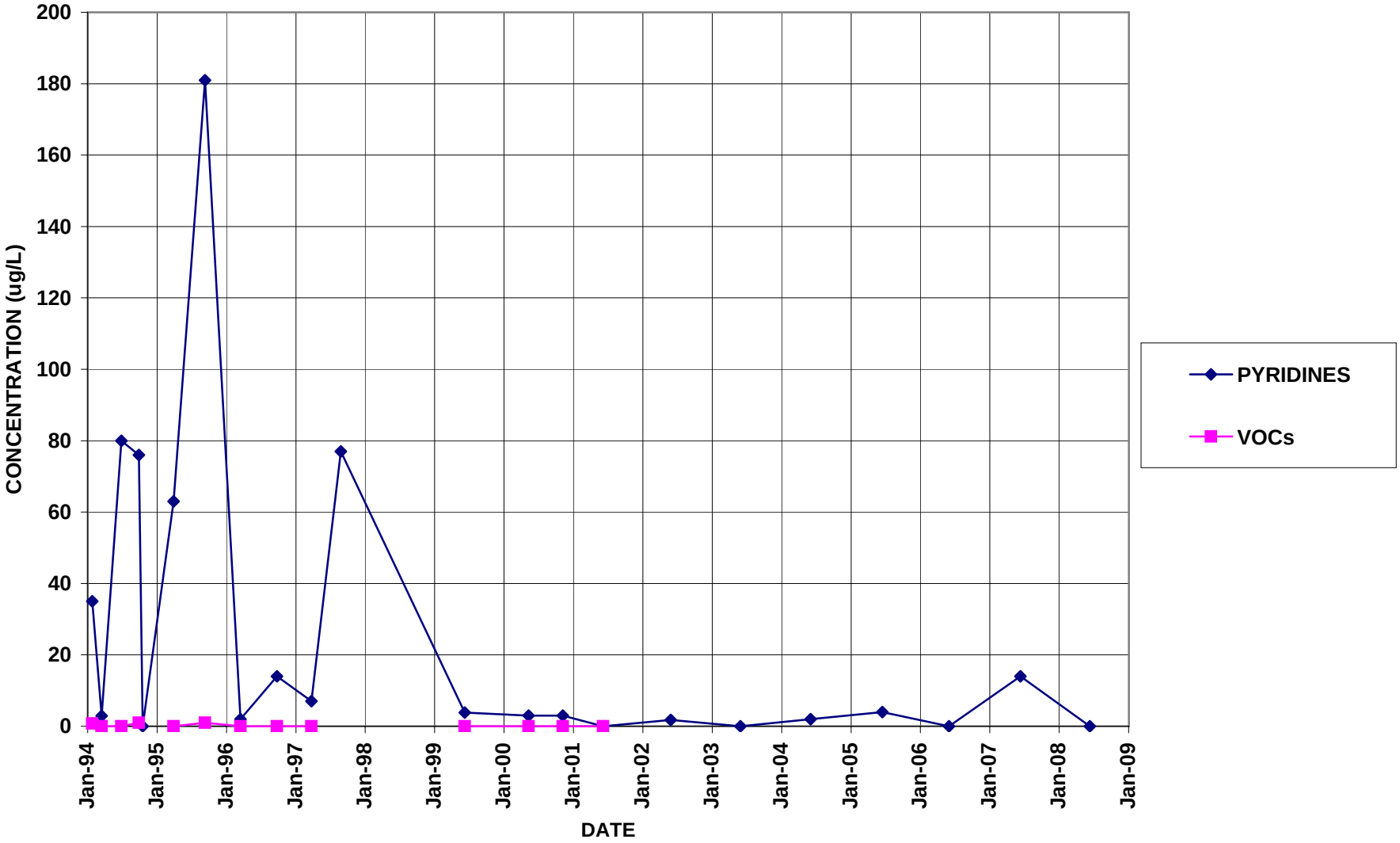
Prepared by: nmb
Reviewed by: jeb

E-3



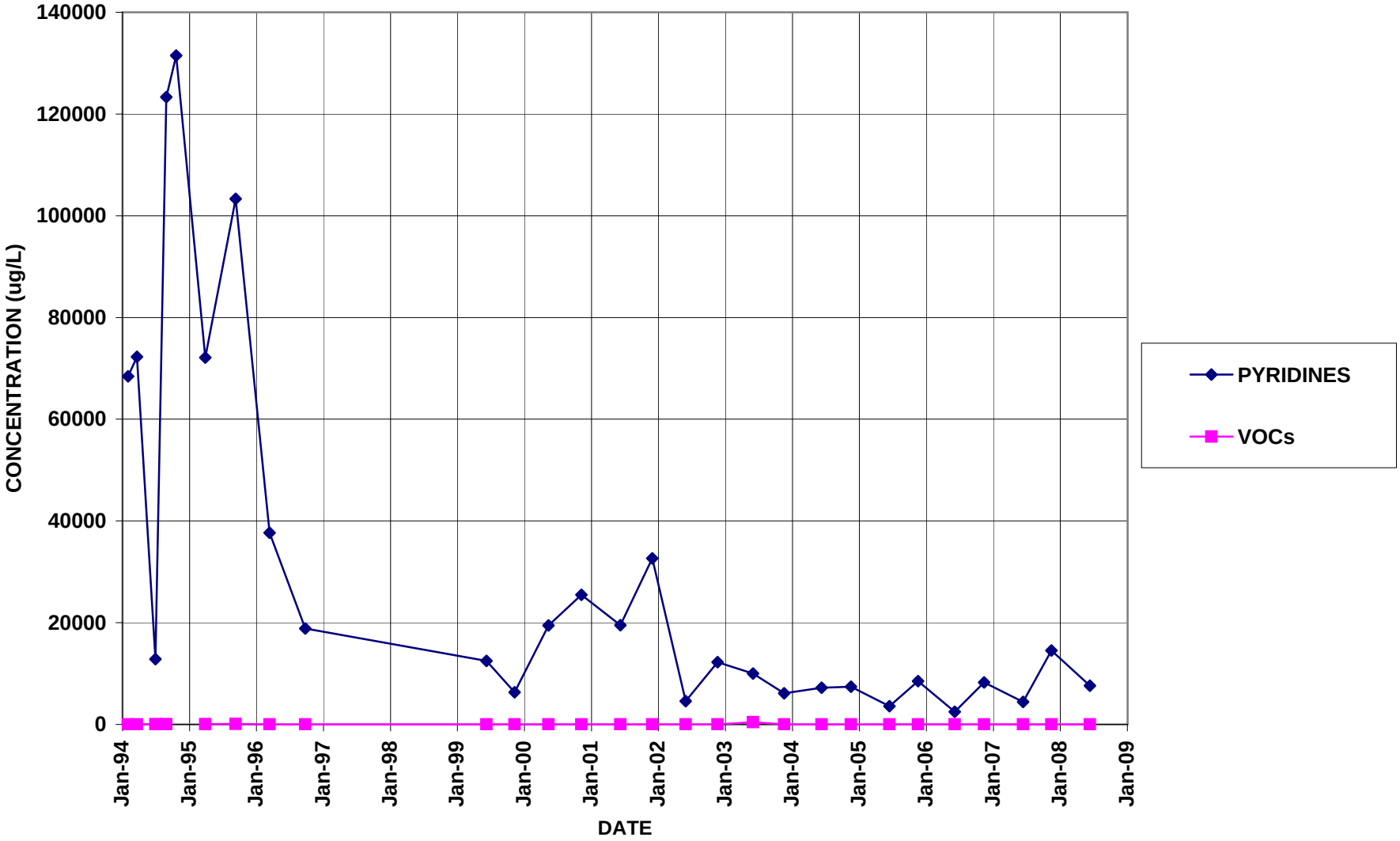
Prepared by: nmb
Reviewed by: jeb

MW-104



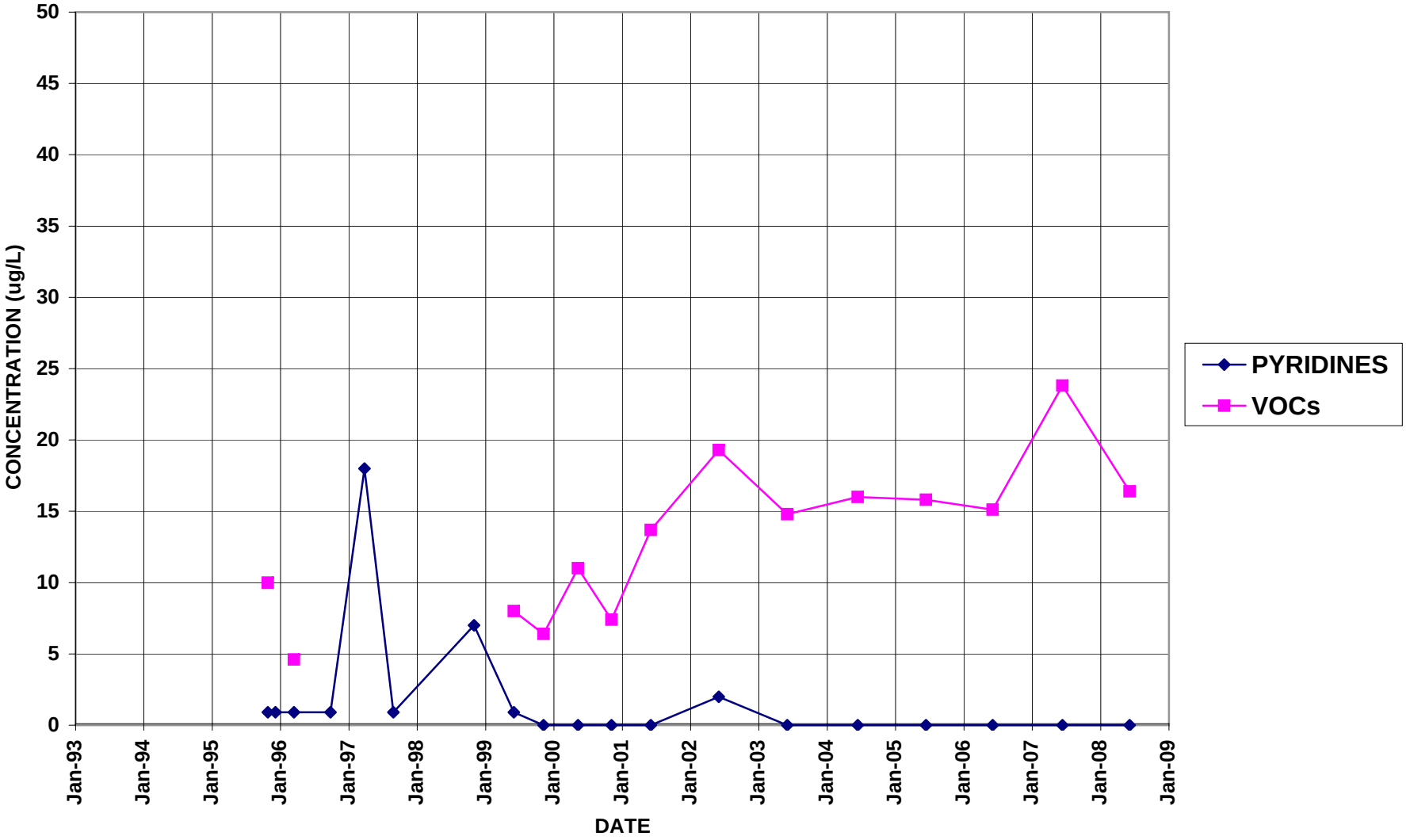
Prepared by: nmb
Reviewed by: jeb

MW-106



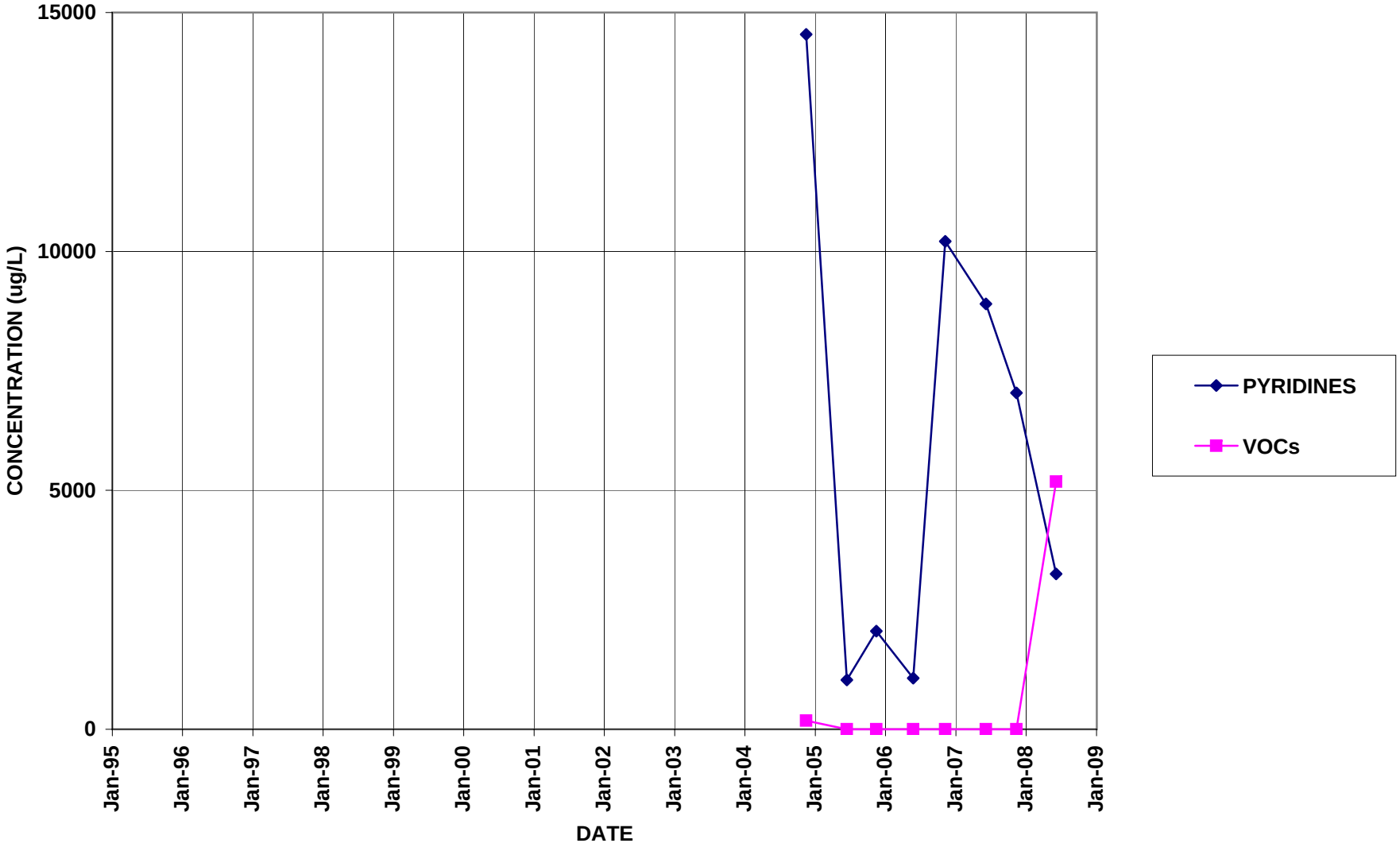
Prepared by: nmb
Reviewed by: jeb

MW-114



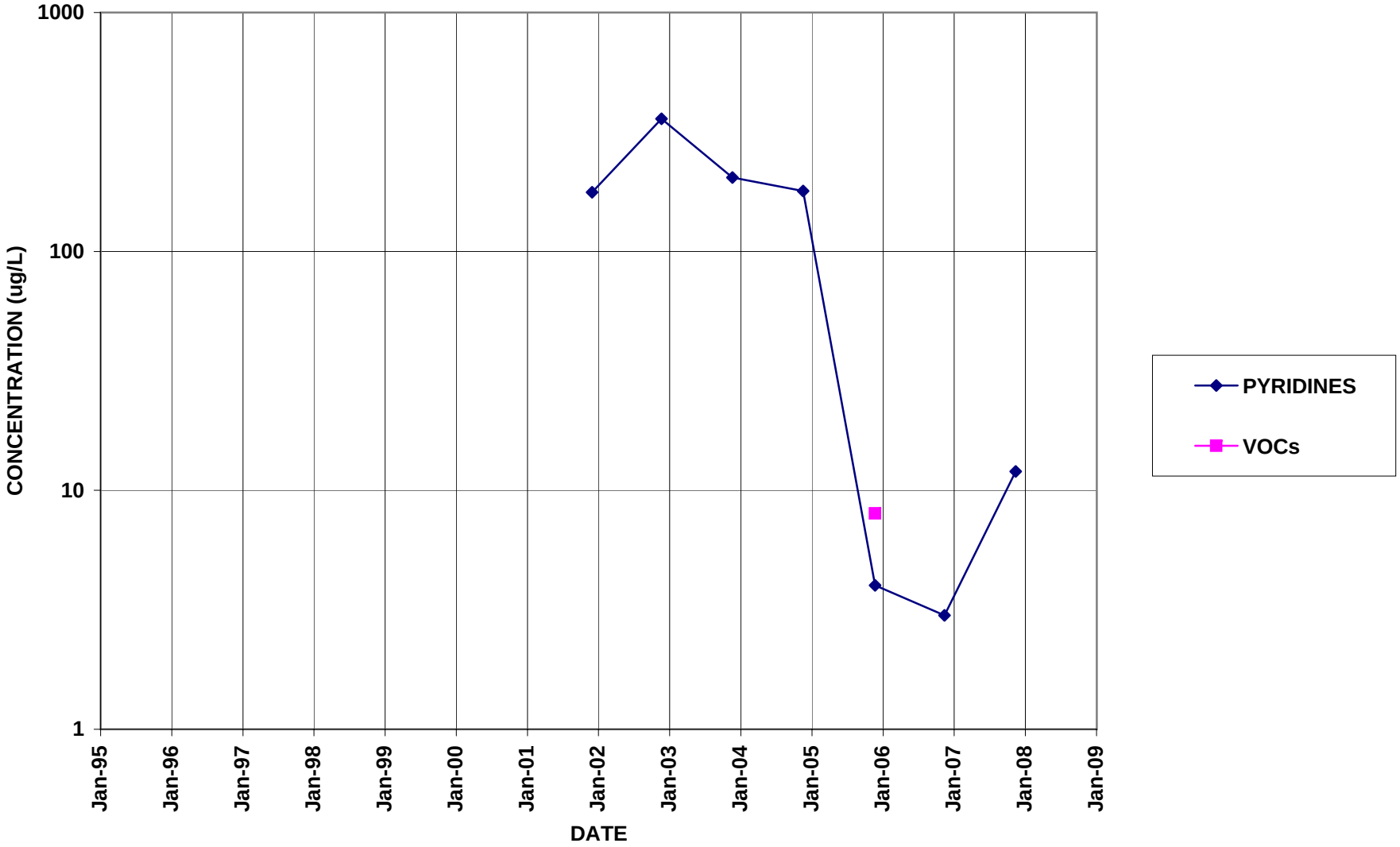
Prepared by: nmb
Reviewed by: jeb

MW-127



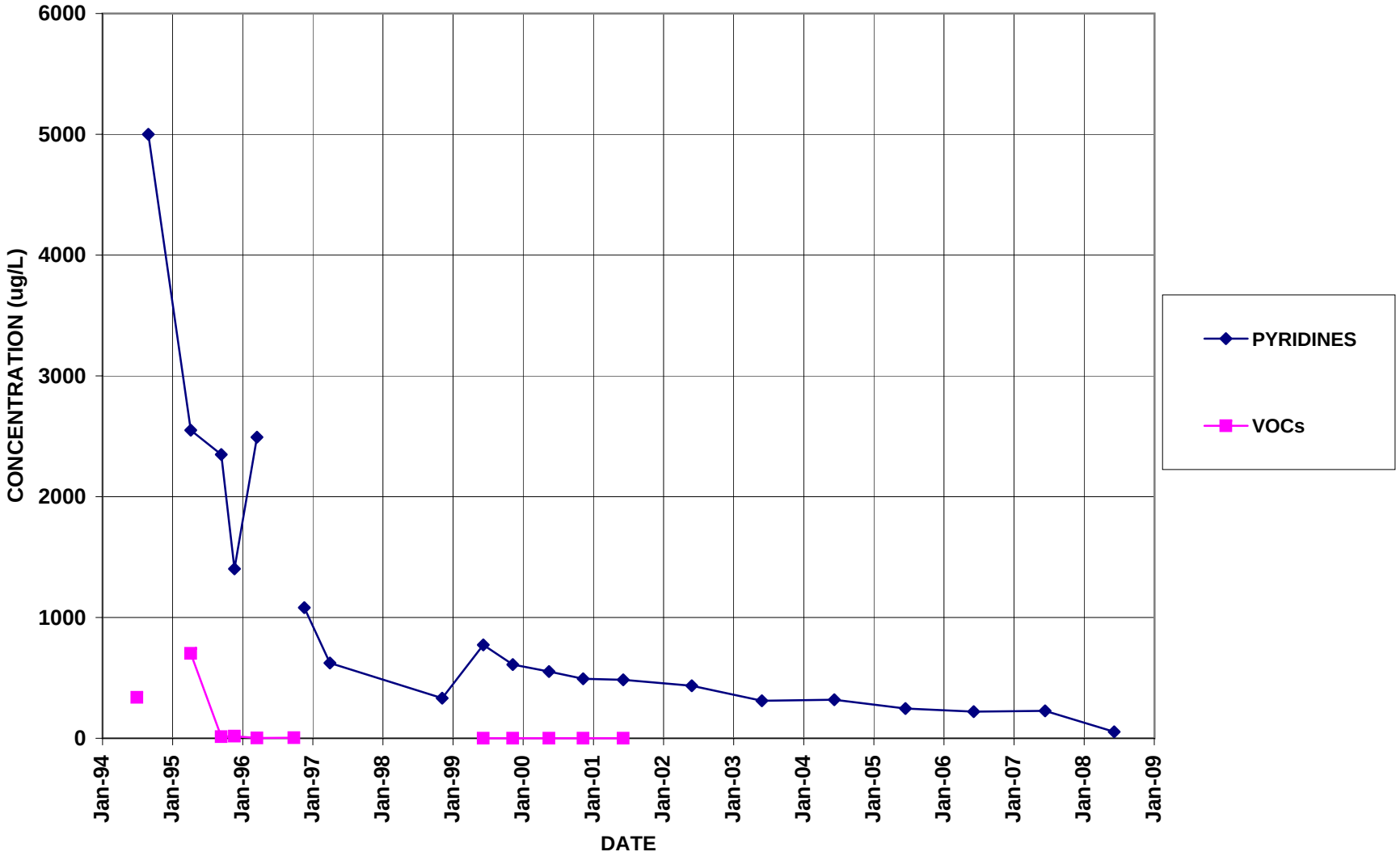
Prepared by: nmb
Reviewed by: jeb

MW-16



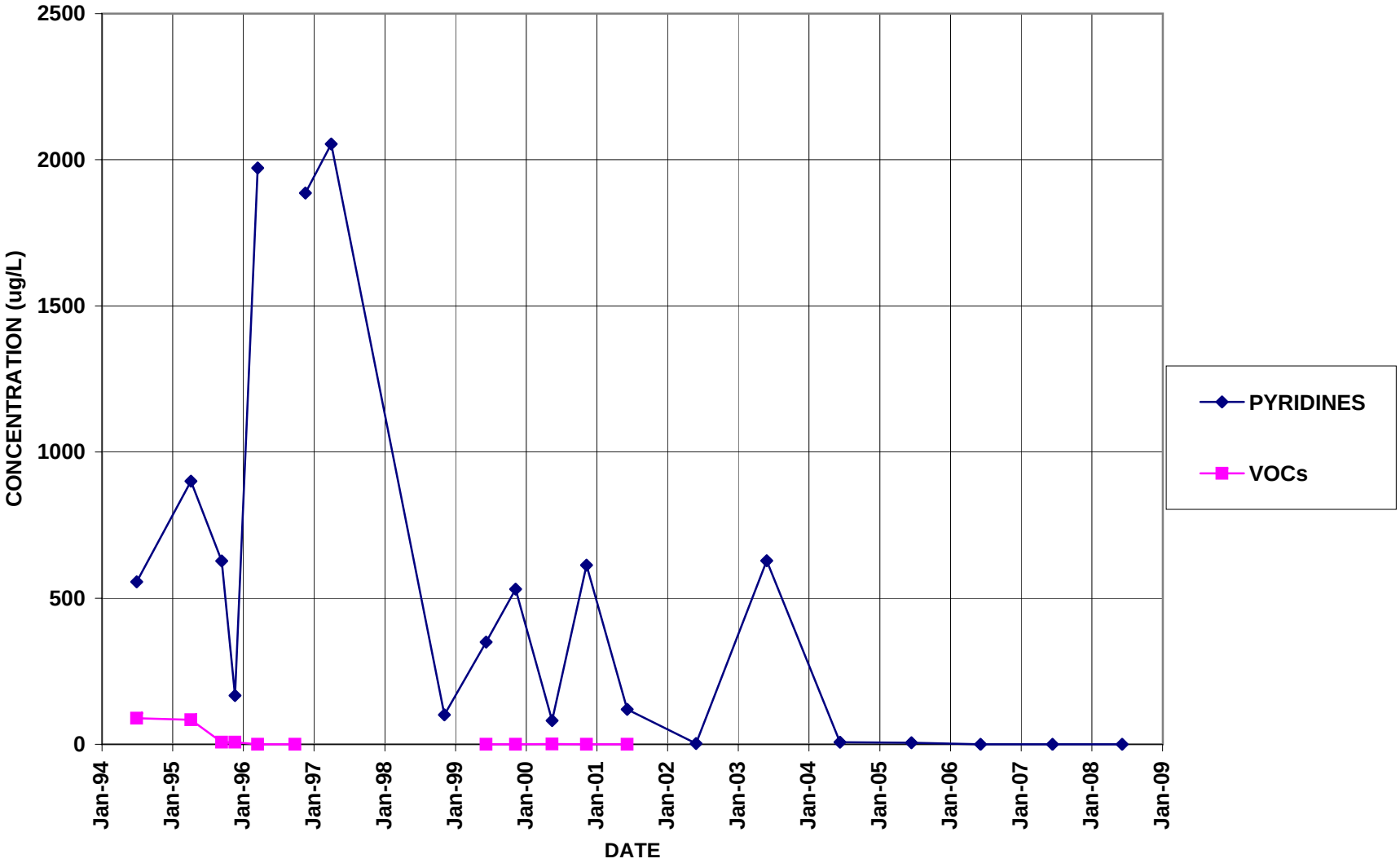
Prepared by: nmb
Reviewed by: jeb

NESS-E



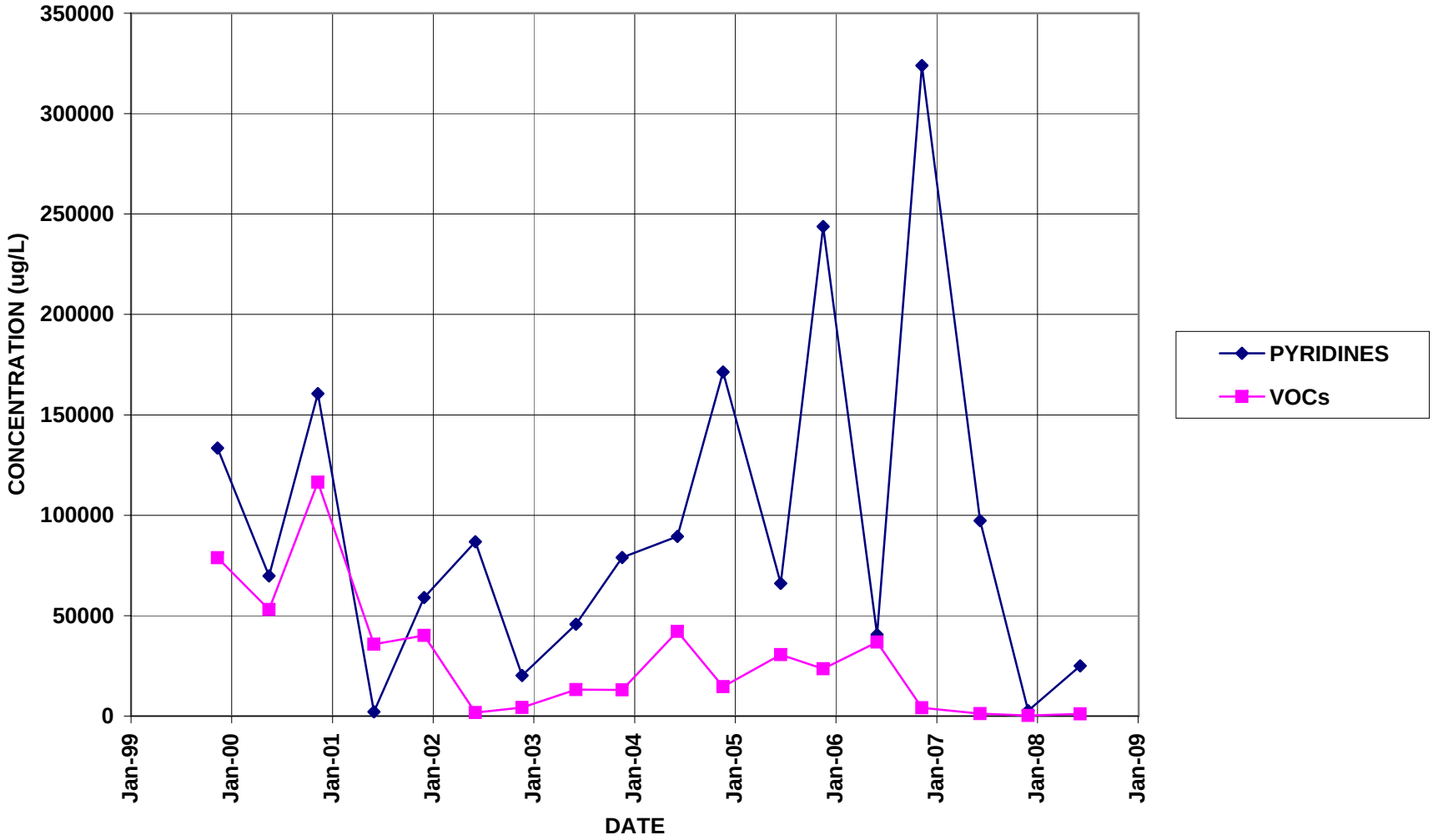
Prepared by: nmb
Reviewed by: jeb

NESS-W



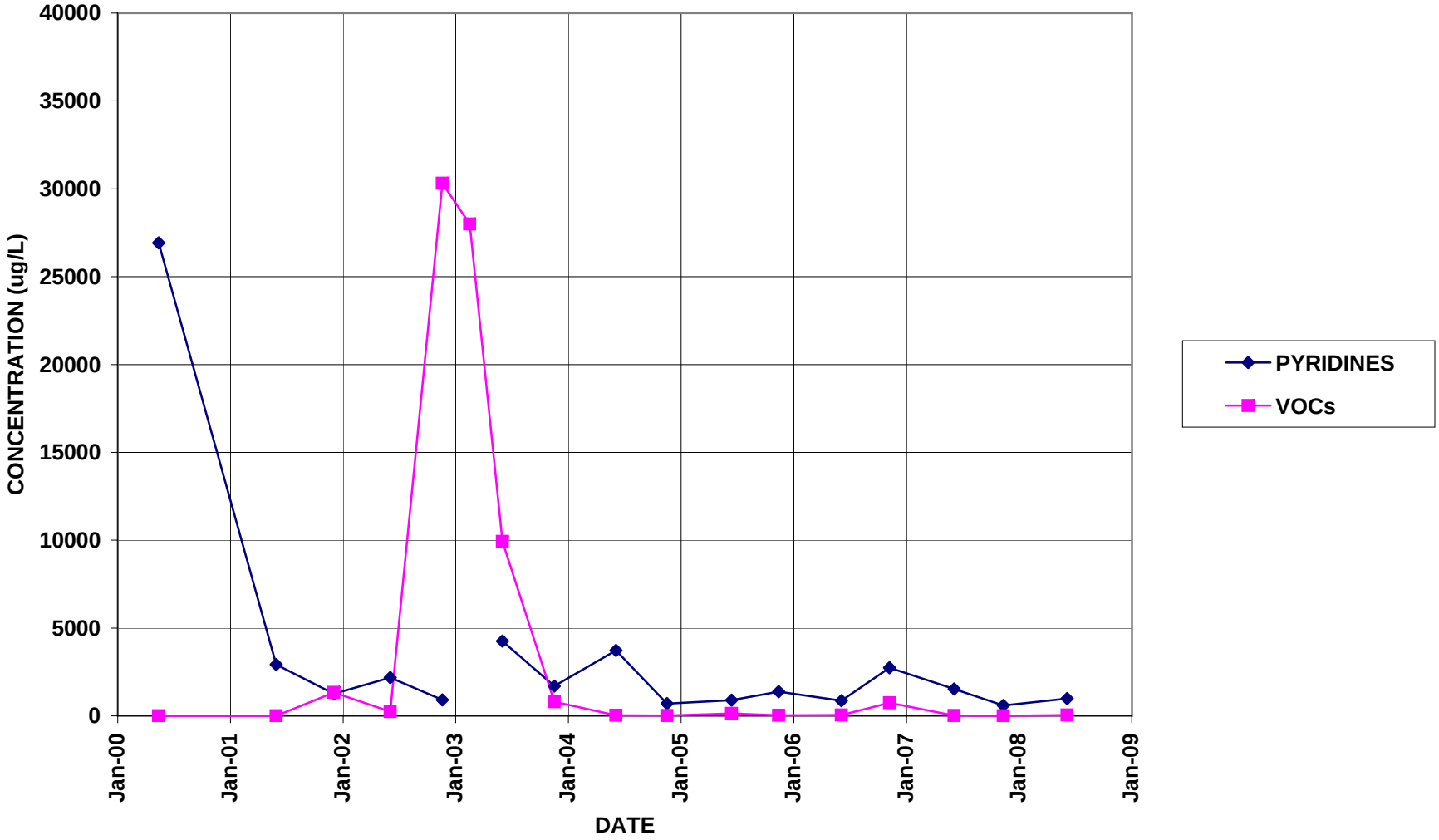
Prepared by: nmb
Reviewed by: jeb

PW10



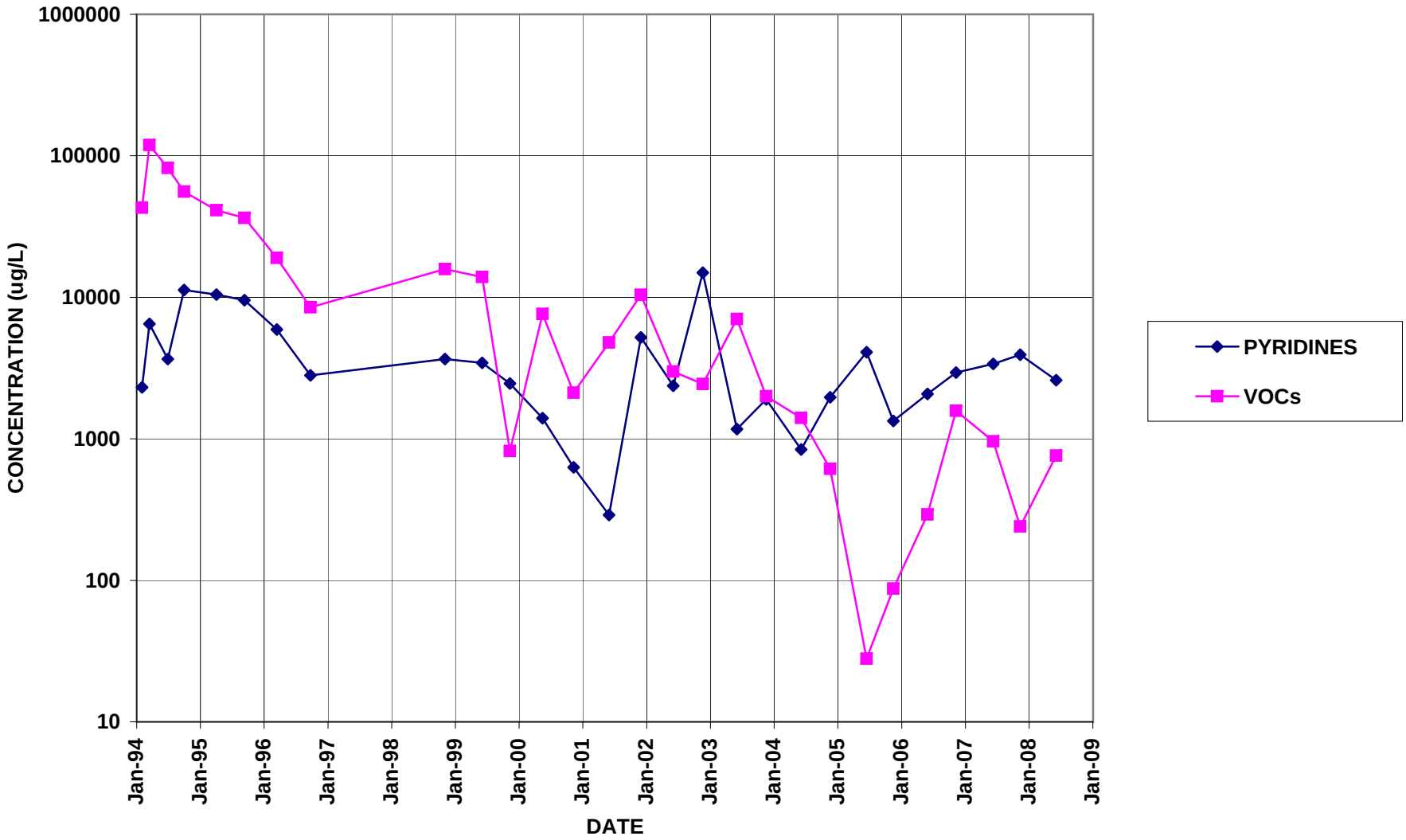
Prepared by: nmb
Reviewed by: jeb

PW11



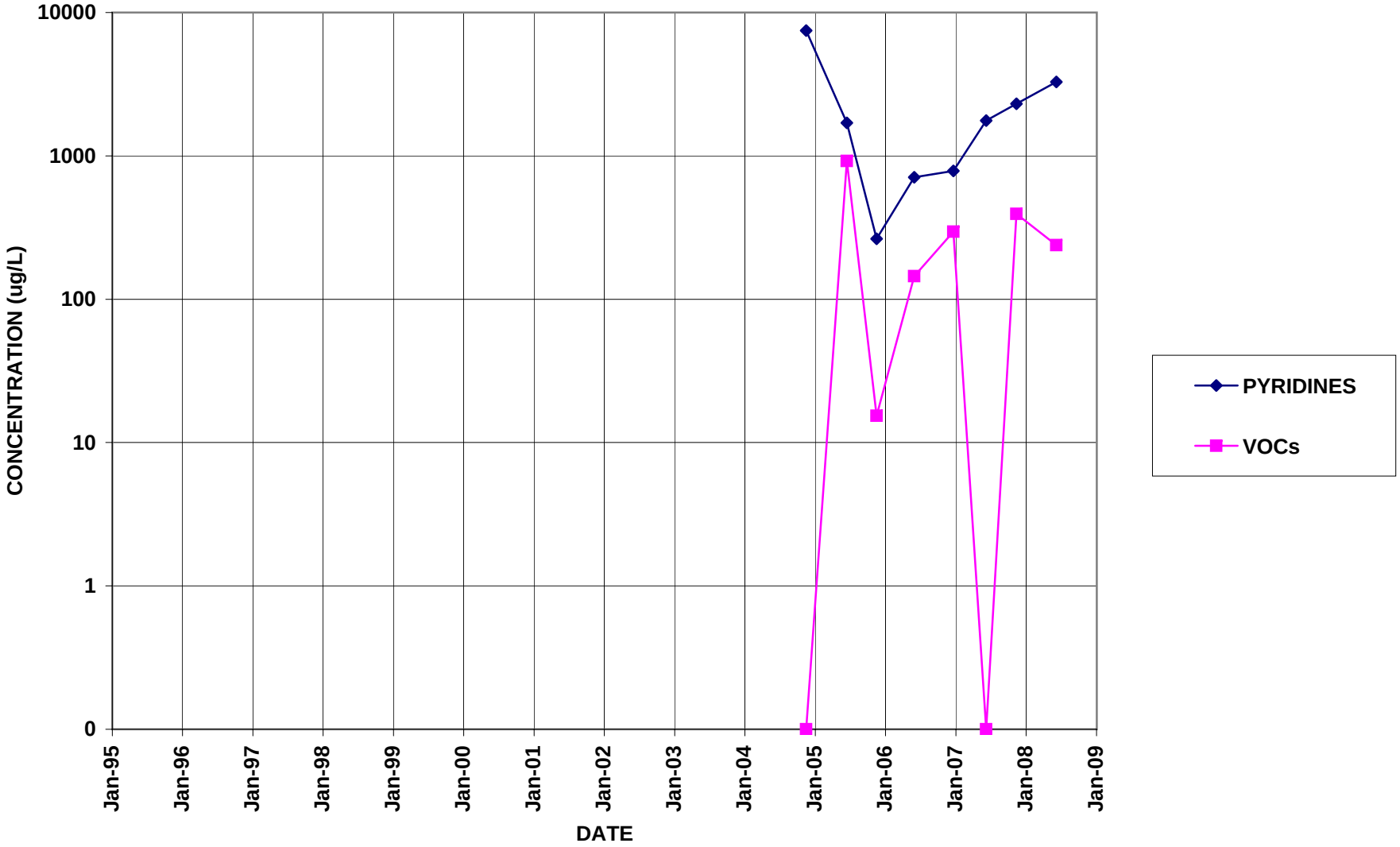
Prepared by: nmb
Reviewed by: jeb

PW12 (Formerly BR-101)



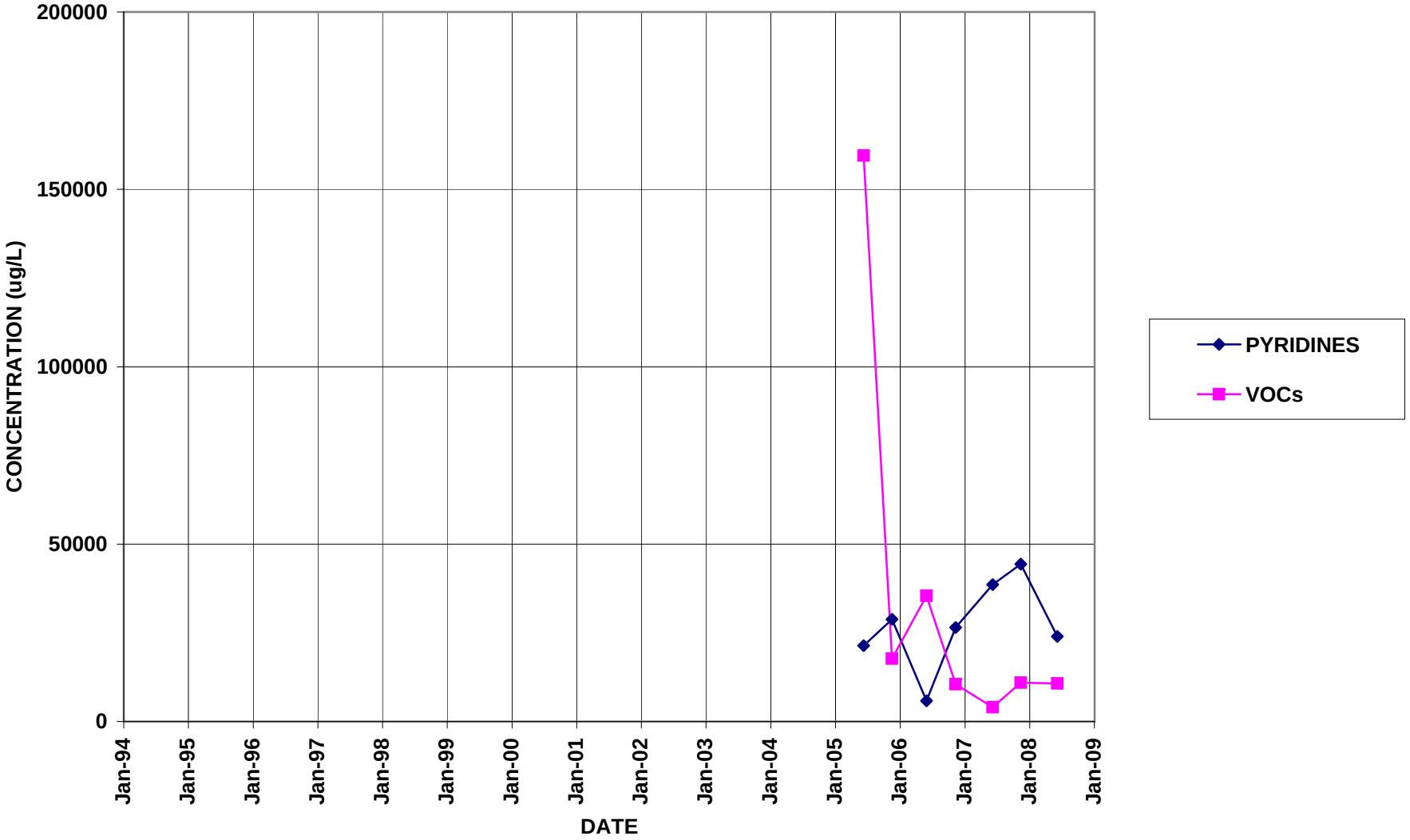
Prepared by: nmb
Reviewed by: jeb

PW13



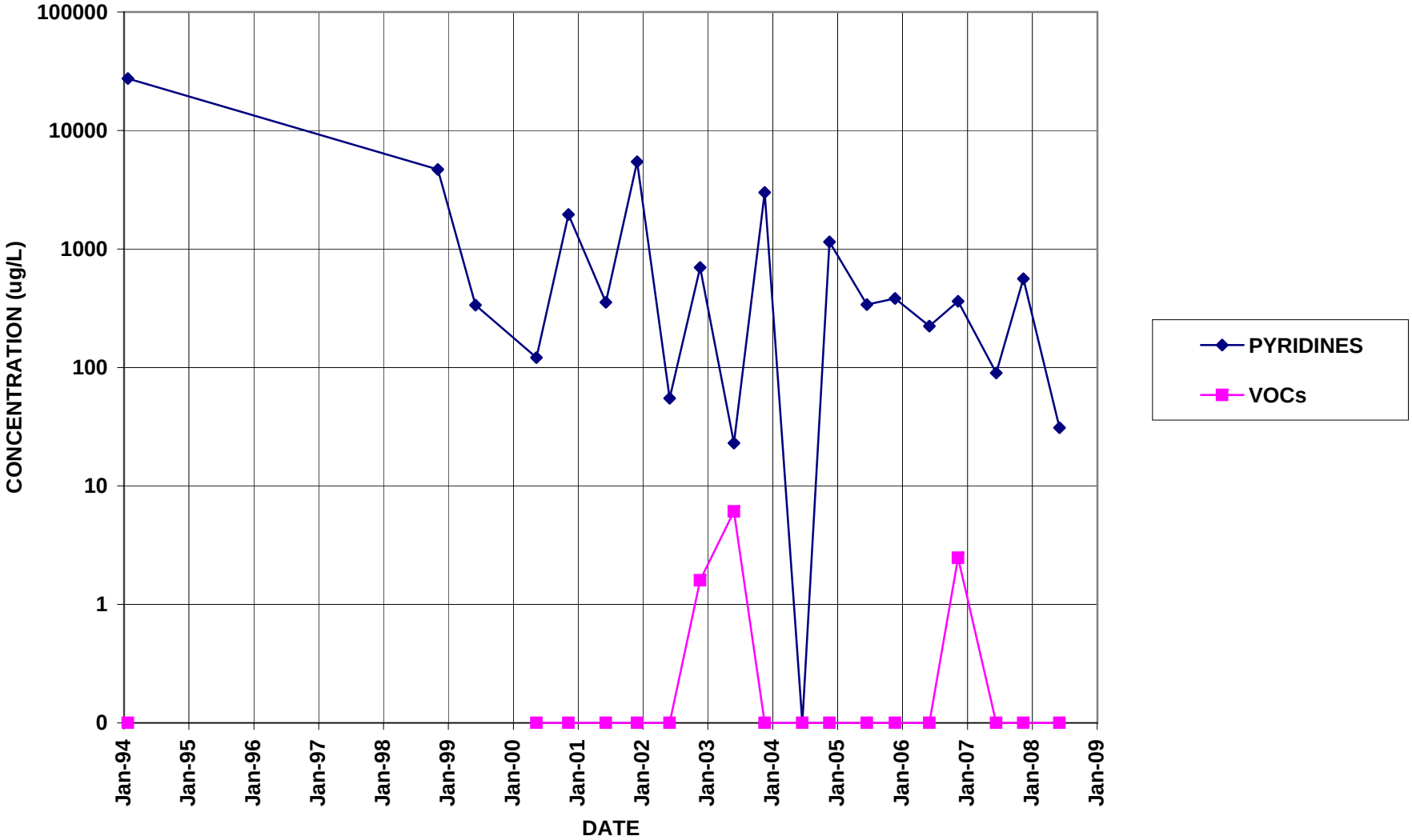
Prepared by: nmb
Reviewed by: jeb

PW14



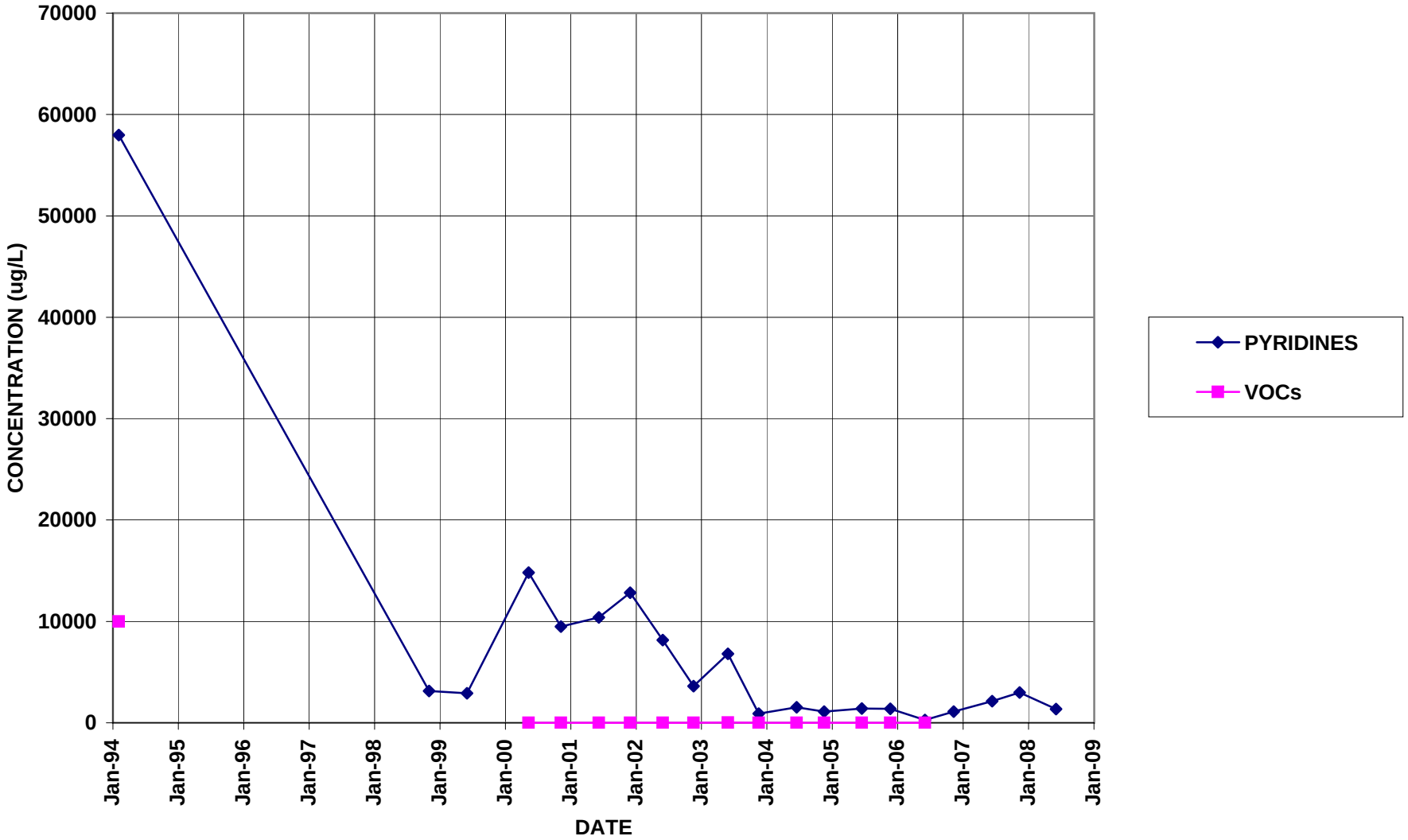
Prepared by: nmb
Reviewed by: jeb

PZ-101



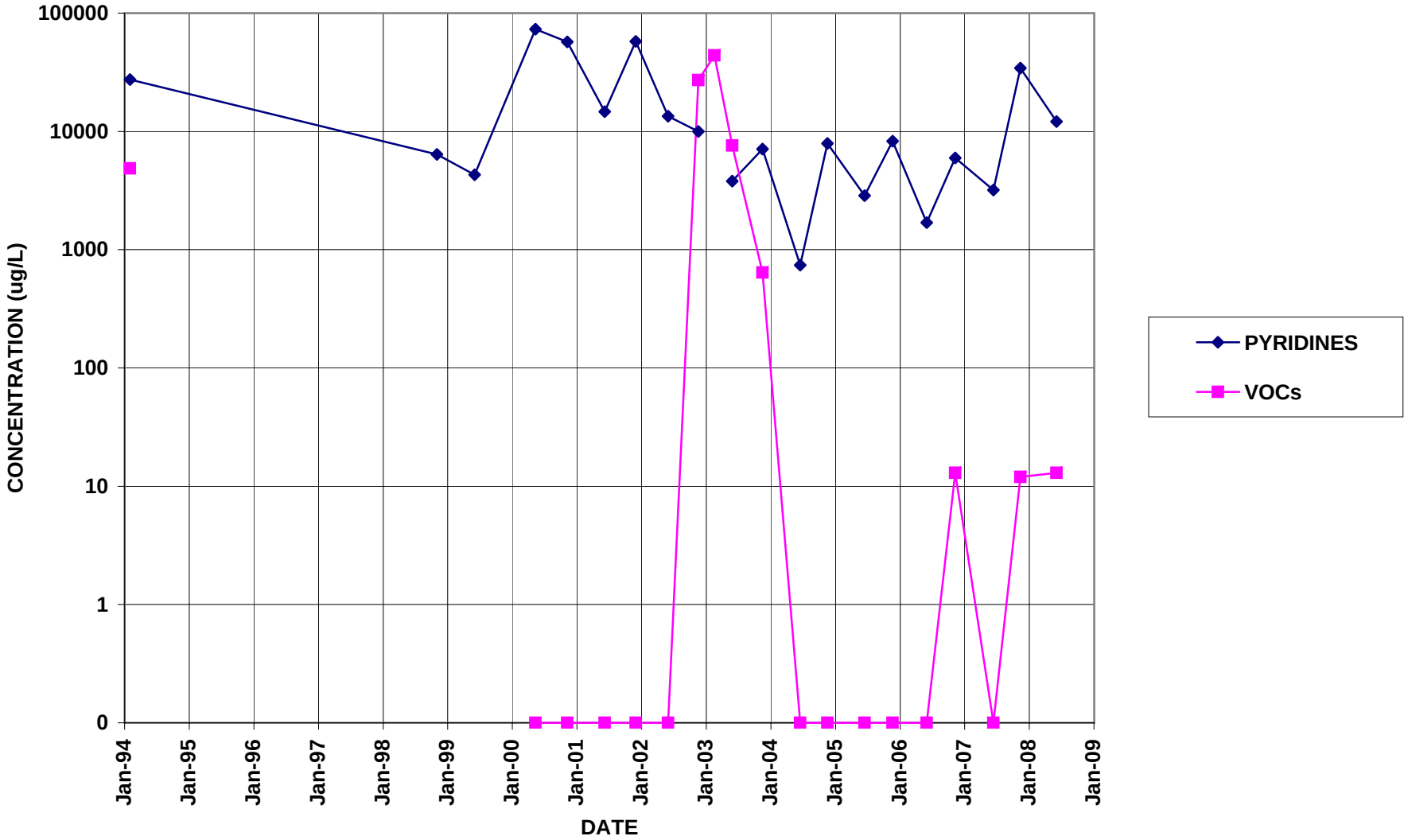
Prepared by: nmb
Reviewed by: jeb

PZ-102



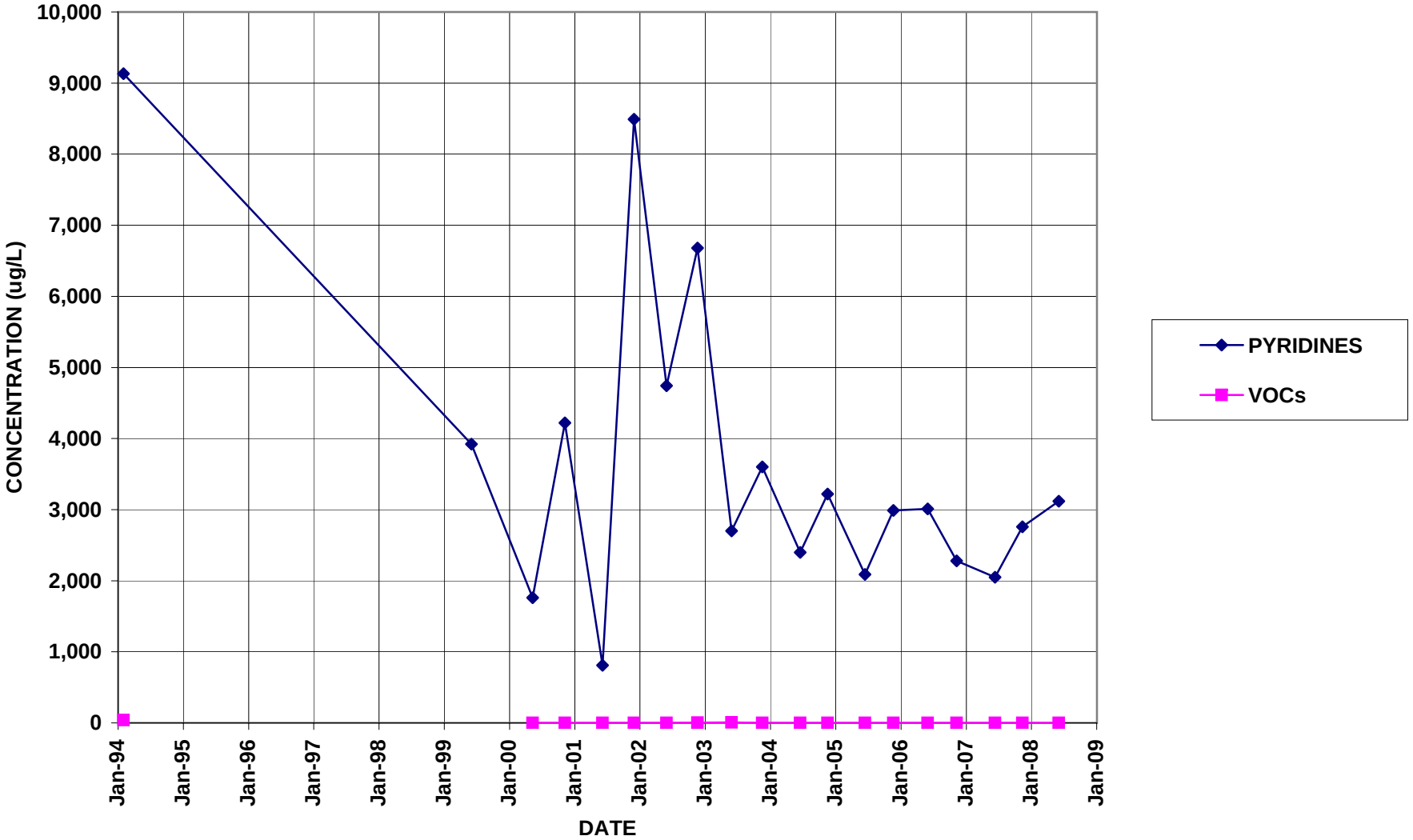
Prepared by: nmb
Reviewed by: jeb

PZ-103



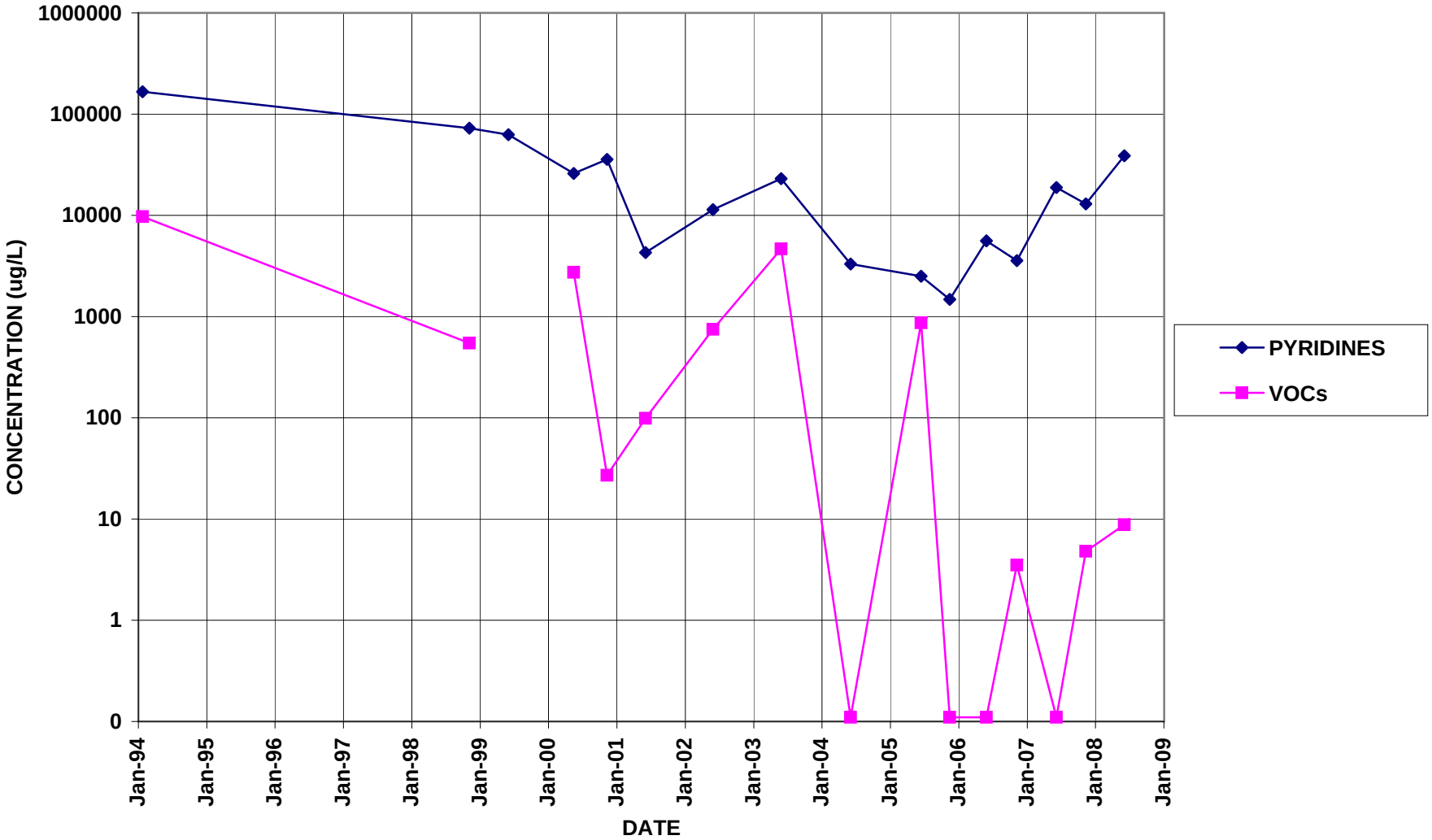
Prepared by: nmb
Reviewed by: jeb

PZ-104



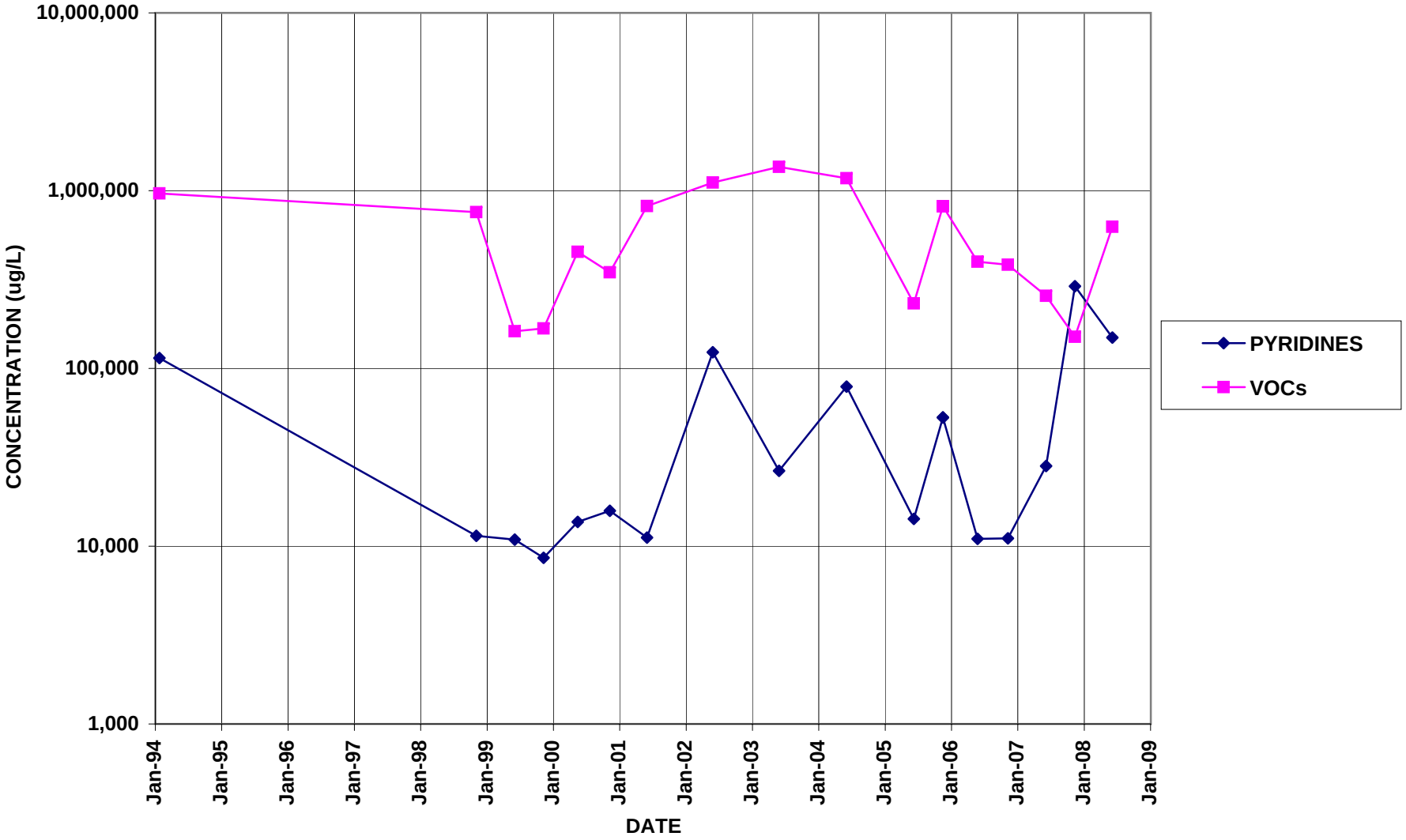
Prepared by: nmb
Reviewed by: jeb

PZ-105



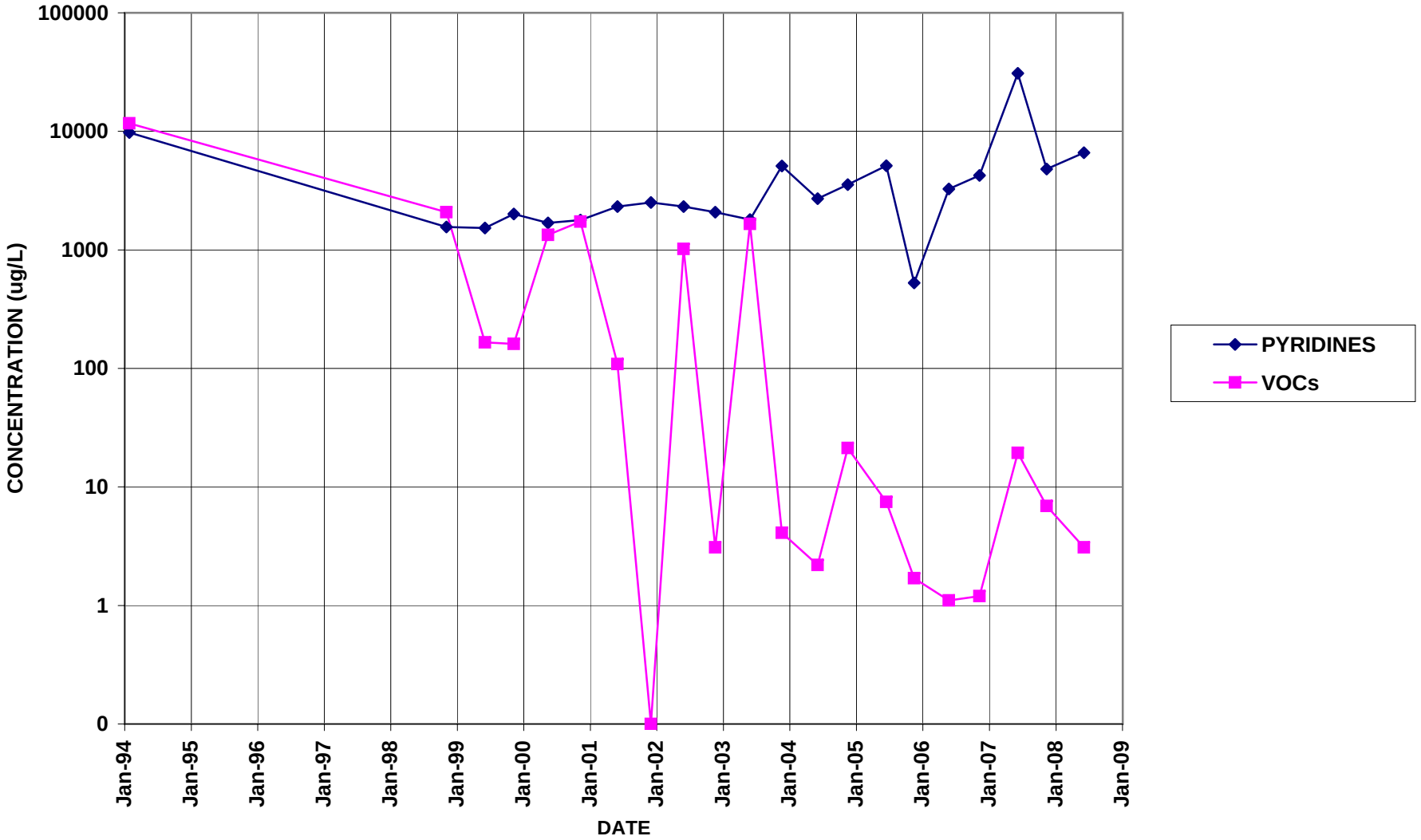
Prepared by: nmb
Reviewed by: jeb

PZ-106



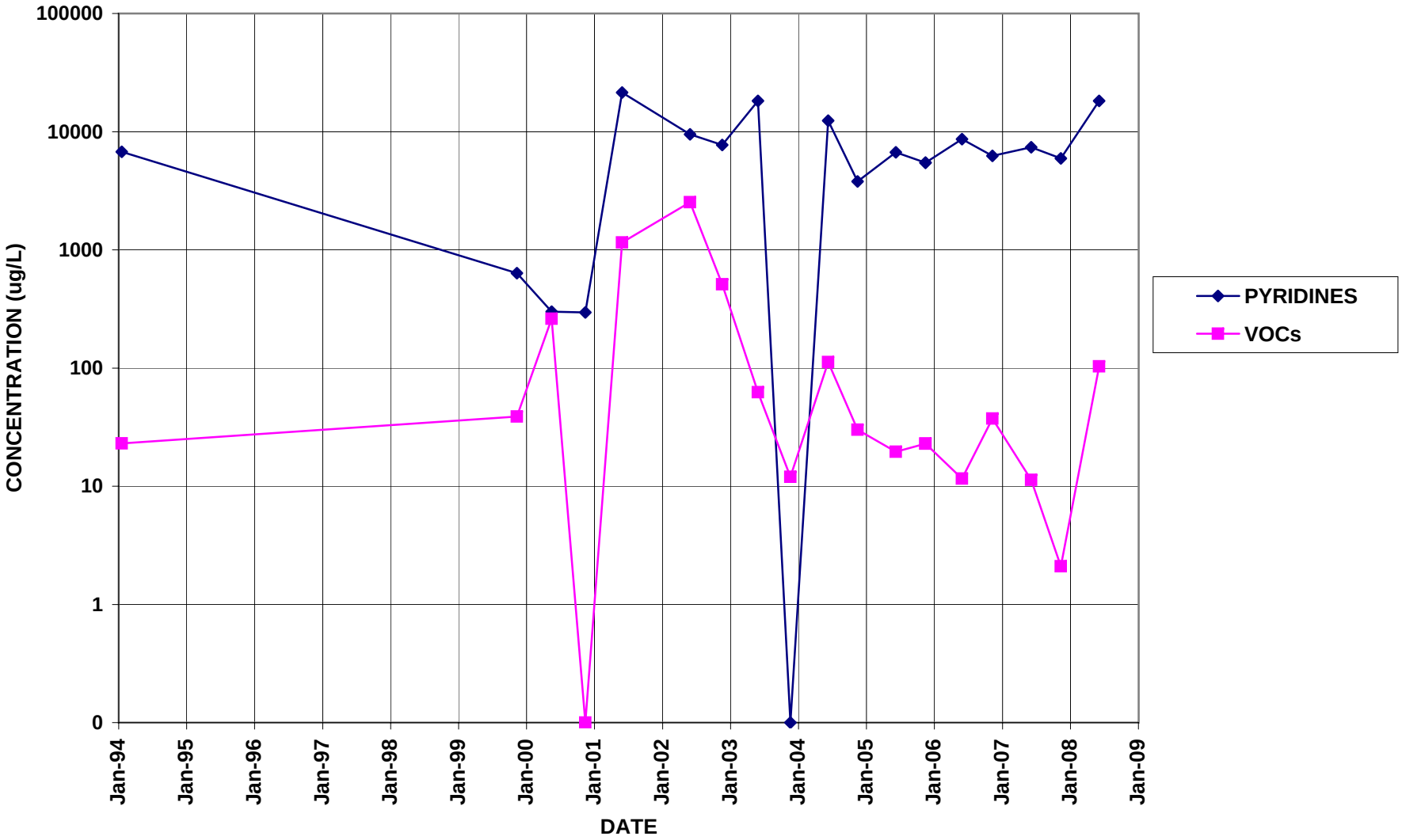
Prepared by: nmb
Reviewed by: jeb

PZ-107



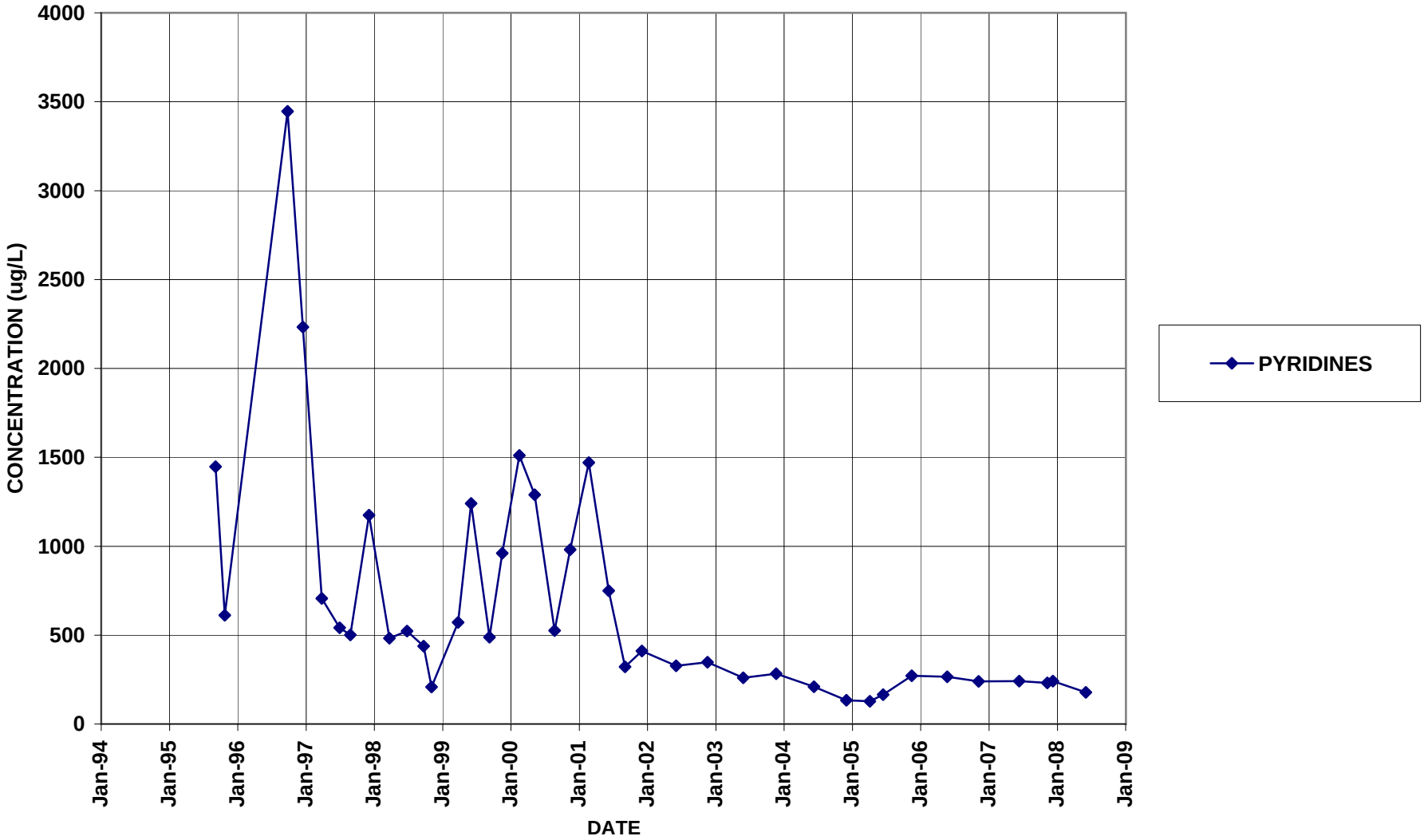
Prepared by: nmb
Reviewed by: jeb

S-3



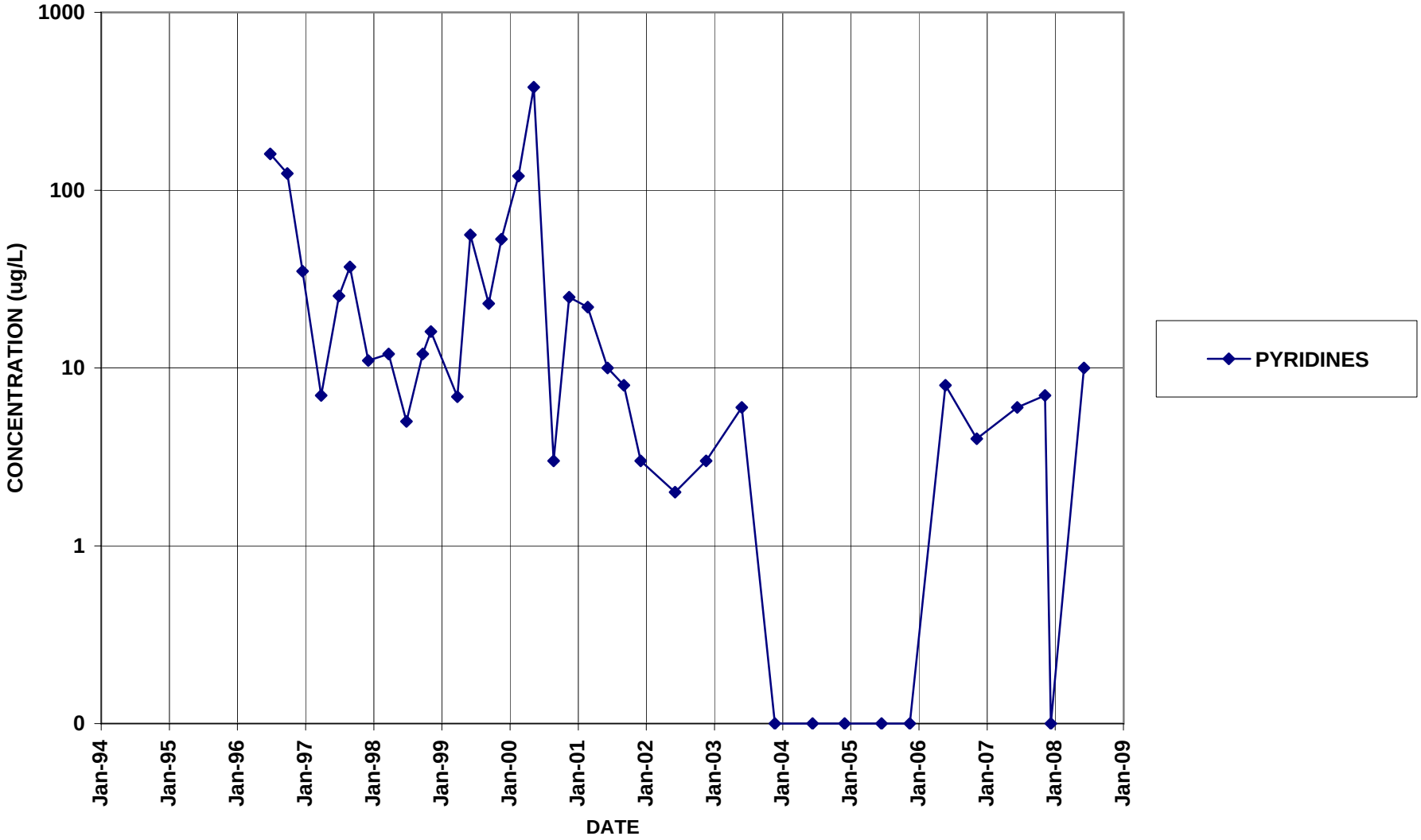
Prepared by: nmb
Reviewed by: jeb

QS-4 (QUARRY SEEP)



Prepared by: nmb
Reviewed by: jeb

QO-2 (QUARRY OUTFALL)



Prepared by: nmb
Reviewed by: jeb