MACTEC

11 October 2023

Mr. Joshuah Klier
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 8
6274 East Avon-Lima Road
Avon, New York 14414-9519

Re: Spring 2023 Monitoring Report Arch Chemicals (Site #828018a – former Olin Chemicals Group), 100 McKee Rd., Rochester, NY

Dear Mr. Klier:

On behalf of Arch Chemicals, Inc. (Arch), MACTEC Engineering and Geology, P.C. (MACTEC) submits the attached Spring 2023 Monitoring Report for the Arch Chemicals Site in Rochester, New York. The report describes the results of the semi-annual groundwater and surface water monitoring completed in May 2023 as part of Arch's on-going monitoring program at the site. An electronic data deliverable (EDD) of the analytical results will be provided to the New York State Department of Environmental Conservation in a separate online submittal.

If you have any questions regarding this report, please call me at (207) 712-8020 or by email at nelson.breton@wsp.com.

Sincerely,
MACTEC Engineering and Geology, P.C

Nelson Breton
Project Manager

encl.

cc : Christopher Budd, NYSDOH – Albany
Jean Robert Jean, USEPA Region II
Warner Golden, Arch
Matt Dillon, Arch
Luke Ferruzza, Arch
Nelson Breton, MACTEC
Charles Staples, MACTEC
Julie Ricardi, MACTEC

Arch Chemicals, Inc.

Rochester, New York (Site #828018a)

Spring 2023 Monitoring Report
Report #70

October 2023

SURFACE WATER AND GROUNDWATER MONITORING PROGRAM
SPRING 2023 MONITORING REPORT

Arch Chemicals
Rochester Plant Site
Rochester, New York

Arch Chemicals, Inc.

October 2023

SURFACE WATER AND GROUNDWATER MONITORING PROGRAM
SPRING 2023 MONITORING REPORT

ARCH CHEMICALS
ROCHESTER PLANT SITE
ROCHESTER, NEW YORK

Prepared by

MACTEC Engineering & Geology, Inc.
Portland, Maine

for

ARCH CHEMICALS, INC.

October 2023

3616236244

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EXECUTIVE SUMMARY

This monitoring report presents the results of an ongoing groundwater and surface water monitoring program being conducted by Arch Chemicals at its Rochester, New York, manufacturing facility. Arch Chemicals, Inc., (formerly the Lonza Specialty Ingredients division of Lonza) is an affiliate of Arxada, a global chemicals supplier for microbial control solutions and specialty products solutions that is headquartered in Basel, Switzerland.

During this monitoring event conducted in May 2023, samples from a total of 39 groundwater monitoring or pumping wells and four locations associated with the Dolomite Products Quarry seep and outfall at the Erie Canal were collected by Matrix Environmental Technologies Inc., of Orchard Park, New York, and analyzed by Paradigm Environmental Services, Inc., of Rochester, New York.

As in prior reports, monitoring results were compared with previous average concentrations at each sampling location. Eighteen of the 39 groundwater or pumping wells sampled for chloropyridines had contaminant concentrations that were above their respective 5-year prior averages. Fifteen of the 39 wells sampled for volatile organic compounds had concentrations above their 5-year prior averages.

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), an outfall downstream of the quarry ditch where water discharges into the Erie Barge Canal (QO-2), and the surface water in the canal approximately 100-feet downstream of the QO-2 outfall (QO-2S1). The total concentration of chloropyridines in quarry seep QS-4 was 21 micrograms per liter (µg/L), less than the prior 5-year average of 66 µg/L. Chloropyridines were not detected in the sample at location QD-1 where the quarry dewatering discharge enters the ditch, the ditch outfall sample at location QO-2, or in canal water at sample location QO-2S1.

On-site monitoring wells were checked for the presence of floating (or light) non-aqueous phase liquids (LNAPL) for the Spring 2023 sampling event. LNAPL was not observed in any of these wells.

During the period December 2022 through May 2023, the on-site groundwater extraction system pumped approximately 5.8 million gallons of groundwater to the on-site treatment system, containing an estimated 1,500 pounds of chloropyridines and 8.1 pounds of target volatile organic compounds.

A pilot test in groundwater treatment and groundwater monitoring for horizontal well HW-1 was initiated on July 10, 2023, and is expected to extend into October 2023.

The next regular monitoring event will occur in November 2023 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 2023 sampling event included the collection and analysis of groundwater, surface water, and seep samples from a total of 43 off-site and on-site locations. Samples were collected from 5 May through 12 May 2023 for analysis of selected chloropyridines and volatile organic compounds (VOCs).

This report presents the results of the Spring 2023 monitoring event.

2.0 SAMPLE COLLECTION AND ANALYSIS

2.1 GROUNDWATER

Groundwater samples were collected from off-site wells and on-site wells 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 personnel from Matrix Environmental Technologies Inc., (Matrix) and transported to the analytical laboratories of Paradigm Environmental Services, Inc. (Paradigm) in Rochester, New York for analysis. Table 1 lists the wells that were sampled and the requested analyses, and the sampling locations are shown on Figures 1 and 2.

The Matrix Field Report, which includes groundwater sampling data sheets, is provided in Appendix A.

Groundwater was collected from most of the wells following the low flow/low stress purging technique using bladder or peristaltic pumps. Samples from active pumping wells were collected from the discharge lines.

Groundwater piezometric elevations were measured on 4 May 2023. Piezometric contours were constructed for each water-bearing zone (overburden, bedrock, and deep bedrock) and are presented on Figures 3, 4, and 5, respectively.

On-site monitoring wells were checked for the presence of LNAPL for the Spring 2023 event. LNAPL was not observed in any of the wells.

2.2 SURFACE WATER

Surface water and quarry seep samples were collected as part of the ongoing 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 outfall 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 Matrix on 12 May 2023. All quarry-related samples were analyzed for selected chloropyridines and pyridine. The quarry locations sampled during the Spring 2023 event are shown on Figure 7.

2.3 ANALYTICAL PROCEDURES

Samples were analyzed for selected chloropyridines and pyridine (collectively referred to as chloropyridines) by USEPA SW-846 Method 8270D and for TCL VOCs by USEPA SW-846 Method 8260C. The reporting limits for the chloropyridines and VOCs are approximately 10 micrograms per liter (µg/L) and 2 to 20 µg/L, respectively, for undiluted samples.

2.4 QUALITY CONTROL

Laboratory analytical results were reviewed and qualified following USEPA "National Functional Guidelines for Organic Superfund Methods Data Review", November 2020, using professional judgment and guidance from USEPA Region II SOPs No. HW-24 Revision 4, October 2014, and No. HW-22 Revision 5, December 2010. Analytical results were evaluated for the following parameters:

* Collection and Preservation
* Holding Times
  Surrogate Recoveries
* Blank Contamination
* Duplicates
  Laboratory Control Samples (LCS)
  Matrix Spike/Matrix Spike Duplicates (MS/MSD)
  Miscellaneous

* - *all criteria were met for this parameter*

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

Surrogate Recoveries. Percent recoveries of one or more VOC surrogates in a subset of samples were less than the laboratory statistically derived control limits, indicating potential low biases. Positive and non-detected VOC results in the following affected samples were qualified estimated with potential low bias (J-/UJ): BR-106, BR-127, E-3, PW-13, PW15, PZ-103, and PZ-105.

Duplicates. No field duplicates were collected for the May 2023 sampling event. Precision was evaluated using MS/MSDs.

LCS. Due to unavailability of a secondary source standard containing a subset of target compounds, the VOC laboratory control samples associated with all field samples were not spiked with cyclohexane, acetic acid, and methylcyclohexane. Positive and non-detected results for cyclohexane, acetic acid, and methylcyclohexane in the affected samples were qualified estimated (J/UJ).

Percent recoveries of 1,4-dioxane (17 - 63), 2-butanone (61 - 69), 2-hexanone (62 - 69), and acetone (53 - 69) in laboratory control samples associated with multiple VOC samples in SDGs 231888, 231942, and 231998 were less than nominal control limits of 70 - 130, indicating potential low bias in associated samples. Nominal control limits were used in place of statistically derived laboratory control limits based on professional judgment. Results for 1,4-dioxane, 2-butanone, 2-hexanone, and acetone in the affected samples were qualified estimated (UJ) or estimated with potential low bias (J-).

Percent recoveries of 1,4-dioxane (29), 2-butanone (67), and 2-hexanone (67) in the LCS associated with VOC sample B17 were less than nominal control limits of 70 - 130, indicating potential low bias in sample B17. Nominal control limits were used in place of statistically derived laboratory control limits based on professional judgment. Reporting limits for 1,4-dioxane, 2-butanone, and 2-hexanone in sample B17 were qualified estimated (UJ).

The percent recovery of acetone (52) in the LCS associated with multiple VOC samples in SDG 231902 was less than nominal control limits of 70 - 130, indicating potential low bias in the associated samples. Nominal control limits were used in place of statistically derived laboratory control limits based on professional judgment. Reporting limits for acetone in the associated samples were qualified estimated (UJ).

Percent recoveries of 1,4-dioxane (43) and 2-hexanone (65) in the LCS associated with VOC sample BR-3 were less than nominal control limits of 70 - 130, indicating potential low bias in sample BR-3. Nominal control limits were used in place of statistically derived laboratory control limits based on professional judgment. Reporting limits for 1,4-dioxane and 2-hexanone in sample BR-3 were qualified estimated (UJ).

Percent recoveries of 1,4-dioxane (17), 2-butanone (69), and acetone (57) in laboratory control samples associated with multiple VOC samples in SDG 231973 were less than nominal control limits of 70 - 130, indicating potential low bias in associated samples. Nominal control limits were used in place of statistically derived laboratory control limits based on professional judgment. Results for 1,4-dioxane, 2-butanone, and acetone in the affected samples were qualified estimated (UJ) or estimated with potential low bias (J-).

Percent recovery of p-fluoroaniline (168) in the LCS associated with SVOC sample BR-105D was greater than nominal control limits of 50 - 140, indicating potential high bias for p-fluoroaniline in associated sample. Nominal control limits were used in place of statistically derived laboratory control limits based on professional judgment. The result for p-fluoroaniline in sample BR-105D was qualified estimated with potential high bias (J+).

Percent recoveries of multiple target compounds (13 – 40) in laboratory control samples associated with a subset of SVOC samples in SDGs 231888, 231902, 231942, 231973, and 232015 were less than nominal control limits of 50 - 140, indicating potential low bias in the associated samples. Nominal control limits were used in place of statistically derived laboratory control limits based on professional judgment. Positive and non-detected results

for 2-chloropyridine, 3-chloropyridine, 4-chloropyridine, and/or pyridine in the affected samples were qualified estimated (J-/UJ).

Percent recoveries of 2-chloropyridine (37), pyridine (25), and 4-chloropyridine (13) in the LCS associated with SVOC sample BR-105D were less than nominal control limits of 50 - 140, indicating potential low bias for pyridine in associated samples. Nominal control limits were used in place of statistically derived laboratory control limits based on professional judgment. Positive and non-detected results for 2-chloropyridine, pyridine, and 4-chloropyridine in the sample BR-105D were qualified estimated (J-/UJ).

MS/MSD. MS/MSD analyses were specified on the chain of custody forms for samples PZ104 and PW15 for both chloropyridines and VOCs, and QD-1 for chloropyridines only.

In the MS and MSD associated with VOC sample PZ104, percent recoveries of 2-butanone (63/61), 2-hexanone (69/66), and acetone (46/44) were less than the nominal control limits of 70 - 130, indicating a potential low bias. Reporting limits for the affected VOC analytes in sample PZ104 were qualified estimated (UJ).

In the MS and MSD associated with VOC sample PW15, percent recoveries of a subset of target compounds (38-69) were less than the nominal control limits of 70 - 130, indicating a potential low bias. Reporting limits for methylene chloride, bromomethane, acetone, 2-hexanone, and 2-butanone in sample PW15 were qualified estimated (UJ), and the detection of chloroform in sample PW15 was qualified estimated with potential low bias (J-).

In the MS and MSD associated with SVOC sample PZ104, percent recoveries of 3-chloropyridine (39/39), pyridine (27/26), and 4-chloropyridine (15/15) were less than the nominal control limits of 40 - 150, indicating a potential low bias. Reporting limits for the affected SVOC analytes in sample PZ104 were qualified estimated (UJ).

In the MS and MSD associated with SVOC sample QD-1, percent recoveries of a subset of parameters (12 - 37) were less than the nominal control limits of 40 - 150, indicating a potential low bias. Reporting limits for the affected SVOC analytes in sample QD-1 were qualified estimated (UJ).

Miscellaneous. Samples from a subset of wells were analyzed at dilutions due to high concentrations of volatile organic and/or semi-volatile organic target analytes. As a result, non-detections are reported at elevated reporting limits.

3.0 ANALYTICAL RESULTS

3.1 GROUNDWATER

The validated results from the Spring 2023 groundwater monitoring event are provided in Tables 2 and 3. Table 4 provides a comparison of the Spring 2023 analytical results for selected chloropyridines and VOCs to mean concentrations of the prior five years (Spring 2018 through Fall 2022). Concentration 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 23 of 24 of the on-site wells sampled in the Spring 2023 event. Concentrations of chloropyridines (sum of all chloropyridine and pyridine isomer concentrations) ranged from not detected in well B-15 to 320,000 µg/L in well BR-8. Nine 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 11 of 15 the off-site wells that were sampled in the Spring 2023 event. Concentrations of total chloropyridines ranged from not detected in BR-114, BR-117D, MW-114, and PZ-101 to 330,000 µg/L in well PZ-103. Samples from nine of the off-site wells were reported with total chloropyridine concentrations above their respective five-year prior means (see Table 4).

Concentration Contours. Chloropyridines 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. A notable increase in chloropyridines concentration was reported in wells BR-112D and BR-122D (see Figure 3 for BR-122D location). These deep bedrock wells appear to represent the core of the chloropyridine plume migration toward the Dolomite Quarry further west. The increased levels may represent a response to increases upgradient that were first observed in wells closer to the Site beginning in the Spring of 2021 (See Appendix B wells BR-106 and PZ-103).

3.1.2 SELECTED VOCS

On-Site. Selected VOCs were detected in 20 of the 24 on-site wells sampled for VOCs in the Spring 2023 event. Total concentrations of selected VOCs (sum of carbon tetrachloride, chlorobenzene, chloroform, methylene chloride, tetrachloroethene, and trichloroethene) ranged from not detected in wells B-15, BR-126, BR-5A, and MW-127 to 54,000 µg/L in PW17. Seven of the on-site wells contained total concentrations of selected VOCs above their respective five-year prior means (see Table 4).

In addition to the selected VOCs, other notable constituents detected in multiple on-site wells include:

1,2-dichlorobenzene (11 of 24)
1,3-dichlorobenzene (9 of 24)
1,4-dichlorobenzene (9 of 24)
benzene (15 of 24)
carbon disulfide (8 of 24)
cis-1,2-dichloroethene (7 of 24)
toluene (11 of 24), and
vinyl chloride (8 of 24).

Off-Site. Selected VOCs were detected in all nine of the off-site wells sampled for VOCs during the Spring 2023 event. Total concentrations of selected VOCs ranged from 1.8 µg/L in well BR-105D to 620 µg/L in well BR-106. All off-site wells except MW-106 contained total concentrations of selected VOCs greater than their respective 5-year prior means for VOCs (see Table 4).

In addition to the selected VOCs, other notable constituents detected in off-site wells include:

1,2-dichlorobenzene (in 5 out of 9 wells)
1,3-dichlorobenzene (3 of 9)
1,4-dichlorobenzene (3 of 9)
acetone (3 of 9)
benzene (6 of 9)
carbon disulfide (5 of 9)
cis-1,2-dichloroethene (2 of 7), and
toluene (3 of 9).

Concentration Contours. The distribution of selected VOCs in groundwater is shown as a set of concentration contours on Figure 9. These contours were developed using both overburden and bedrock groundwater data and are dashed where approximated using historical data. VOC distribution in groundwater is generally consistent with previous monitoring events with higher VOC concentrations representing the core of the plume in the area of monitoring well PW-17, a former pumping well, and PZ-106.

3.2 SURFACE WATER AND GROUNDWATER SEEP

Results from the Spring 2023 canal and quarry monitoring event are presented in Table 5 and are discussed below.

3.2.1 QUARRY

One quarry seep sample (QS-4) was collected during the Spring 2023 monitoring event. The sample contained total chloropyridines at a concentration of 21 µg/L, which is less than its prior five-year mean concentration of 66 µg/L.

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 discharge enters the ditch; and QO-2, the location where the ditch discharges to the canal. Chloropyridine compounds were not detected in either sample.

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

Table 6 presents a summary of the system flow measurements for the on-site extraction wells from December 2022 through May 2023. The total volume pumped during the six-month period was approximately 5.8 million gallons. Overall, with the exceptions of when the system was off-line for maintenance and the horizontal well (HW-1) pumping test, all extraction wells pumped reliably throughout the period, with total combined flow rates averaging between 19 and 26 gallons per minute (gpm) on a monthly basis.

The total well extraction volume (5.8 million gallons) for the 6-month period was greater than in Spring 2022 (4.1 million gallons) and Fall 2022 (4.8 million gallons) and more closely approximates total flow observed for the prior Fall 2021 period (5.8 million gallons). Total well extraction volumes observed during recent events represent a decrease in total flows since Spring 2018 and Spring 2019, when total flow volume from the same wells was 7.7 and 7.1 million gallons, respectively. Arch anticipates that operation of the HW-1 well, when placed into service, will result in improved mass removal and hydraulic containment of constituent plumes.

Table 7 provides a calculation of mass removal rates since the previous groundwater monitoring event (i.e., from December 2022 through May 2023). Arch estimates that approximately 8.1 pounds of target VOCs and 1,500 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. The estimated mass removal rate for the 6-month period covered by the Spring 2023 monitoring report is consistent with that observed for the Fall 2022 period during which 1,500 pounds of chloropyridine compounds were removed. Mass removal for both the Spring 2023 period and the previous Fall 2022 period represents an increase over that observed for the Spring 2022 period (740 pounds of chloropyridine compounds) and more closely approximates the mass removal rates for prior monitoring events (2,000 pounds in Spring 2021 and 1,400 pounds in Fall 2021).

5.0 OPTIMIZATION OF MONITORING AND EXTRACTION WELL NETWORK

Routine pump cleaning and maintenance were performed for all extraction wells in February 2023.

A 4-day constant rate pumping test for horizontal well HW-1 was completed in early November 2022. Data collected from this pumping test was used to support the plan for a pilot test for longer term extraction and treatment using granular activated carbon for horizontal well HW-1. The pilot test operations were initiated on July 10, 2023, and are expected to extend into October 2023. The six-well extraction system was shut down on 29 June 2023 to prepare for baseline measurements before the start of the pilot test and will remain offline thru the end of the pilot test. Updates on the progress of this test are being provided to the NYSDEC while the six-well system is offline. The pilot test is intended to support the design and installation of a permanent extraction and treatment system. Findings from the pilot test will be submitted to the NYSDEC in a separate report. Arch will work with the NYSDEC and seek approval for future modifications to the extraction well network.

6.0 PROCESS SEWER INSPECTIONS

Process sewer inspections include inspection of process trench drains and are completed annually in Area A, Area B, and Area C process areas in the main manufacturing building. Inspections were last completed in October 2022 (October 3, 18, and 26). These inspections are performed because, historically, process trench drains have been identified as potential sources of contaminant releases beneath the manufacturing areas. No findings were noted during these inspections.

7.0 NEXT MONITORING EVENT

The next regular monitoring event will occur in November 2023 and will include groundwater, surface water, and seep sampling.

Table 8 shows the 2023 monitoring program for the Arch Rochester site.

Figures

Legend

Property Owned by Arch

Monitoring Well

NOTES

1. Source - Topographic Quadrangle 7.5-Minute Series

N

0 250 500 Feet

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Prepared/Date: JAR 08/22/23	Checked/Date:NMB 09/13/2023

I-390

ERIE BARGE CANAL

HOWMET

BUFFALO RD. BUSINESS CENTER

MW-103/BR-103

MW-108/BR-108

ARCH

PZ-102

BR-111/BR-111D

BR-106/MW-106

PZ-103

MW-16

AID TO HOSPITALS

BR-126

BR-112A/BR-112D

MW-105/BR-105

MW-104/BR-104

BUFFALO ROAD

12-6

CUMBERLAND FARMS PETROLEUM TERMINAL

OW-105

MW-114/BR-114

NESS-W

NESS-E

BR-113/BR-113D

8-8

7-6

11-8

LEXINGTON

GENERAL RAIL SIGNAL CO.

HOWARD ROAD

9-6

RW-1

10-6

13-4

OW-102A

OW-103

Morey

DOLOMITE PRODUCTS QUARRY

BR-122D

PFAUDLER

BR-117/BR-117D

BR-121D (Abandoned)

BR-118/BR-118D

BR-123D

BR-116/BR-116D

I-390

ERIE BARGE CANAL

BR-120D (Abandoned)

BR-119D (Abandoned)

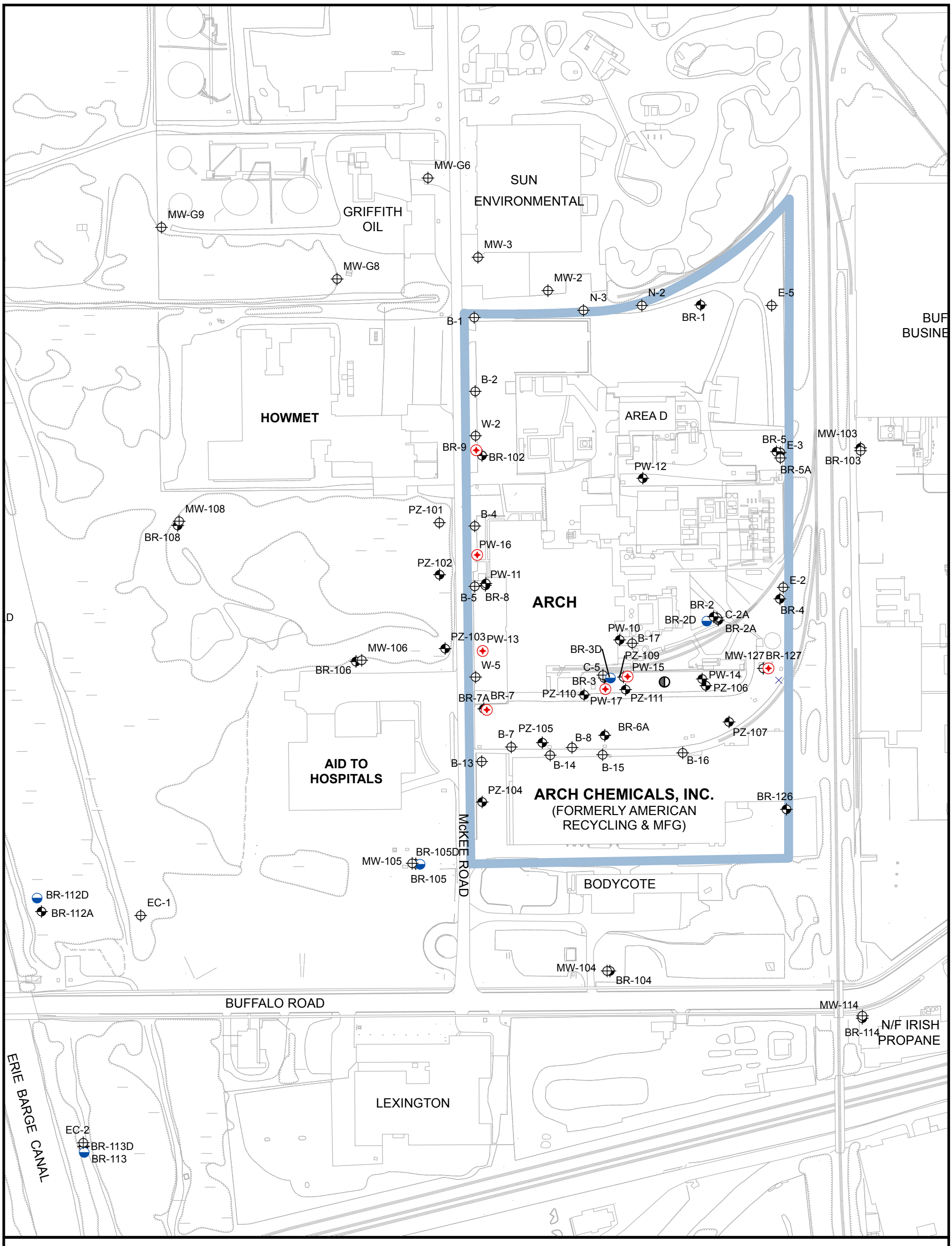
LETTINGTON DRIVE

BR-124D

Figure 1
Spring 2023
Off-Site Groundwater Monitoring Well Locations

Arch Chemicals, Inc.
Rochester, NY

Document: P:\Projects\Arch\Rochester\GIS\MapDocuments\Fall 2019\Arch_OffsiteWells_Fig1.mxd PDF: P:Project\Projects\Arch\Arch-Lonza-2019 GW Monitoring-361619607\4.0_Deliverables\4.1_Reports\Fall_2019\Figures\Figure_1_Off_Site_Loc.pdf 3/23/2020 15:23 PM ian.desjarlais



Legend

- Active Pumping Well
- Overburden Monitoring Well
- Bedrock Monitoring Well
- Deep Bedrock Monitoring Well
- Carbon Treatment Sample Location
- Property Owned by Arch

0 100 200 Feet

N

Figure 2
Spring 2023 Onsite Monitoring Well Locations

Arch Chemicals, Inc.
Rochester, NY

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Prepared/Date: JAR 08/22/23	Checked/Date: NMB 09/13/2023

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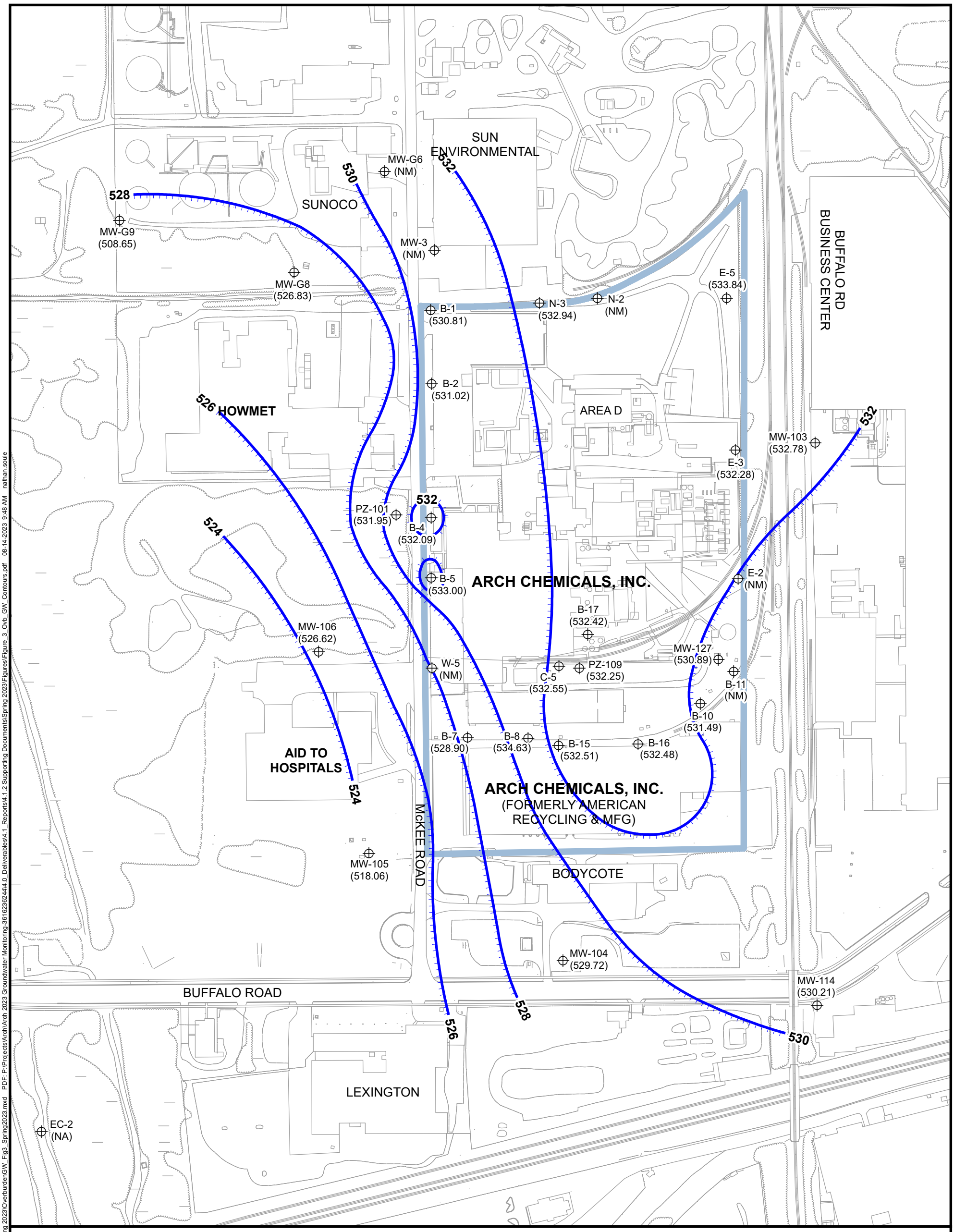

NOTES:
1. Water Levels Measured on May 4, 2023
2. Dashed Contours Reflect Uncertainty
3. NM = Not Measured

0 100 200 Feet

N

Legend

MW-104 (529.68) — Piezometric Elevation (Feet MSL) at Well or Piezometer

Property Owned by Arch Chemicals, Inc.

Interpreted Groundwater Flow Direction

528 — Overburden Piezometric Elevation Contour (Feet MSL)

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Figure 3
Spring 2023
Overburden Groundwater
Interpreted Piezometric Contours

Arch Chemicals, Inc.
Rochester, NY

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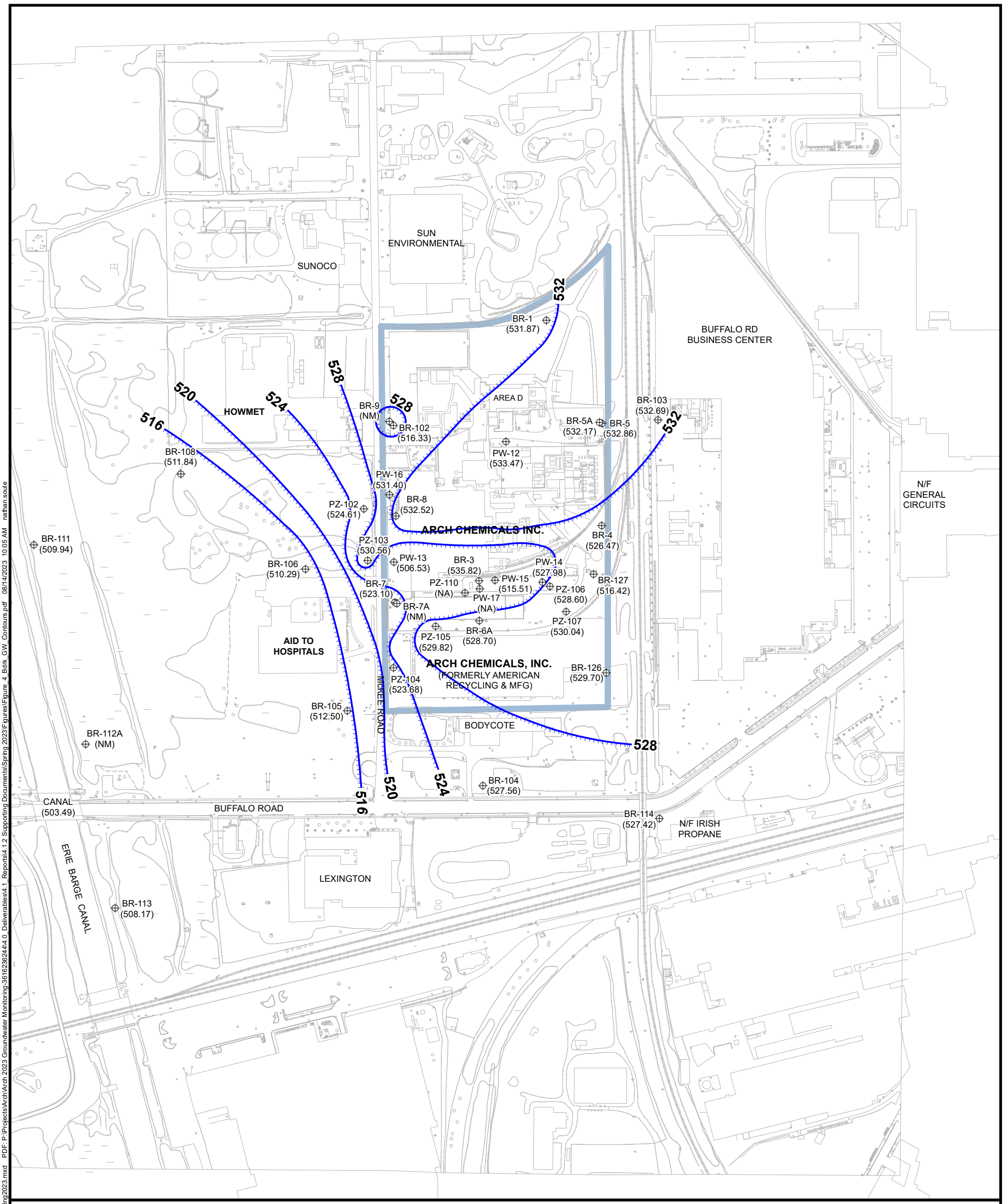

Legend

- BR-114 (526.63) — Piezometric Elevation (Feet MSL) at Well or Piezometer
- Interpreted Groundwater Flow Direction
- 516 — Bedrock Piezometric Elevation Contour (Feet MSL)
- Property Owned by Arch Chemicals, Inc.

0 150 300 Feet

N

NOTES:

1. Water Levels Measured on May 4, 2023
2. Dashed Contours Reflect Uncertainty

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Figure 4
Spring 2023
Bedrock Groundwater
Interpreted Piezometric Contours

Arch Chemicals, Inc.
Rochester, NY

Legend

- Bedrock Well ('D' Designates Deep Well)
- **500** Deep Bedrock Elevation Contour (MSL)
- Interpreted Groundwater Flow Direction
- Property Owned by Arch Chemicals, Inc.
- BR-116D (510.02) Piezometric Elevation (Feet MSL) at Deep Bedrock Well

NOTES:
1. Water Levels Measured on May 4, 2023
2. Dashed Contours Reflect Uncertainty
3. Wells BR-105D, BR2D and BR-3D not used in contouring

0 250 500 Feet

N

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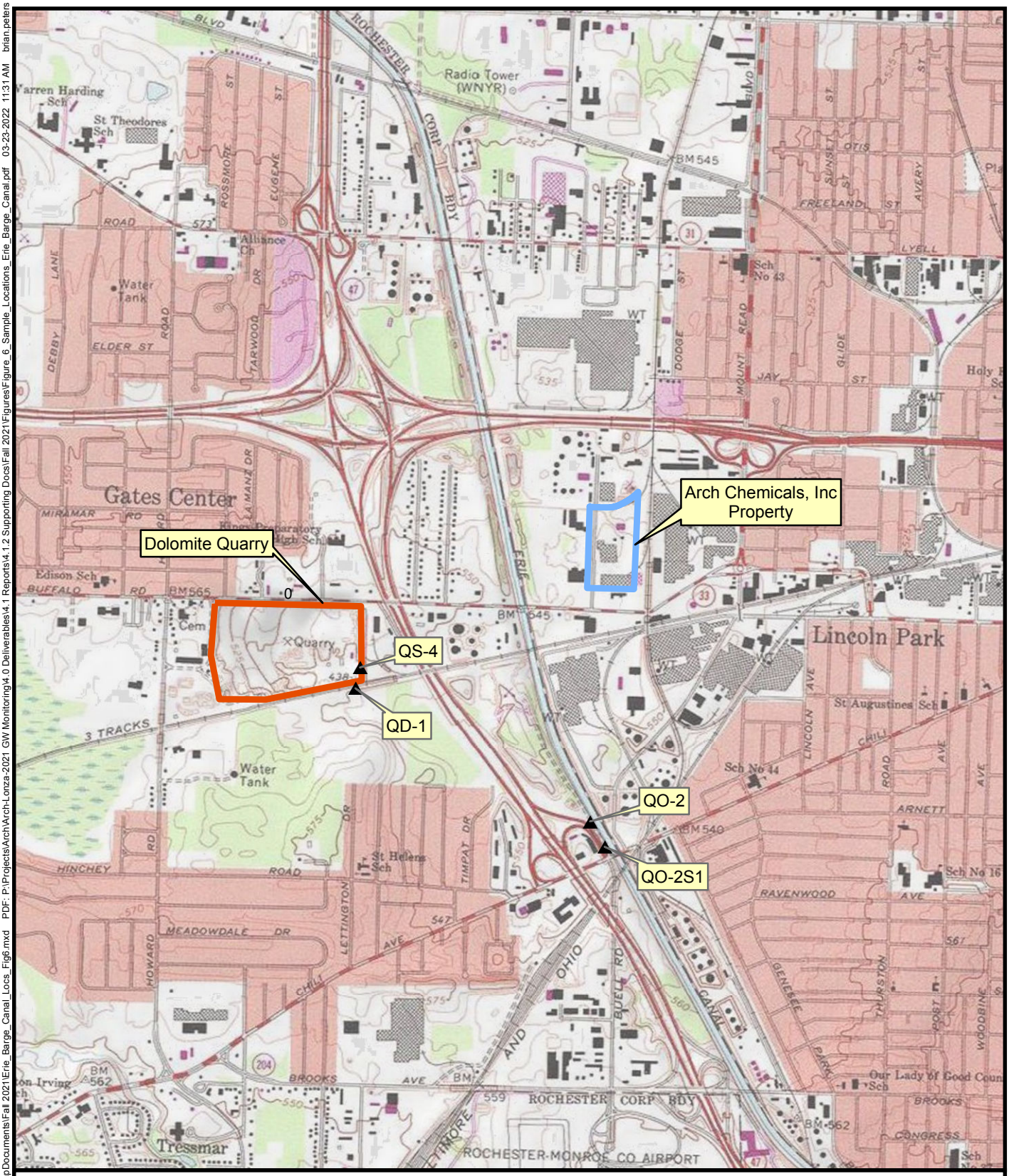
I-390
ERIE BARGE CANAL
HOWMET
ARCH
BUFFALO RD. BUSINESS CENTER
BR-2D (NM)
BR-3D (537.47)
AID TO HOSPITALS
BR-105D (505.58)
BR-112D (508.06)
BUFFALO ROAD
CUMBERLAND FARMS PETROLEUM TERMINAL
NESS-W (NM)
NESS-E (512.93)
LEXINGTON
BR-113D (508.33)
GENERAL RAIL SIGNAL CO.
DOLOMITE PRODUCTS QUARRY
BR-122D (504.76)
PFAUDLER
BR-117D (498.38)
BR-118D (502.58)
BR-123D (505.70)
BR-116D (507.14)
BR-124D (501.10)
LETTINGTON DRIVE
502
504
506
508

Figure 5
Spring 2023
Deep Bedrock Groundwater
Interpreted Piezometric Contours

Arch Chemicals, Inc.
Rochester, NY

Document: P:\Projects\Arch\Rochester\GIS\MapDocuments\Spring 2023\Deep_BedrockGW_Fig5_Spring2023.mxd PDF: P:\Projects\Arch\Arch 2023 Groundwater Monitoring-3616236244\4.0_Deliverables\4.1_Reports\4.1.2 Supporting Documents\Spring 2023\Figures\Figure_5_Deep_Bdrk_GW_Contours.pdf 08/11/2023 10:58 AM nathan.soule



Topographic map: Copyright:© 2013 National Geographic Society, i-cubed

0 1,000 2,000 Feet

N

Legend

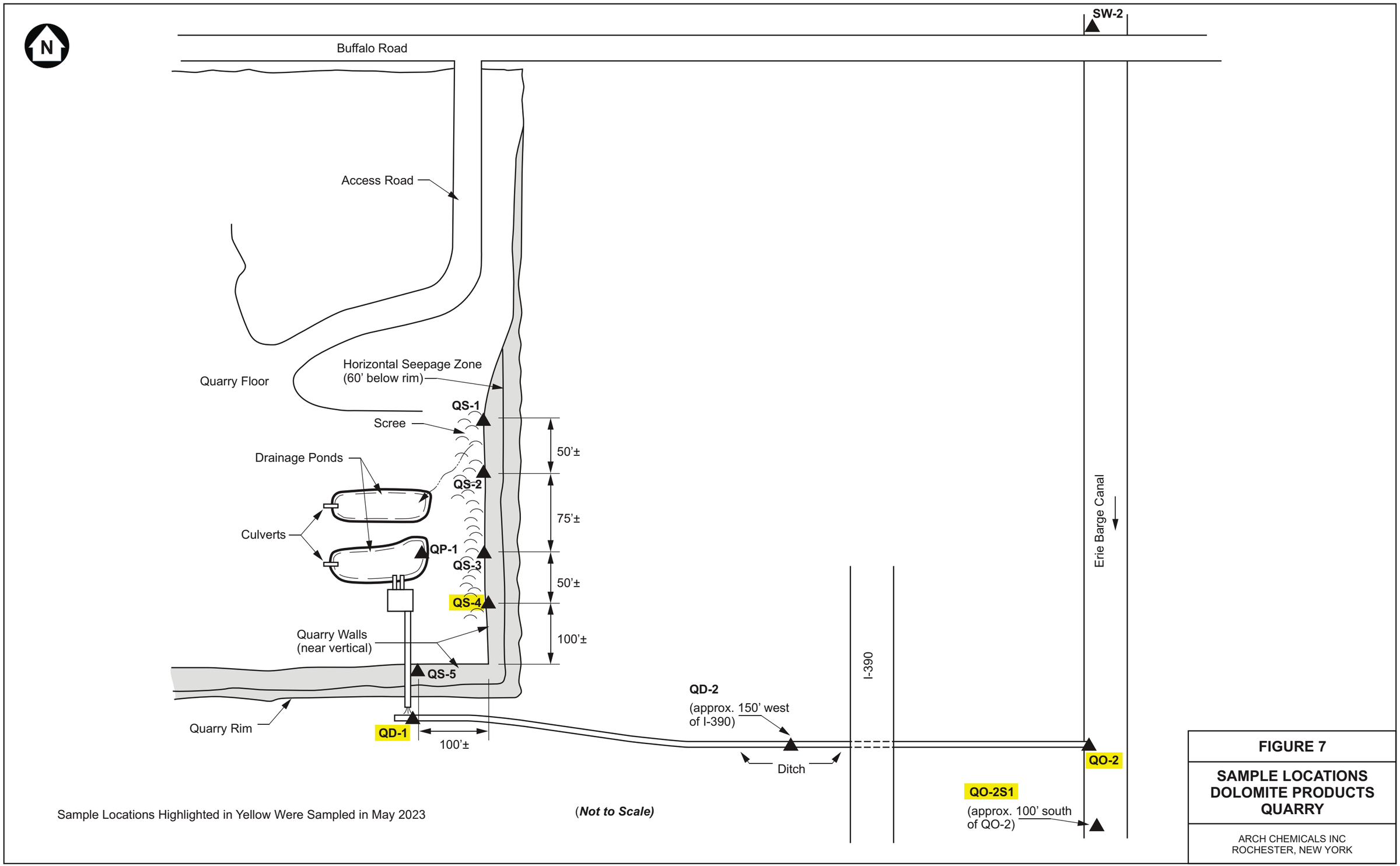
- Arch Chemicals, Inc. Property
- Dolomite Quarry Boundary
- ▲ Surface Water Sample Location

Figure 6
Sample Locations
Erie Barge Canal

MACTEC

Prepared/Date: BRP 03-23-22	Checked/Date: JAR 09-27-22

Arch Chemicals, Inc.
Rochester, NY



Sample Locations Highlighted in Yellow Were Sampled in May 2023

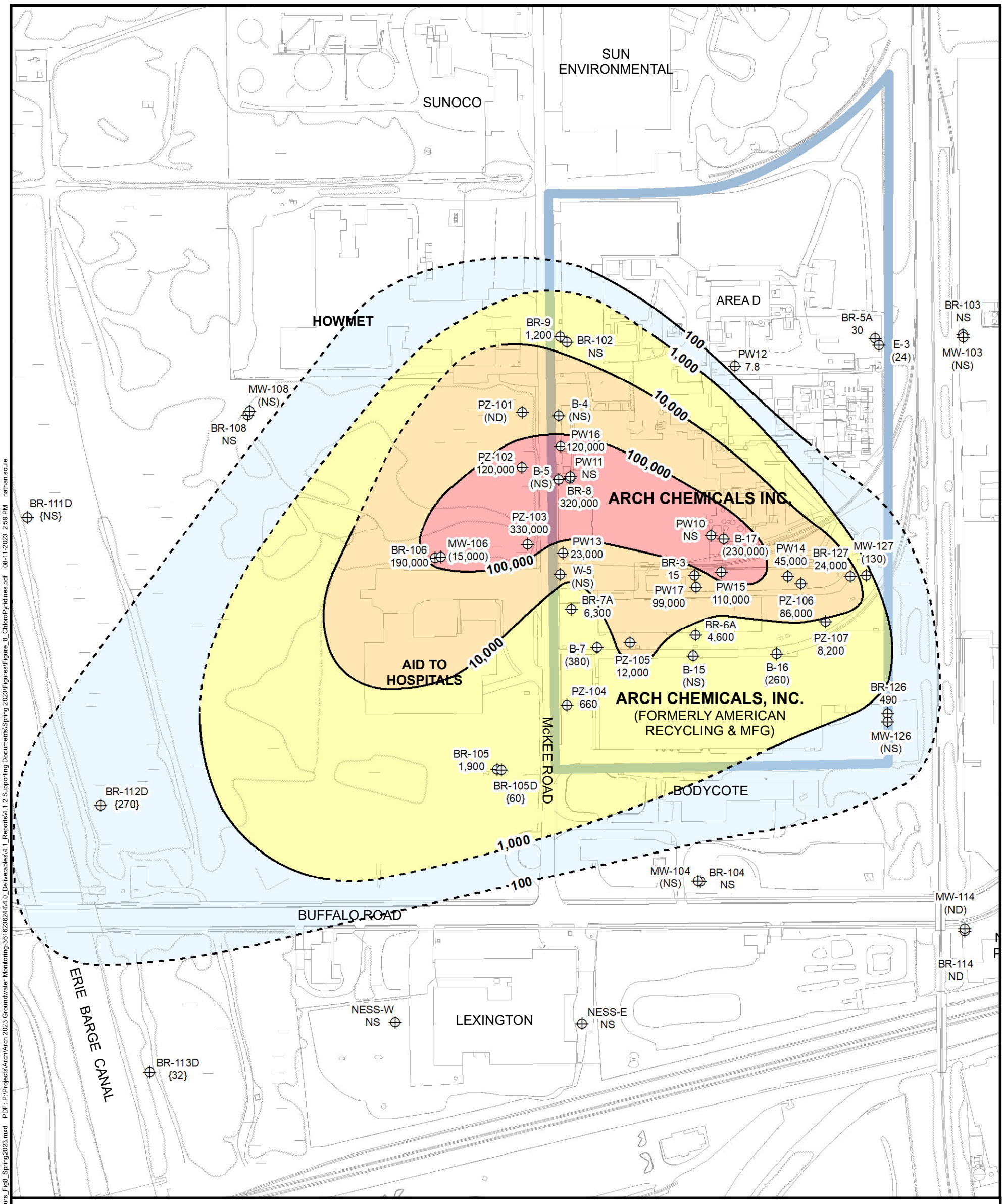
(***Not to Scale***)

FIGURE 7

SAMPLE LOCATIONS
DOLOMITE PRODUCTS
QUARRY

ARCH CHEMICALS INC
ROCHESTER, NEW YORK

W2004030a.cdr



Legend

MW-106 (94,000) — Monitoring Location with Concentration

Property Owned by Arch Chemicals, Inc.

100 — Chloropyridine Concentration Contour

{1000} Deep Bedrock Well
(1000) Overburden Well
1000 Bedrock Well
NS Not Sampled
ND Not Detected

0 100 200 Feet

N

MACTEC

NOTES:

1. Samples Collected May 2023
2. Selected chloropyridines consist of 2,6-dichloropyridine, 2-chloropyridine, 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.
5. Concentrations are in µg/L.

Prepared/Date: NES 08-11-23	Checked/Date: NMB 08-11-23

Figure 8
Spring 2023
Selected Chloropyridine Concentration Contours

Arch Chemicals, Inc.
Rochester, NY

SUN ENVIRONMENTAL

SUNOCO

BUFFALO RD BUSINESS CENTER

HOWMET

AREA D

BR-9 27

BR-102 NS

BR-5A ND

E-3 (5.7)

BR-103 NS

MW-103 (NS)

PW12 20

MW-108 (NS)

BR-108 NS

PZ-101 (2.8)

B-4 (NS)

10

100

PW16 280

PZ-102 250

PW11 NS

B-5 (NS)

BR-8 290

ARCH CHEMICALS, INC.

BR-111D {NS}

PZ-103 520

PW10 NS

B-17 (130)

PW13 87

BR-3 1.1

PW14 430

BR-127 240

MW-127 (ND)

BR-106 620

MW-106 (69)

W-5 (NS)

PW15 1,000

PW17 54,000

BR-7A 29

10,000

PZ-106 13,000

PZ-105 60

BR-6A 14

1,000

PZ-107 450

100

10

B-7 (4.8)

B-15 (ND)

B-9 (NS)

B-16 (1.3)

AID TO HOSPITALS

PZ-104 2.2

ARCH CHEMICALS, INC.
(FORMERLY AMERICAN RECYCLING & MFG)

BR-126 ND

MW-126 (NS)

McKEE ROAD

BR-105 15

BR-105D {1.8}

BR-112D {NS}

BODYCOTE

MW-104 (NS)

BR-104 NS

10

MW-114 (13)

BUFFALO ROAD

BR-114 2.6

ERIE BARGE CANAL

NESS-W NS

LEXINGTON

NESS-E NS

BR-113D {NS}

Legend

BR-127 89 — Monitoring Location with Concentration

100 — VOC Concentration Contour

Property Owned by Arch Chemicals, Inc.

{1000} Deep Bedrock Well
(1000) Overburden Well
1000 Bedrock Well
NS Not Sampled
ND Not Detected

0 100 200 Feet

N

MACTEC

NOTES:

1. Samples Collected May 2023
2. Select VOCs consist of Carbon tetrachloride, Methylene chloride Chloroform, TCE, PCE, and Chlorobenzene.
3. Concentration contours represented for Bedrock Wells and selected Overburden and Deep Bedrock Wells.
4. Dashed concentration contours represent inferences from historical analytical results.
5. Concentrations are in µg/L

Prepared/Date: NES 08/14/23	Checked/Date: NMB 08/14/23

Figure 9
Spring 2023
Selected Volatile Organic Compound Concentration Contours

Arch Chemicals, Inc.
Rochester, NY

Tables

TABLE 1
SPRING 2023 GROUNDWATER SAMPLING AND ANALYTICAL PROGRAM

ARCH ROCHESTER
ROCHESTER, NEW YORK

			ANALYSIS	PYRIDINES	VOCs
SITE / AREA	**WELL / POINT**	**DATE**	**QC TYPE**		
AID TO HOSPITALS	BR-106	5/11/2023	FS	X	X
	MW-106	5/10/2023	FS	X	X
	PZ-101	5/10/2023	FS	X	X
	PZ-102	5/10/2023	FS	X	X
	PZ-103	5/10/2023	FS	X	X
ARCH CHEMICALS, INC.	B-15	5/8/2023	FS	X	X
	B-16	5/8/2023	FS	X	X
	B-17	5/8/2023	FS	X	X
	B-7	5/9/2023	FS	X	X
	BR-126	5/8/2023	FS	X	X
	BR-127	5/5/2023	FS	X	X
	BR-3	5/9/2023	FS	X	X
	BR-5A	5/5/2023	FS	X	X
	BR-6A	5/5/2023	FS	X	X
	BR-7A	5/9/2023	FS	X	X
	BR-8	5/9/2023	FS	X	X
	BR-9	5/10/2023	FS	X	X
	E-3	5/9/2023	FS	X	X
	MW-127	5/5/2023	FS	X	X
	PW12	5/5/2023	FS	X	X
	PW13	5/9/2023	FS	X	X
	PW14	5/8/2023	FS	X	X
	PW15	5/11/2023	FS	X	X
	PW16	5/9/2023	FS	X	X
	PW17	5/11/2023	FS	X	X
	PZ-104	5/8/2023	FS	X	X
	PZ-105	5/5/2023	FS	X	X
	PZ-106	5/8/2023	FS	X	X
	PZ-107	5/5/2023	FS	X	X
ERIE BARGE CANAL	BR-112D	5/11/2023	FS	X	
(Samples in canal or property along canal)	BR-113D	5/12/2023	FS	X	
	QD-1	5/12/2023	FS	X	
	QO-2	5/12/2023	FS	X	
	QO-2S1	5/12/2023	FS	X	
DOLOMITE PRODUCTS, INC.	BR-117D	5/11/2023	FS	X	
(Samples at or near Dolomite Quarry)	BR-118D	5/12/2023	FS	X	
	QS-4	5/12/2023	FS	X	
IRISH PROPANE (Formerly Jackson Welding	BR-114	5/10/2023	FS	X	X
	MW-114	5/10/2023	FS	X	X
RG & E RIGHT OF WAY	BR-105	5/11/2023	FS	X	X
	BR-105D	5/11/2023	FS	X	X
OU-1 (West side of Erie Canal)	BR-122D	5/12/2023	FS	X	
	BR-123D	5/12/2023	FS	X	

Notes:
FS = Field Sample

Prepared by: SRC 8/22/2023
Checked by: JAR 8/23/2023

TABLE 2
SPRING 2023 GROUNDWATER MONITORING RESULTS
CHLOROPYRIDINES

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	B-15		B-16		B-17		B-7		BR-105		BR-105D		BR-106		BR-112D	
SAMPLE DATE:	5/8/2023		5/8/2023		5/8/2023		5/9/2023		5/11/2023		5/11/2023		5/11/2023		5/11/2023	
QC TYPE:	FS		FS		FS		FS		FS		FS		FS		FS	
SELECTED CHLOROPYRIDINES BY SW-846 Method 8270D (µg/L)																
2,6-Dichloropyridine	9.8	U	95.4	J	19400		71.8		103	J	20	U	20000	U	47.6	U
2-Chloropyridine	9.8	UJ	165	J-	197000	J-	304	J-	1840		39.1	J-	192000		273	
3-Chloropyridine	9.8	UJ	100	UJ	10000	UJ	48.6	UJ	192	U	20	U	20000	U	47.6	U
4-Chloropyridine	9.8	UJ	100	UJ	10000	UJ	48.6	UJ	192	U	20	UJ	20000	U	47.6	U
p-Fluoroaniline	9.8	U	100	U	10000	U	48.6	U	192	U	21.3	J+	20000	U	47.6	U
Pyridine	9.8	UJ	100	UJ	15200	J-	48.6	UJ	192	U	20	UJ	20000	U	47.6	U

Notes:

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

J = Estimated value

J- = Estimated with a potential low bias

J+ = Estimated with a potential high bias

µg/L = micrograms per Liter

FS = Field sample

Created by: SRC 8/7/2023
Edited: SRC 8/21/2023
Checked by: JAR 8/23/2023

TABLE 2
SPRING 2023 GROUNDWATER MONITORING RESULTS
CHLOROPYRIDINES

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	BR-113D		BR-114		BR-117D		BR-118D		BR-122D		BR-123D		BR-126		BR-127	
SAMPLE DATE:	5/12/2023		5/10/2023		5/11/2023		5/12/2023		5/12/2023		5/12/2023		5/8/2023		5/5/2023	
QC TYPE:	FS		FS		FS		FS		FS		FS		FS		FS	
SELECTED CHLOROPYRIDINES BY SW-846 Method 8270D (µg/L)																
2,6-Dichloropyridine	9.54	U	9.76	U	9.15	U	9.63	U	95.5	U	6.19	J	125		4000	U
2-Chloropyridine	32.4	J-	9.76	UJ	9.15	U	9.39	J-	602	J-	114	J-	369	J-	23900	J-
3-Chloropyridine	9.54	U	9.76	U	9.15	U	9.63	U	95.5	U	9.65	U	40	UJ	4000	UJ
4-Chloropyridine	9.54	UJ	9.76	UJ	9.15	U	9.63	UJ	95.5	UJ	9.65	UJ	40	UJ	4000	UJ
p-Fluoroaniline	9.54	U	9.76	U	9.15	U	9.63	U	95.5	U	9.65	U	40	U	4000	U
Pyridine	9.54	UJ	9.76	UJ	9.15	U	9.63	UJ	95.5	UJ	9.65	UJ	40	UJ	4000	UJ

Notes:

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

J = Estimated value

J- = Estimated with a potential low bias

J+ = Estimated with a potential high bias

µg/L = micrograms per Liter

FS = Field sample

Created by: SRC 8/7/2023
Edited: SRC 8/21/2023
Checked by: JAR 8/23/2023

TABLE 2
SPRING 2023 GROUNDWATER MONITORING RESULTS
CHLOROPYRIDINES

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	BR-3		BR-5A		BR-6A		BR-7A		BR-8		BR-9		E-3		MW-106	
SAMPLE DATE:	5/9/2023		5/5/2023		5/5/2023		5/9/2023		5/9/2023		5/10/2023		5/9/2023		5/10/2023	
QC TYPE:	FS		FS		FS		FS		FS		FS		FS		FS	
SELECTED CHLOROPYRIDINES BY SW-846 Method 8270D (µg/L)																
2,6-Dichloropyridine	10	U	18		1030		1000	U	40000	U	100	U	5.9	J	2000	U
2-Chloropyridine	14.9	J-	12.2	J-	3600	J-	6330	J-	318000	J-	1160	J-	18.5	J-	15000	J-
3-Chloropyridine	10	UJ	9.64	UJ	400	UJ	1000	UJ	40000	UJ	100	U	9.61	UJ	2000	U
4-Chloropyridine	10	UJ	9.64	UJ	400	UJ	1000	UJ	40000	UJ	100	UJ	9.61	UJ	2000	UJ
p-Fluoroaniline	10	U	9.64	U	400	U	1000	U	40000	U	100	U	9.61	U	2000	U
Pyridine	10	UJ	9.64	UJ	400	UJ	1000	UJ	40000	UJ	100	UJ	9.61	UJ	2000	UJ

Notes:

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

J = Estimated value

J- = Estimated with a potential low bias

J+ = Estimated with a potential high bias

µg/L = micrograms per Liter

FS = Field sample

Created by: SRC 8/7/2023
Edited: SRC 8/21/2023
Checked by: JAR 8/23/2023

TABLE 2
SPRING 2023 GROUNDWATER MONITORING RESULTS
CHLOROPYRIDINES

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	MW-114		MW-127		PW12		PW13		PW14		PW15		PW16		PW17	
SAMPLE DATE:	5/10/2023		5/5/2023		5/5/2023		5/9/2023		5/8/2023		5/11/2023		5/9/2023		5/11/2023	
QC TYPE:	FS		FS		FS		FS		FS		FS		FS		FS	
SELECTED CHLOROPYRIDINES BY SW-846 Method 8270D (µg/L)																
2,6-Dichloropyridine	9.7	U	57.9		10	U	4000	U	4000	U	10000	U	20000	U	7160	J
2-Chloropyridine	9.7	UJ	76.8	J-	7.77	J-	23400	J-	44500	J-	109000		122000	J-	75600	
3-Chloropyridine	9.7	U	9.71	UJ	10	UJ	4000	UJ	4000	UJ	10000	U	20000	UJ	4620	J
4-Chloropyridine	9.7	UJ	9.71	UJ	10	UJ	4000	UJ	4000	UJ	10000	U	20000	UJ	8000	U
p-Fluoroaniline	9.7	U	9.71	U	10	U	4000	U	4000	U	10000	U	20000	U	8000	U
Pyridine	9.7	UJ	9.71	UJ	10	UJ	4000	UJ	4000	UJ	10000	U	20000	UJ	11300	

Notes:

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

J = Estimated value

J- = Estimated with a potential low bias

J+ = Estimated with a potential high bias

µg/L = micrograms per Liter

FS = Field sample

Created by: SRC 8/7/2023
Edited: SRC 8/21/2023
Checked by: JAR 8/23/2023

TABLE 2
SPRING 2023 GROUNDWATER MONITORING RESULTS
CHLOROPYRIDINES

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	PZ-101		PZ-102		PZ-103		PZ-104		PZ-105		PZ-106		PZ-107	
SAMPLE DATE:	5/10/2023		5/10/2023		5/10/2023		5/8/2023		5/5/2023		5/8/2023		5/5/2023	
QC TYPE:	FS		FS		FS		FS		FS		FS		FS	
SELECTED CHLOROPYRIDINES BY SW-846 Method 8270D (µg/L)														
2,6-Dichloropyridine	9.7	U	16000	U	40000	U	89.3		1520	J	10000	U	2000	U
2-Chloropyridine	9.7	UJ	119000	J-	329000	J-	566	J-	10400	J-	86000	J-	8160	J-
3-Chloropyridine	9.7	U	16000	U	40000	U	40	UJ	1600	UJ	10000	UJ	2000	UJ
4-Chloropyridine	9.7	UJ	16000	UJ	40000	UJ	40	UJ	1600	UJ	10000	UJ	2000	UJ
p-Fluoroaniline	9.7	U	16000	U	40000	U	40	U	1600	U	10000	U	2000	U
Pyridine	9.7	UJ	16000	UJ	40000	UJ	40	UJ	1600	UJ	10000	UJ	2000	UJ

Notes:

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

J = Estimated value

J- = Estimated with a potential low bias

J+ = Estimated with a potential high bias

µg/L = micrograms per Liter

FS = Field sample

Created by: SRC 8/7/2023
Edited: SRC 8/21/2023
Checked by: JAR 8/23/2023

TABLE 3
SPRING 2023 GROUNDWATER MONITORING RESULTS
VOLATILE ORGANIC COMPOUNDS

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	B-15	B-16	B-17	B-7	BR-105	BR-105D	BR-106	BR-114	BR-126	BR-127	BR-3
SAMPLE DATE:	5/8/2023	5/8/2023	5/8/2023	5/9/2023	5/11/2023	5/11/2023	5/11/2023	5/10/2023	5/8/2023	5/5/2023	5/9/2023
QC TYPE:	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
VOCs By SW-846 Method 8260C (µg/L)											
1,1,1-Trichloroethane	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
1,1,2,2-Tetrachloroethane	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
1,1,2-Trichloroethane	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
1,1-Dichloroethane	2 U	2 U	2 U	2 U	2 U	1.02 J	10 UJ	2 U	2 U	2 UJ	2 U
1,1-Dichloroethene	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
1,2,3-Trichlorobenzene	5 U	5 U	5.14	5 U	5 U	5 U	25 UJ	5 U	5 U	5 UJ	5 U
1,2,4-Trichlorobenzene	5 U	5 U	19	5 U	5 U	5 U	25 UJ	5 U	5 U	3.58 J-	5 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	10 U	10 U	50 UJ	10 U	10 U	10 UJ	10 U
1,2-Dibromoethane	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
1,2-Dichlorobenzene	2 U	2 U	2 U	1.14 J	4.9	2 U	193 J-	2 U	2 U	4.45 J-	2 U
1,2-Dichloroethane	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
1,2-Dichloropropane	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
1,3-Dichlorobenzene	2 U	2 U	1.44 J	2 U	2 U	2 U	11.3 J-	2 U	2 U	4.24 J-	2 U
1,4-Dichlorobenzene	2 U	2 U	1.85 J	2 U	2 U	2 U	16.1 J-	2 U	2 U	6.52 J-	2 U
1,4-Dioxane	10 U	10 U	10 UJ	10 UJ	10 UJ	10 UJ	50 UJ	10 UJ	10 U	10 UJ	10 UJ
2-Butanone	10 U	10 U	10 UJ	10 UJ	10 UJ	10 UJ	50 UJ	10 UJ	10 U	10 UJ	10 U
2-Hexanone	5 U	5 U	5 UJ	5 U	5 UJ	5 UJ	25 UJ	5 U	5 U	5 UJ	5 UJ
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U	25 UJ	5 U	5 U	5 UJ	5 U
Acetic acid, methyl ester	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	10 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Acetone	10 UJ	10 UJ	8.92 J	10 UJ	10 UJ	10 UJ	50 UJ	10 UJ	10 UJ	10 UJ	10 U
Benzene	1 U	1 U	2.01	1 U	1.15	4.5	31.1 J-	1 U	1.02	1.97 J-	1.93
Bromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	25 UJ	5 U	5 U	5 UJ	5 U
Bromodichloromethane	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
Bromoform	5 U	5 U	5 U	5 U	5 U	5 U	25 UJ	5 U	5 U	10.7 J-	5 U
Bromomethane	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
Carbon disulfide	2 U	2 U	1.55 J	2 U	1.4 J	3.3	12.5 J-	2 U	2 U	15.8 J-	2 U
Carbon tetrachloride	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	16.9 J-	2 U
Chlorobenzene	2 U	1.33 J	5.24	2.01	12.3	2 U	616 J-	2 U	2 U	8.16 J-	2 U
Chloroethane	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
Chloroform	2 U	2 U	109	2 U	2.79	1.78 J	10 UJ	2 U	2 U	156 J-	2 U

Created by: SRC 8/8/2023
Edited: SRC 8/22/2023
Checked by: jar 8/23/2023

TABLE 3
SPRING 2023 GROUNDWATER MONITORING RESULTS
VOLATILE ORGANIC COMPOUNDS

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	B-15	B-16	B-17	B-7	BR-105	BR-105D	BR-106	BR-114	BR-126	BR-127	BR-3
SAMPLE DATE:	5/8/2023	5/8/2023	5/8/2023	5/9/2023	5/11/2023	5/11/2023	5/11/2023	5/10/2023	5/8/2023	5/5/2023	5/9/2023
QC TYPE:	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
VOCs By SW-846 Method 8260C (µg/L)											
Chloromethane	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
cis-1,2-Dichloroethene	2 U	2 U	1.62 J	2 U	2.6	6.51	10 UJ	2 U	2 U	1.74 J-	2 U
cis-1,3-Dichloropropene	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
Cyclohexane	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	5.92 J	50 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Dibromochloromethane	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
Dichlorodifluoromethane	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
Ethylbenzene	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
Isopropylbenzene	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
Methyl cyclohexane	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	3.77 J	10 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Methyl Tertbutyl Ether	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
Methylene chloride	5 U	5 U	5 U	2.79 J	5 U	5 U	25 UJ	2.55 J	5 U	37.2 J-	5 U
Styrene	5 U	5 U	5 U	5 U	5 U	5 U	25 UJ	5 U	5 U	5 UJ	5 U
Tetrachloroethene	2 U	2 U	6.72	2 U	2 U	2 U	10 UJ	2 U	2 U	18.5 J-	1.1 J
Toluene	2 U	2 U	1.53 J	2 U	2 U	2 U	15.2 J-	2 U	2 U	6.47 J-	2 U
trans-1,2-Dichloroethene	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
trans-1,3-Dichloropropene	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
Trichloroethene	2 U	2 U	8.11	2 U	2 U	2 U	10 UJ	2 U	2 U	6.12 J-	2 U
Trichlorofluoromethane	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
Vinyl chloride	2 U	2 U	1 J	2 U	2.23	2 U	10 UJ	2 U	2 U	2.16 J-	2 U
Xylene, o	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U
Xylenes (m&p)	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2 UJ	2 U

Notes:

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

J = Estimated value

J- = Estimated with a potential low bias

µg/L = micrograms per Liter

FS = Field sample

Created by: SRC 8/8/2023
Edited: SRC 8/22/2023
Checked by: jar 8/23/2023

TABLE 3
SPRING 2023 GROUNDWATER MONITORING RESULTS
VOLATILE ORGANIC COMPOUNDS

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	BR-5A	BR-6A	BR-7A	BR-8	BR-9	E-3	MW-106	MW-114	MW-127	PW12	PW13
SAMPLE DATE:	5/5/2023	5/5/2023	5/9/2023	5/9/2023	5/10/2023	5/9/2023	5/10/2023	5/10/2023	5/5/2023	5/5/2023	5/9/2023
QC TYPE:	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
VOCs By SW-846 Method 8260C (µg/L)											
1,1,1-Trichloroethane	2 U	2 U	2 U	20 U	1.19 J	2 UJ	5 U	2 U	2 U	2 U	2 UJ
1,1,2,2-Tetrachloroethane	2 U	2 U	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	2 U	2 UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	2 U	2 U	2 U	20 U	38.1	2 UJ	5 U	2 U	2 U	2 U	2 UJ
1,1,2-Trichloroethane	2 U	2 U	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	2 U	2 UJ
1,1-Dichloroethane	2 U	2 U	1.23 J	20 U	8.79	2 UJ	5 U	2 U	2 U	2 U	2 UJ
1,1-Dichloroethene	2 U	2 U	2 U	20 U	1.59 J	2 UJ	5 U	2 U	2 U	2 U	2 UJ
1,2,3-Trichlorobenzene	5 U	5 U	5 U	50 U	5 U	5 UJ	12.5 U	5 U	5 U	11.5	5 UJ
1,2,4-Trichlorobenzene	5 U	2.52 J	5 U	50 U	5 U	5 UJ	12.5 U	5 U	5 U	60.8	5 UJ
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	100 U	10 U	10 UJ	25 U	10 U	10 U	10 U	10 UJ
1,2-Dibromoethane	2 U	2 U	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	2 U	2 UJ
1,2-Dichlorobenzene	2 U	1.32 J	14.5	142	18	2 UJ	12.5	2 U	2 U	3.78	70.2 J-
1,2-Dichloroethane	2 U	2 U	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	2 U	2 UJ
1,2-Dichloropropane	2 U	2 U	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	2 U	2 UJ
1,3-Dichlorobenzene	2 U	2 U	4.21	51.1	4.43	2 UJ	5 U	2 U	2 U	22.3	16.6 J-
1,4-Dichlorobenzene	2 U	2 U	2.74	20.6	3.86	2 UJ	5 U	2 U	2 U	12.3	11.7 J-
1,4-Dioxane	10 UJ	10 U	10 UJ	100 UJ	10 UJ	10 UJ	25 UJ	10 UJ	10 UJ	10 UJ	10 UJ
2-Butanone	10 UJ	10 UJ	10 UJ	100 UJ	10 UJ	10 UJ	25 UJ	10 UJ	10 UJ	10 UJ	10 UJ
2-Hexanone	5 UJ	5 UJ	5 U	50 U	5 U	5 UJ	12.5 U	5 U	5 UJ	5 UJ	5 UJ
4-Methyl-2-pentanone	5 U	5 U	5 U	50 U	5 U	5 UJ	12.5 U	5 U	5 U	5 U	5 UJ
Acetic acid, methyl ester	2 UJ	2 UJ	2 UJ	20 UJ	2 UJ	2 UJ	5 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Acetone	10 U	9.61 J-	10 UJ	100 UJ	8.13 J-	10 UJ	32.5 J-	10 UJ	10 U	7.84 J	10 UJ
Benzene	1 U	1.58	2.59	11.2	17	1.52 J-	3.29	1 U	1 U	0.743 J	5.09 J-
Bromochloromethane	5 U	5 U	5 U	50 U	5 U	5 UJ	12.5 U	5 U	5 U	5 U	5 UJ
Bromodichloromethane	2 U	2 U	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	2 U	2 UJ
Bromoform	5 U	5 U	5 U	50 U	5 U	5 UJ	12.5 U	5 U	5 U	5 U	5 UJ
Bromomethane	2 U	2 U	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	2 U	2 UJ
Carbon disulfide	2 U	2 U	1.01 J	20 U	2 U	2 UJ	5 U	2 U	2 U	2 U	2 UJ
Carbon tetrachloride	2 U	2 U	1.07 J	20 U	2 U	2 UJ	5 U	2 U	2 U	2 U	2 UJ
Chlorobenzene	2 U	10.8	25	263	21.6	5.7 J-	57.4	2 U	2 U	17.9	86.6 J-
Chloroethane	2 U	2 U	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	2 U	2 UJ
Chloroform	2 U	3.37	2 U	20 U	2 U	2 UJ	5 U	7.52	2 U	2 U	2 UJ

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Edited: SRC 8/22/2023
Checked by: jar 8/23/2023

TABLE 3
SPRING 2023 GROUNDWATER MONITORING RESULTS
VOLATILE ORGANIC COMPOUNDS

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	BR-5A	BR-6A	BR-7A	BR-8	BR-9	E-3	MW-106	MW-114	MW-127	PW12	PW13
SAMPLE DATE:	5/5/2023	5/5/2023	5/9/2023	5/9/2023	5/10/2023	5/9/2023	5/10/2023	5/10/2023	5/5/2023	5/5/2023	5/9/2023
QC TYPE:	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
VOCs By SW-846 Method 8260C (µg/L)											
Chloromethane	2 U	2 U	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	2 U	2 UJ
cis-1,2-Dichloroethene	2 U	2 U	1.56 J	20 U	112	2 UJ	5 U	2 U	2 U	2 U	2 UJ
cis-1,3-Dichloropropene	2 U	2 U	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	2 U	2 UJ
Cyclohexane	10 UJ	10 UJ	10 UJ	100 UJ	10.5 J	10 UJ	25 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Dibromochloromethane	2 U	2 U	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	2 U	2 UJ
Dichlorodifluoromethane	2 U	2 U	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	2 U	2 UJ
Ethylbenzene	2 U	2 U	2 U	20 U	2.15	2 UJ	5 U	2 U	2 U	1.12 J	2 UJ
Isopropylbenzene	2 U	2 U	2 U	20 U	1.42 J	2 UJ	5 U	2 U	2 U	2 U	2 UJ
Methyl cyclohexane	2 UJ	2 UJ	2 UJ	20 UJ	4.05 J	2 UJ	5 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Methyl Tertbutyl Ether	2 U	2 U	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	2 U	4.85 J-
Methylene chloride	5 U	5 U	2.66 J	26.9 J	3.66 J	5 UJ	11.8 J	2.89 J	5 U	5 U	5 UJ
Styrene	5 U	5 U	5 U	50 U	5 U	5 UJ	12.5 U	5 U	5 U	5 U	5 UJ
Tetrachloroethene	2 U	2 U	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	2.08	2 UJ
Toluene	2 U	37.3	2 U	54.8	1.5 J	2 UJ	5 U	2 U	2 U	3.69	4.28 J-
trans-1,2-Dichloroethene	2 U	1.68 J	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	2 U	2 UJ
trans-1,3-Dichloropropene	2 U	2 U	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	2 U	2 UJ
Trichloroethene	2 U	2 U	2 U	20 U	1.65 J	2 UJ	5 U	2.7	2 U	2 U	2 UJ
Trichlorofluoromethane	2 U	2 U	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	2 U	2 UJ
Vinyl chloride	2 U	6.9	2.01	20 U	101	2 UJ	5 U	2 U	2 U	2 U	2 UJ
Xylene, o	2 U	2 U	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	2.63	2 UJ
Xylenes (m&p)	2 U	2 U	2 U	20 U	2 U	2 UJ	5 U	2 U	2 U	3.86	2 UJ

Notes:

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

J = Estimated value

J- = Estimated with a potential low bias

µg/L = micrograms per Liter

FS = Field sample

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Checked by: jar 8/23/2023

TABLE 3
SPRING 2023 GROUNDWATER MONITORING RESULTS
VOLATILE ORGANIC COMPOUNDS

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	PW14	PW15	PW16	PW17	PZ-101	PZ-102	PZ-103	PZ-104	PZ-105	PZ-106	PZ-107
SAMPLE DATE:	5/8/2023	5/11/2023	5/9/2023	5/11/2023	5/10/2023	5/10/2023	5/10/2023	5/8/2023	5/5/2023	5/8/2023	5/5/2023
QC TYPE:	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
VOCs By SW-846 Method 8260C (µg/L)											
1,1,1-Trichloroethane	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
1,1,2,2-Tetrachloroethane	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
1,1,2-Trichloroethane	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
1,1-Dichloroethane	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
1,1-Dichloroethene	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
1,2,3-Trichlorobenzene	50 U	25 UJ	10 U	1250 U	5 U	25 U	25 UJ	5 U	5 UJ	500 U	50 U
1,2,4-Trichlorobenzene	50 U	50.4 J-	10 U	1250 U	5 U	25 U	25 UJ	5 U	5 UJ	500 U	50 U
1,2-Dibromo-3-chloropropane	100 U	50 UJ	20 U	2500 U	10 U	50 U	50 UJ	10 U	10 UJ	1000 U	100 U
1,2-Dibromoethane	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
1,2-Dichlorobenzene	20 U	10.6 J-	158	500 U	2 U	78.2	366 J-	2 U	2.49 J-	200 U	20 U
1,2-Dichloroethane	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
1,2-Dichloropropane	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
1,3-Dichlorobenzene	20 U	16 J-	45	500 U	2 U	13	98.2 J-	2 U	2 UJ	200 U	20 U
1,4-Dichlorobenzene	20 U	40.8 J-	17.4	500 U	2 U	5.43 J	66.8 J-	2 U	2 UJ	200 U	20 U
1,4-Dioxane	100 U	50 UJ	20 UJ	2500 U	10 UJ	50 UJ	50 UJ	10 U	10 UJ	1000 U	100 U
2-Butanone	100 U	50 UJ	20 UJ	2500 U	8.42 J-	35.2 J-	50 UJ	10 UJ	10 UJ	1000 U	100 UJ
2-Hexanone	50 U	25 UJ	10 U	1250 U	5 U	25 U	25 UJ	5 UJ	5 UJ	500 U	50 UJ
4-Methyl-2-pentanone	50 U	25 UJ	10 U	1250 U	5 U	25 U	25 UJ	5 U	5 UJ	500 U	50 U
Acetic acid, methyl ester	20 UJ	10 UJ	4 UJ	500 UJ	2 UJ	10 UJ	10 UJ	2 UJ	2 UJ	200 UJ	20 UJ
Acetone	100 UJ	50 UJ	20 UJ	2500 U	18.6 J-	95.4 J-	50 UJ	10 UJ	10 UJ	1000 UJ	100 UJ
Benzene	10 U	21.4 J-	5.3	250 U	1 U	15.3	16.5 J-	0.506 J	6.21 J-	100 U	10 U
Bromochloromethane	50 U	25 UJ	10 U	1250 U	5 U	25 U	25 UJ	5 U	5 UJ	500 U	50 U
Bromodichloromethane	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
Bromoform	50 U	25 UJ	10 U	1250 U	5 U	25 U	25 UJ	5 U	5 UJ	500 U	50 U
Bromomethane	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
Carbon disulfide	35.1	102 J-	4 U	6980	2 U	7.15 J	17.3 J-	2 U	1.37 J-	579	20 U
Carbon tetrachloride	20 U	94.4 J-	4 U	6100	2 U	10 U	10 UJ	2 U	2 UJ	188 J	39.8
Chlorobenzene	15.4 J	30.4 J-	278	500 U	2 U	229	497 J-	2.16	59.5 J-	200 U	20 U
Chloroethane	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
Chloroform	328	714 J-	4 U	39900	2 U	10 U	10 UJ	2 U	2 UJ	10200	247

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TABLE 3
SPRING 2023 GROUNDWATER MONITORING RESULTS
VOLATILE ORGANIC COMPOUNDS

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	PW14	PW15	PW16	PW17	PZ-101	PZ-102	PZ-103	PZ-104	PZ-105	PZ-106	PZ-107
SAMPLE DATE:	5/8/2023	5/11/2023	5/9/2023	5/11/2023	5/10/2023	5/10/2023	5/10/2023	5/8/2023	5/5/2023	5/8/2023	5/5/2023
QC TYPE:	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
VOCs By SW-846 Method 8260C (µg/L)											
Chloromethane	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
cis-1,2-Dichloroethene	20 U	12.4 J-	4 U	1360	2 U	10 U	10 UJ	2 U	2 UJ	137 J	20 U
cis-1,3-Dichloropropene	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
Cyclohexane	100 UJ	50 UJ	20 UJ	2500 UJ	10 UJ	50 UJ	50 UJ	10 UJ	10 UJ	1000 UJ	100 UJ
Dibromochloromethane	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
Dichlorodifluoromethane	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
Ethylbenzene	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
Isopropylbenzene	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
Methyl cyclohexane	20 UJ	10 UJ	4 UJ	500 UJ	2 UJ	10 UJ	10 UJ	2 UJ	2 UJ	200 UJ	20 UJ
Methyl Tertbutyl Ether	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
Methylene chloride	50 U	25 UJ	10 U	5800	2.82 J	18.9 J	19.7 J-	5 U	5 UJ	1260	134
Styrene	50 U	25 UJ	10 U	1250 U	5 U	25 U	25 UJ	5 U	5 UJ	500 U	50 U
Tetrachloroethene	74.8	87.7 J-	4 U	1830	2 U	10 U	10 UJ	2 U	2 UJ	850	24.4
Toluene	22.9	27.2 J-	5.21	819	2 U	8.62 J	53.2 J-	2 U	2 UJ	200 U	20 U
trans-1,2-Dichloroethene	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
trans-1,3-Dichloropropene	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
Trichloroethene	16.6 J	69.2 J-	4 U	455 J	2 U	10 U	10 UJ	2 U	2 UJ	305	20 U
Trichlorofluoromethane	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
Vinyl chloride	20 U	7.39 J-	4 U	1010	2 U	10 U	10 UJ	2 U	2 UJ	800	20 U
Xylene, o	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U
Xylenes (m&p)	20 U	10 UJ	4 U	500 U	2 U	10 U	10 UJ	2 U	2 UJ	200 U	20 U

Notes:

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

J = Estimated value

J- = Estimated with a potential low bias

µg/L = micrograms per Liter

FS = Field sample

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TABLE 4
COMPARISON OF SPRING 2023
CHLOROPYRIDINES AND VOLATILE ORGANICS CONCENTRATIONS
IN GROUNDWATER TO PREVIOUS RESULTS (ug/L)

ARCH ROCHESTER
ROCHESTER, NEW YORK

WELL	SELECTED CHLOROPYRIDINES				SELECTED VOCs			
	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	MAY 2023 RESULT	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	MAY 2023 RESULT
ON-SITE WELLS/LOCATIONS								
B-15	10	13,000	16	ND	10	1,600	ND	ND
B-16	10	33,000	2,500	260	10	4,500	6.6	1.3
B-17	5	28,000,000	590,000	230,000	5	350,000	5,300	130
B-7	5	9,100	180	**380**	5	270	2.3	**4.8**
BR-126	10	12,000	950	490	10	240	ND	ND
BR-127	10	44,000	12,000	**24,000**	10	1,300	190	**240**
BR-3	4	6,500,000	230	15	4	930,000	280	1.1
BR-5A	10	1,700	37	30	10	9,400	0.42	ND
BR-6A	10	140,000	9,500	4,600	10	69,000	170	14
BR-7A	10	510,000	20,000	6,300	10	5,600	57	29
BR-8	10	730,000	570,000	320,000	10	7,800	810	290
BR-9	10	34,000	7,900	1,200	10	210	27	27
E-3	5	600	10	**24**	5	15,000	ND	**5.7**
MW-127	10	15,000	960	130	10	7,500	0.80	ND
PW12	10	15,000	33	7.8	10	120,000	35	20
PW13	10	94,000	21,000	**23,000**	10	1,800	83	**87**
PW14	10	99,000	23,000	**45,000**	10	160,000	930	430
PW15	10	620,000	270,000	110,000	10	57,000	11,000	1,000
PW16	10	180,000	94,000	**120,000**	10	1,200	250	**280**
PW17	10	75,000	12,000	**99,000**	10	66,000	4,300	**54,000**
PZ-104	10	9,100	1,000	660	10	52	3.1	2.2
PZ-105	10	190,000	8,200	**12,000**	10	9,900	52	**60**
PZ-106	10	290,000	32,000	**86,000**	10	1,400,000	15,000	13,000
PZ-107	10	31,000	11,000	8,200	10	160,000	35,000	450
OFF-SITE WELLS/LOCATIONS								
BR-105	10	24,000	640	**1,900**	10	350	6.0	**15**
BR-105D	10	17,000	140	60	10	230	0.47	**1.8**
BR-106	10	170,000	57,000	**190,000**	10	12,000	330	**620**
BR-112D	5	310	8.6	**270**		4.3		
BR-113D	5	490	5	**32**		2.8		
BR-114	5	520	ND	ND	5	12	ND	**2.6**
BR-117D	5	80	1.9	ND		1.9		
BR-118D	5	330	5.9	**9.4**		6.6		
BR-122D	5	650	8.6	**600**		ND		

TABLE 4
COMPARISON OF SPRING 2023
CHLOROPYRIDINES AND VOLATILE ORGANICS CONCENTRATIONS
IN GROUNDWATER TO PREVIOUS RESULTS (ug/L)

ARCH ROCHESTER
ROCHESTER, NEW YORK

WELL	SELECTED CHLOROPYRIDINES				SELECTED VOCs			
	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	MAY 2023 RESULT	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	MAY 2023 RESULT
BR-123D	5	860	50	**120**		7		
MW-106	10	130,000	35,000	15,000	10	4,000	220	69
MW-114	5	18	3.4	ND	5	27	11	**13**
PZ-101	10	27,000	18	ND	10	620	0.36	**2.8**
PZ-102	10	240,000	92,000	**120,000**	10	11,000	200	**250**
PZ-103	10	910,000	270,000	**330,000**	10	46,000	390	**520**
QD-1	9		ND	ND				
QO-2	10	380	ND	ND		ND		
QO-2S1	10	27	ND	ND		ND		
QS-4	10	13,000	66	21		ND		

Note:
1) Number of samples and mean reflect 5-year sampling period from May 2018 through November 2022. Historic maximum based on all available results from March 1990 through November 2022.
2) Chloropyridines represented by: 2-Chloropyridine, 2,6-Dichloropyridine, 3-Chloropyridine, 4-Chloropyridine, p-Fluoroaniline, and Pyridine.
3) Selected VOCs represented by Carbon Tetrachloride, Chlorobenzene, Chloroform, Methylene Chloride, Tetrachloroethene, and Trichloroethene.
4) **Bold and shade** - May 2023 exceeds 5-year mean.
5) ND = Not detected
BLANK = Not sampled

TABLE 5
SPRING 2023 QUARRY SEEP AND OUTFALL SAMPLE RESULTS
CHLOROPYRIDINES

ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

LOCATION:	QD-1		QO-2		QO-2S1		QS-4	
SAMPLE DATE:	5/12/2023		5/12/2023		5/12/2023		5/12/2023	
QC TYPE:	FS		FS		FS		FS	
SELECTED CHLOROPYRIDINES BY SW-846 Method 8270D (µg/L)								
2,6-Dichloropyridine	9.52	U	9.65	U	9.68	U	10.3	
2-Chloropyridine	9.52	UJ	9.65	UJ	9.68	UJ	10.8	J-
3-Chloropyridine	9.52	UJ	9.65	U	9.68	U	9.76	U
4-Chloropyridine	9.52	UJ	9.65	UJ	9.68	UJ	9.76	UJ
p-Fluoroaniline	9.52	U	9.65	U	9.68	U	9.76	U
Pyridine	9.52	UJ	9.65	UJ	9.68	UJ	9.76	UJ

Notes:

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

J = Estimated value

J- = Estimated with a potential low bias

J+ = Estimated with a potential high bias

µg/L = micrograms per Liter

FS = Field sample

Created by: SRC 8/8/2023
Checked by: JAR 8/16/2023

TABLE 6
EXTRACTION WELL WEEKLY FLOW MEASUREMENTS
DECEMBER 2022 THROUGH MAY 2023

ARCH ROCHESTER
ROCHESTER, NEW YORK

Week Ending	BR-7A [Gal./Wk.]	BR-9 [Gal./Wk.]	PW-13 [Gal./Wk.]	PW-15 [Gal./Wk.]	PW-16 [Gal./Wk.]	BR-127 * [Gal./Wk.]	Total [Gal.]
12/04/22	138,176	28,616	15,254	28,489	176	24,969	235,680
12/11/22	150,888	27,351	16,326	30,395	0	25,596	250,556
12/18/22	133,788	26,553	5,472	31,598	0	24,798	222,209
12/25/22	120,437	24,952	2	30,147	0	26,793	202,331
01/01/23	90,635	20,688	2	33,616	0	18,953	163,894
01/08/23	120,860	22,666	2	27,862	0	27,993	199,383
01/15/23	113,756	23,534	2	26,472	0	30,341	194,105
01/22/23	121,067	23,810	2	24,717	2	32,688	202,286
01/29/23	128,122	25,548	1	22,695	0	32,721	209,087
02/05/23	127,382	26,482	3	22,481	0	33,594	209,942
02/12/23	117,395	27,708	4	20,927	0	33,257	199,291
02/19/23	118,668	28,044	9	16,554	7	31,694	194,976
02/26/23	68,429	32,662	2	454	25,939	27,683	155,169
03/05/23	96,710	4,584	3	18,008	34,016	27,425	180,746
03/12/23	116,600	31,430	5	22,660	26,909	29,852	227,456
03/19/23	123,447	30,724	7	21,516	20,324	28,951	224,969
03/26/23	125,508	31,482	15	19,777	7,425	28,542	212,749
04/02/23	126,716	25,077	19	18,613	2,707	33,615	206,747
04/09/23	126,376	45,051	30	25,683	14,711	28,297	240,148
04/16/23	125,284	45,420	29	16,629	15,429	33,746	236,537
04/23/23	126,645	42,990	13	15,950	13,185	30,576	229,359
04/30/23	194,355	48,960	24	19,125	12,824	36,345	311,633
05/07/23	125,123	53,800	26	19,030	6,930	28,891	233,800
05/14/23	116,717	79,305	30	19,691	5,056	27,886	248,685
05/21/23	107,600	76,635	25	18,840	3,716	26,362	233,178
05/28/23	143,752	121,290	40	29,357	4,700	37,483	336,622
Total 6 Mo. 26 Weeks	3,204,436	975,362	37,347	581,286	194,056	769,051	**5,761,538**

*Erroneous reading recorded for BR-127 for week ending 1/15/23. Total flow estimated as average of prior and following weeks.

Prepared/Date: JAR 8/22/23
Checked/Date: NMB 8/22/23

TABLE 7

MASS REMOVAL ESTIMATE
PERIOD: DECEMBER 2022 THROUGH MAY 2023

ARCH ROCHESTER
ROCHESTER, NEW YORK

Well	Total Vol. Pumped (gallons)[2]	Avg[1.] VOC Conc. (ppm)	Avg[1.] PYR Conc. (ppm)	VOCs Removed (pounds)	PYR. Removed (pounds)
BR-7A	3,204,436	0.065	24	1.7	640
BR-9	975,362	0.038	7	0.30	50
PW-13	37,347	0.09	27	0.03	8
PW-15	581,286	0.9	90	4.4	440
PW-16	194,056	0.40	135	0.6	220
BR-127	769,051	0.155	18.0	0.99	115
Totals:	5,761,538			8.1	1,500

Notes: 1) VOC and chloropyridine concentrations used in this table are an average of concentrations measured from the Fall 2022 and Spring 2023 sampling events for each well;
Total select VOCs include chlorobenzene, PCE, TCE, methylene chloride, carbon tetrachloride, and chloroform
2) Flows measured for period of 26 weeks (182 days).
3) Estimates for VOCs and PYR removed listed at 2 significant figures.

Prepared/Date: JAR 08/22/23
Checked/Date:nmb 09/14/23

TABLE 8
2023 SAMPLING SCHEDULE
ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

ARCH CHEMICALS, INC.						**2023**					
MONITORING PROGRAM						**SPRING**		**FALL**		**TOTAL**	
	Well	***zone***	***area***	***Frequency/Parameters***	***Purpose***	***Pyridines***	***VOCs***	***Pyridines***	***VOCs***	***Pyridines***	***VOCs***
OFF-SITE	BR-105	BR	RG&E ROW	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
MONITORING	BR-105D	BR deep	RG&E ROW	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	MW-106	OB	AID-HOSP	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	BR-106	BR	AID-HOSP	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	BR-112D	BR deep	NYSDOT	annual monitoring, PYR	trend monitoring	1				1	0
	BR-113D	BR deep	NYSDOT	annual monitoring, PYR	trend monitoring	1				1	0
	MW-114	OB	Irish Propane	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	BR-114	BR	Irish Propane	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	BR-117D	BR deep	QUARRY	annual monitoring, PYR	trend monitoring	1				1	0
	BR-118D	BR deep	QUARRY	annual monitoring, PYR	trend monitoring	1				1	0
	BR-122D	BR deep	QUARRY	annual monitoring, PYR	trend monitoring	1				1	0
	BR-123D	BR deep	QUARRY	annual monitoring, PYR	trend monitoring	1				1	0
	PZ-101	BR	AID-HOSP	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	PZ-102	BR	AID-HOSP	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	PZ-103	BR	AID-HOSP	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
ON-SITE	PZ-104	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
MONITORING	PZ-105	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	PZ-106	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	PZ-107	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	BR-126	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	BR-127	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	BR-3	BR	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	BR-8	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	BR-9	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	BR-5A	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	BR-6A	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	BR-7A	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	B-16	OB	ON-SITE	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	B-17	OB	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	B-7	OB	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	B-15	OB	ON-SITE	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	E-3	OB	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	MW-127	OB	ON-SITE	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	PW10	OB/BR	ON-SITE	semi-annual monitoring, VOCs & PYR	abandoned spring 2021- no longer in use						
	PW12	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	PW13	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	PW14	OB/BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	PW15	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	PW16	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	PW17	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
QUARRY/CANAL	QS-4	quarry seep	QUARRY	semi-annual monitoring, PYR	trend monitoring	1		1		2	0
MONITORING	QD-1	quarry ditch	DITCH	semi-annual monitoring, PYR	trend monitoring	1		1		2	0
	QO-2	quarry outfall	DITCH	semi-annual monitoring, PYR	trend monitoring	1		1		2	0
	QO-2S1	canal at outfall	CANAL	semi-annual monitoring, PYR	surface water monitoring	1		1		2	0
TOTAL SAMPLES						43	33	31	27	74	60

Notes:
RG&E ROW = Rochester Gas and Electric Right of Way
N/F = now or formerly
AID-HOSP = Aid to Hospitals
NYSDOT = New York State Department of Transportation
On-site Well PW17 was taken out of service as a pumping well October 2022

Appendix A

Matrix Environmental Field Report

FIELD REPORT

REMEDIAL INVESTIGATION SAMPLING
ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

Spring 2023 Event

Matrix Environmental Project #04-029

PREPARED FOR:

ARCH CHEMICALS, INC.
100 McKee Road
Rochester, NY 14611

PREPARED BY:

MATRIX
ENVIRONMENTAL TECHNOLOGIES INC.

3730 California Road
Orchard Park, New York 14127

Written by: Nickolas S. Ander

Reviewed by: Steven L. Marchetti

Date: June 23, 2023

TABLE OF CONTENTS

1.0 INTRODUCTION

This report describes the sampling of the following locations:

- 39 groundwater monitoring/pumping well samples
- 1 quarry sample at seep
- 1 quarry sample at ditch
- 1 quarry sample at outfall
- 1 canal sample at outfall

These activities were in support of the Phase II Remedial Investigation being conducted at the Arch Chemicals Inc. (Arch) facility in Rochester, New York. Static water levels in the groundwater wells were recorded on May 4th, 2023 by Matrix Environmental Technologies Inc. (METI) field personnel. The samples were collected from May 5th through May 12th, 2023.

2.0 METHODOLOGIES

2.1 Liquid Level Measurements

Static water levels were measured from all on-site and off-site monitoring wells. Light non-aqueous phase liquid (LNAPL) was measured (if present) in all on-site monitoring wells. Bottom well measurements were not collected during this event; therefore, dense non-aqueous phase liquid (DNAPL) was not verified. The measurements were recorded from the top of the well casing/riser using a Solinst oil/water interface probe. Measurements were recorded to the nearest hundredth of a foot (0.01 feet). The length of the measuring device which contacted liquids was cleaned with a deionized water rinse and paper towel wipe at each location. The data is presented in Sampling Summary Table and Field Observation Forms.

2.2 Well Purging

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

1. Purging three times the standing water volume using precleaned or dedicated 1.25" x 5' stainless steel bailer or 2" x 5' polyvinyl chloride bailer.

2. Evacuated with a low flow/low stress purging technique using QED low-flow bladder pumps or a variable rate peristaltic pump.

Wells that were purged of three 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

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conductance, temperature, ORP, dissolved oxygen and turbidity are monitored every 3-5 minutes until stabilization of parameters is observed before sampling. All purged water was collected for disposal at the on-site wastewater treatment facility. Data pertaining to well purging are presented in the Sampling Summary Table and Field Observation Forms.

3.0 SAMPLING

3.1 Monitoring Wells

All groundwater wells were sampled using precleaned or dedicated 1.25" x 5' stainless steel bailers, peristaltic pumps or bladder (Sample Pro) 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 to minimize agitation. 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 parameters. Data pertaining to sampling are presented on the Sampling Summary Table and the Field Observation Forms.

3.2 Erie Canal Sampling

When possible, samples were collected directly from the Erie Canal into appropriate sample containers (QO-2S1). Otherwise, samples were collected with the use of a dedicated, laboratory cleaned stainless steel bailer. The bailers were immersed just below the surface, retrieved and the sample 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 Quarry Seep Sampling

Groundwater samples were collected from a seep at the quarry (QS-4) located on Buffalo Road. The samples were collected with the use of a laboratory cleaned stainless steel bucket and transferred directly into the appropriate containers. An additional container was collected to facilitate the measurement of field parameters. Data pertaining to this sampling is present in the Sampling Summary Table and Field Observation Forms.

3.4 Quarry Outfall Sampling

Groundwater samples were collected from the quarry outfall (QO-2) located along NY Interstate 390 near the walking/bicycle path near the Erie Canal. The samples were

collected with the use of a laboratory cleaned stainless steel bucket and transferred directly into the appropriate containers. An additional container was collected to facilitate the measurement of field parameters. Data pertaining to this sampling is present in the Sampling Summary Table and Field Observation Forms.

3.5 Quarry Ditch Sampling

Groundwater samples were collected from the quarry ditch (QD-1) located at the top of the quarry along the railroad tracks. The samples were collected with the use of a laboratory cleaned stainless steel bucket and transferred directly into the appropriate containers. An additional container was collected to facilitate the measurement of field parameters. Data pertaining to this sampling is present in the Sampling Summary Table and Field Observation Forms.

4.0 SAMPLE CONTAINERS

Monitoring wells and surface water samples requiring analysis for volatile organic compounds were collected in 40 ml glass vials with Teflon septa. Samples for semi-volatile and pyridine analysis were collected in one-liter amber glass bottles with Teflon-lined caps. All bottles were purchased new and cleaned (Protocol A, 300 series) from Paradigm Environmental 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 included Field pH, specific conductance, temperature, ORP, dissolved oxygen and turbidity. 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 compound analysis. Each trip blank consisted of one 40 ml glass vial with Teflon septa which were filled with deionized water provided by Paradigm Environmental Services. These blanks were transported to the site, stored with field collected samples and submitted to the Paradigm Environmental Services for analysis.

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6.2 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD samples were collected at a frequency of one per 20 groundwater samples. The MS is a sample to which known quantities of target analytes are added by the laboratory prior to sample analysis. Acceptable ranges for percent recovery of the added analytes are defined by the laboratory. The MS data is primarily used to evaluate potential matrix effects, which can impart a positive or negative bias. The MSD is used to assess the precision of the analytical method.

7.0 CHAIN OF CUSTODY

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

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TABLES

Table 1
Sampling Summary Table
Arch Chemicals Inc., Rochester, NY

Sample Location		Zone	Sample Date	Sample Time	Water Level (ft)	Bottom of Well (ft)	pH (STD Units)	Spec. Cond. (mS/cm)	Temp ©	Turb (NTU)	ORP (mv)	DO (ppm)
B-15	On-Site	OB	5/8/2023	11:40	4.48	NM	7.40	0.581	10.6	-0.82	69	2.50
B-16	Off-Site	OB	5/8/2023	12:18	4.21	NM	7.20	1.48	10.1	66.1	81	0.83
B-17	On-Site	OB	5/8/2023	9:42	6.05	NM	8.08	8.13	12.1	-1.69	-90	0.82
B-7	On-Site	OB	5/9/2023	2:20	16.98	NM	6.91	2.18	13.5	6.93	65.6	0.84
BR-105	Off-Site	BR	5/11/2023	10:45	22.15	NM	6.85	4.78	15.6	-2.10	-208	0.56
BR-105D	Off-Site	BR deep	5/11/2023	11:25	26.80	NM	6.82	24.25	15.0	19.19	-328	0.53
BR-106	Off-Site	BR	5/11/2023	9:55	22.67	NM	7.02	6.57	14.1	137.80	-340	0.51
BR-112D	Off-Site	BR deep	5/11/2023	3:10	36.41	NM	7.25	5.86	16.1	10.89	-273	2.22
BR-113D	Off-Site	BR deep	5/12/2023	10:25	31.70	NM	7.01	3.41	13.8	1.35	-309	0.55
BR-114	Off-Site	BR	5/10/2023	9:15	12.27	NM	7.99	0.46	11.6	7.86	-34.9	1.81
BR-117D	Off-Site	BR deep	5/11/2023	1:50	47.32	NM	6.42	89.43	12.8	32.40	-303	0.45
BR-118D	Off-Site	BR deep	5/12/2023	9:25	46.68	NM	7.56	1.06	11.4	4.22	-227	0.95
BR-122D	Off-Site	BR deep	5/12/2023	11:45	45.11	NM	6.88	3.55	21.3	-0.82	-281	0.49
BR-123D	Off-Site	BR deep	5/12/2023	12:40	45.35	NM	7.85	1.87	15.7	41.08	-232	0.55
BR-126	Off-Site	BR	5/8/2023	10:52	8.11	NM	7.07	1.03	12.5	7.01	-94	0.67
BR-127	On-Site	BR	5/5/2023	2:10	19.80	NM	8.97	3.65	11.1	51.46	-122	6.81
BR-3	On-Site	BR	5/9/2023	10:45	4.17	NM	7.96	2.740	11.0	320.0	-244	0.55
BR-5A	On-Site	pumping well	5/5/2023	9:25	4.38	NM	7.25	3.47	8.90	74.25	-108.7	0.69
BR-6A	On-Site	BR	5/5/2023	11:20	13.85	NM	8.49	4.28	13.5	34.90	-261	0.67
BR-7A	On-Site	pumping well	5/9/2023	2:50	NM	NM	7.30	3.42	14.8	10.88	-116	6.38
BR-8	On-Site	BR	5/9/2023	12:10	7.48	NM	8.95	13.50	13.4	3.80	-239	0.49
BR-9	On-Site	pumping well	5/10/2023	1:40	NM	NM	7.40	4.16	16.4	82.15	-95.7	4.48
E-3	On-Site	OB	5/9/2023	9:45	4.70	NM	7.96	1.716	9.50	34.09	-206	0.72
MW-106	Off-Site	OB	5/10/2023	2:45	10.42	NM	6.88	2.14	16.3	167.40	-211	0.57
MW-114	Off-Site	OB	5/10/2023	9:55	11.03	NM	7.10	1.72	12.6	12.84	-26	3.10
MW-127	On-Site	OB	5/5/2023	1:55	7.06	NM	7.69	1.29	10.9	-0.84	-36.1	0.79
PW-12	On-Site	BR	5/5/2023	2:55	4.33	NM	8.99	0.40	11.3	1.63	-225	0.61
PW-13	On-Site	pumping well	5/9/2023	3:20	25.35	NM	7.18	6.19	14.2	47.13	-133	2.61
PW-14	On-Site	pumping well	5/8/2023	9:08	8.59	NM	10.09	5.28	11.6	-1.90	-271	0.52
PW-15	On-Site	pumping well	5/11/2023	9:00	22.50	NM	9.27	6.23	13.3	4.96	-157	4.98
PW-16	On-Site	pumping well	5/9/2023	12:35	7.55	NM	7.49	5.26	13.7	22.46	-149	5.48
PW-17	On-Site	pumping well	5/11/2023	8:25	18.48	NM	7.92	12.20	12.2	31.09	-115	4.16
PZ-101	Off-Site	BR	5/10/2023	10:55	11.30	NM	6.73	3.41	17.9	19.60	73.3	0.84
PZ-102	Off-Site	BR	5/10/2023	11:35	18.50	NM	7.06	6.17	18.6	6.12	-319	0.44
PZ-103	Off-Site	BR	5/10/2023	12:30	12.00	NM	7.35	9.09	16.1	21.87	-371	0.49
PZ-104	Off-Site	BR	5/8/2023	1:58	13.33	NM	6.98	3.55	14.1	300.6	-102	0.64
PZ-105	On-Site	BR	5/5/2023	10:30	11.98	NM	7.57	4.80	12.2	120.0	-339	0.53
PZ-106	On-Site	BR	5/8/2023	8:42	12.84	NM	9.22	10.00	10.1	43.80	-192	0.63

Table 1
Sampling Summary Table
Arch Chemicals Inc., Rochester, NY

Sample Location		Zone	Sample Date	Sample Time	Water Level (ft)	Bottom of Well (ft)	pH (STD Units)	Spec. Cond. (mS/cm)	Temp ©	Turb (NTU)	ORP (mv)	DO (ppm)
PZ-107	On-Site	BR	5/5/2023	12:20	10.33	NM	7.32	2.21	12.3	-2.35	-186	0.58
QD-1	Quarry/Canal	quarry ditch	5/12/2023	1:30	NA	NA	8	2.20	13.8	-0.08	-8.1	9.95
QO-2	Quarry/Canal	quarry outfall	5/12/2023	1:00	NA	NA	8.55	2.17	18.4	2.27	-47.2	10.64
QO-2S1	Quarry/Canal	canal at outfall	5/12/2023	1:15	NA	NA	8.81	0.76	16.1	0.79	-73.5	11.56
QS-4	Quarry/Canal	quarry seep	5/12/2023	1:45	NA	NA	8.45	1.80	18.1	-2.90	-0.2	9.31

** Water level at time of sampling
NM = Not Measured
NA = Not Accessible

Table 2
Groundwater Elevation Report
Arch Chemicals Inc., Rochester, NY

Sample Location		Zone	Date	Depth to water	Casing Elevation	GW Elevation	Time	Comments
B-1	On-Site	OB	5/4/2023	6.94	537.75	530.81	-	
B-10	On-Site	OB	5/4/2023	7.31	538.80	531.49	-	
B-15	Off-Site	OB	5/4/2023	2.78	535.29	532.51	-	
B-16	Off-Site	OB	5/4/2023	3.73	536.21	532.48	-	
B-17	On-Site	OB	5/4/2023	6.32	538.74	532.42	-	Missing bolts, flushmount box
B-2	On-Site	OB	5/4/2023	8.00	539.02	531.02	-	
B-4	On-Site	OB	5/4/2023	10.78	542.87	532.09	-	J-plug missing
B-5	On-Site	OB	5/4/2023	7.21	540.21	533.00	-	
B-7	On-Site	OB	5/4/2023	12.21	541.11	528.90	-	
B-8	On-Site	OB	5/4/2023	4.25	538.88	534.63	-	
BR-1	On-Site	BR	5/4/2023	5.41	537.28	531.87	-	
BR-102	On-Site	BR	5/4/2023	23.10	539.43	516.33	-	Broken
BR-103	Off-Site	BR	5/4/2023	0.50	533.19	532.69	-	Bolts, tabs missing
BR-104	Off-Site	BR	5/4/2023	10.00	537.56	527.56	-	Bolts missing
BR-105	Off-Site	BR	5/4/2023	24.40	536.90	512.50	-	Broken Lid
BR-105D	Off-Site	BR deep	5/4/2023	30.91	536.49	505.58	-	Bolts missing
BR-106	Off-Site	BR	5/4/2023	25.45	535.74	510.29	-	
BR-108	Off-Site	BR	5/4/2023	28.74	540.58	511.84	-	
BR-111	Off-Site	BR	5/4/2023	30.48	540.42	509.94	-	
BR-111D	Off-Site	BR	5/4/2023	32.20	540.34	508.14	-	
BR-112D	Off-Site	BR deep	5/4/2023	39.85	547.91	508.06	-	
BR-113	Off-Site	BR	5/4/2023	34.85	543.02	508.17	-	
BR-113D	Off-Site	BR deep	5/4/2023	34.60	542.93	508.33	-	
BR-114	Off-Site	BR	5/4/2023	12.35	539.77	527.42	-	
BR-116	Off-Site	BR	5/4/2023	28.41	545.38	516.97	-	
BR-116D	Off-Site	BR deep	5/4/2023	38.08	545.22	507.14	-	
BR-117	Off-Site	BR	5/4/2023	35.00	547.61	512.61	-	
BR-117D	Off-Site	BR deep	5/4/2023	48.78	547.16	498.38	-	
BR-118	Off-Site	BR	5/4/2023	22.85	547.79	524.94	-	
BR-118D	Off-Site	BR deep	5/4/2023	45.35	547.93	502.58	-	
BR-122D	Off-Site	BR deep	5/4/2023	47.58	552.34	504.76	-	
BR-123D	Off-Site	BR deep	5/4/2023	47.92	553.62	505.70	-	
BR-124D	Off-Site	BR deep	5/4/2023	36.35	537.45	501.10	-	
BR-126	Off-Site	BR	5/4/2023	8.20	537.90	529.70	-	
BR-127	On-Site	BR	5/4/2023	19.63	536.05	516.42	-	
BR-3	On-Site	BR	5/4/2023	2.38	538.20	535.82	-	
BR-3D	On-Site	BR deep	5/4/2023	0.20	537.67	537.47	-	Same as surface water
BR-4	On-Site	BR	5/4/2023	12.56	539.03	526.47	-	
BR-5	On-Site	BR	5/4/2023	3.44	536.30	532.86	-	
BR-5A	On-Site	pumping well	5/4/2023	4.18	536.35	532.17	-	
BR-6A	On-Site	BR	5/4/2023	12.20	540.90	528.70	-	
BR-7	On-Site	BR	5/4/2023	16.00	539.10	523.10	-	
BR-7A	On-Site	pumping well	5/4/2023	NM	539.12	NM	-	Unable to measure past pump
BR-8	On-Site	BR	5/4/2023	7.20	539.72	532.52	-	
BR-9	On-Site	pumping well	5/4/2023	NM	542.17	NM	-	Unable to measure past pump
C-5	On-Site	OB	5/4/2023	7.08	539.63	532.55	-	
CANAL	Off-Site	SW	5/4/2023	41.30	544.79	503.49	-	
E-2	On-Site	OB	5/4/2023	NG	538.32	NM	-	Well Missing
E-3	On-Site	OB	5/4/2023	4.31	536.59	532.28	-	Missing cover and locking lid
E-5	On-Site	OB	5/4/2023	5.47	539.31	533.84	-	Missing cover and locking lid
EC-2	Off-Site	BR	5/4/2023	NA	542.00	NA	-	Dry at 12.70

Table 2
Groundwater Elevation Report
Arch Chemicals Inc., Rochester, NY

Sample Location		Zone	Date	Depth to water	Casing Elevation	GW Elevation	Time	Comments
MW-103	Off-Site	OB	5/4/2023	0.47	533.25	532.78	-	Bolts, tabs missing
MW-104	Off-Site	OB	5/4/2023	7.82	537.54	529.72	-	Sunk in; bolts missing
MW-105	Off-Site	OB	5/4/2023	18.85	536.91	518.06	-	Bolts missing
MW-106	Off-Site	OB	5/4/2023	8.82	535.44	526.62	-	
MW-114	Off-Site	OB	5/4/2023	9.48	539.69	530.21	-	
MW-127	On-Site	OB	5/4/2023	5.98	536.87	530.89	-	
MW-16	Off-Site	BR	5/4/2023	10.70	536.79	526.09	-	Road box needs replacement
MW-3	Off-Site	OB	5/4/2023	NM	535.89	NM	-	Parked over/inaccessible
MW-G6	Off-Site	OB	5/4/2023	NM	534.65	NM	-	Missing/destroyed
MW-G8	Off-Site	OB	5/4/2023	7.42	534.25	526.83	-	
MW-G9	Off-Site	OB	5/4/2023	27.95	536.60	508.65	-	
N-2	On-Site	OB	5/4/2023	NM	537.33	NM	-	Casing broken at 3.10
N-3	On-Site	OB	5/4/2023	4.45	537.38	532.94	-	Pro top bent/locking lid broken
NESS-E	Off-Site	BR deep	5/4/2023	27.38	540.31	512.93	-	
NESS-W	Off-Site	BR deep	5/4/2023	NM	543.04	NM	-	Gate locked/inaccessible
PW-12	On-Site	BR	5/4/2023	4.02	537.49	533.47	-	
PW-13	On-Site	pumping well	5/4/2023	29.60	536.13	506.53	-	Pump not operational
PW-14	On-Site	pumping well	5/4/2023	9.05	537.03	527.98	-	J-plug missing
PW-15	On-Site	pumping well	5/4/2023	22.81	538.32	515.51	-	
PW-16	On-Site	pumping well	5/4/2023	7.92	539.32	531.40	-	Pump not operational
PW-17	On-Site	pumping well	5/4/2023	20.36	NA	NA	-	
PZ-101	Off-Site	BR	5/4/2023	11.00	542.95	531.95	-	
PZ-102	Off-Site	BR	5/4/2023	16.28	540.89	524.61	-	
PZ-103	Off-Site	BR	5/4/2023	9.64	540.20	530.56	-	
PZ-104	Off-Site	BR	5/4/2023	13.17	536.85	523.68	-	Lid of curb box broken
PZ-105	On-Site	BR	5/4/2023	7.11	536.93	529.82	-	
PZ-106	On-Site	BR	5/4/2023	8.64	537.24	528.60	-	
PZ-107	On-Site	BR	5/4/2023	8.35	538.39	530.04	-	
PZ-109	On-Site	BR	5/4/2023	6.34	538.59	532.25	-	
PZ-110	On-Site	BR	5/4/2023	11.31	NA	NA	-	
PZ-111	On-Site	BR	5/4/2023	NM	NA	NA	-	Missing
W-5	On-Site	OB	5/4/2023	NM	538.53	NM	-	Missing

NM = Not Measured
NA = Not Applicable

APPENDIX A
FIELD OBSERVATION FORMS

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR-5A

Field Personnel: Ander, Reagen Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/5/23 9:00am

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/5/23 9:00 Date/Time Completed: ____

Surf. Meas. Point: ( ) Pro Casing (X) Riser Riser Diameter (inches) 6in

Initial Water Level (ft): 4.18 Elevation G/W MSL: ____

Well Total Depth (ft): ____ Method of Well Purge spg pump

One (1) Riser Vol (gal): ____ Dedicated: Y / N

Total Volume Purged (gal): 82oz Purged to Dryness: Y / N

Purge Observations: Start 9:00 Finish 9:25

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume (oz)	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
9:00	4.18		0	9.0	7.23	3.40	124.4	-87.4	2.82	
9:05	4.27		15 oz	9.2	7.24	3.459	118.8	-100.8	1.08	
9:10	4.30		30 oz	9.2	7.25	3.465	58.08	-104.4	0.92	
9:15	4.32		50 oz	9.0	7.26	3.469	86.88	-107.9	0.73	
9:20	4.36		66 oz	8.9	7.25	3.470	84.34	-108.2	0.71	
9:25	4.38		82 oz	8.9	7.25	3.468	74.25	-108.7	0.69	

Sampled @ 9:25

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR-5A

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/5/23 Water Level at Sampling (ft) 4.38

Method of Sampling geopump Dedicated: (Y) N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
9:25	20.9	7.25	3.468	74.25	-108.7	0.69	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 50°

Sample characteristics: rust colored

Comments and Observations:

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

Date: 5/5/23 by: Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PZ 105

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/5/23 Water Level at Sampling (ft) 11.98

Method of Sampling geopump Dedicated: Y / N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
10:30	12.2	7.57	4.800	120	-339	0.53	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 50°

Sample characteristics: clear, slight odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PZ 105

Field Personnel: Ander, Reagen Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/5/23 10:00

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/5/23 10:05 Date/Time Completed: 10:30

Surf. Meas. Point: (X) Pro Casing ( ) Riser Riser Diameter (inches) 2 in

Initial Water Level (ft): 8.00 Elevation G/W MSL: ____

Well Total Depth (ft): ____ Method of Well Purge Slopump

One (1) Riser Vol (gal): ____ Dedicated: Y / N

Total Volume Purged (gal): 75 oz Purged to Dryness: Y / N

Purge Observations: Start 10:05 Finish 10:30

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume oz	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
10:05	8.00		0	12.3	7.64	4.473	150	-213	5.99	
10:10	8.72		50z	11.5	7.58	4.949	36.2	-267	1.63	
10:15	9.45		150z	11.1	7.58	5.016	114.4	-318	0.71	
10:20	10.28		340z	11.9	7.58	5.003	108.8	-334	0.60	
10:25	11.15		520z	10.9	7.58	4.985	69.6	-338	0.57	
10:30	11.98		750z	12.2	7.57	4.800	120	-339	0.53	

Sampled @ 10:30

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR-6A

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/5/23 Water Level at Sampling (ft) 13.85

Method of Sampling Gropump Dedicated: (Y) / N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
11:20	13.5	8.49	4,275	34.90	-261	0.67	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 50°

Sample characteristics: light amber color

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR-6A

Field Personnel: Nick, Rich Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/5/23 10:50

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/5/23 10:55 Date/Time Completed: 11:20

Surf. Meas. Point: (X) Pro Casing ( ) Riser Riser Diameter (inches) 4in steel

Initial Water Level (ft): 12.22 Elevation G/W MSL: ____

Well Total Depth (ft): ____ Method of Well Purge geopump

One (1) Riser Vol (gal): ____ Dedicated: (Y) N

Total Volume Purged (gal): 100oz Purged to Dryness: Y / (N)

Purge Observations: Start 10:55 Finish 11:20

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
10:55	12.22		0	12.3	6.58	4.342	52.14	-99	2.09	
11:00	12.62		10oz	12.9	8.23	4.272	42.61	-207	1.07	
11:05	13.18		30oz	15.6	8.44	4.282	42.38	-237	0.72	
11:10	13.45		64oz	15.2	8.45	4.271	39.62	-240	0.69	
11:15	13.73		82oz	14.8	8.47	4.289	39.07	-246	0.66	
11:20	13.85		100oz	13.5	8.49	4.275	34.98	-261	0.67	

Sampled @ 11:20

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: MW 127

Field Personnel: _____ Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/5/23 Condition of seal: (X) Good ( ) Cracked _____ %
( ) None ( ) Buried

Prot. Casing/Riser Height: _____ Condition 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 Matter (Calibration/Reading): _____ Volatiles (ppm): _____

PURGE INFORMATION

Date/Time Initiated: 5/5/23 1:30 Date/Time Completed: _____

Surf. Meas. Point: ( ) Pro Casing (X) Riser Riser Diameter (inches) 2 in PVC

Initial Water Level (ft): 5.90 Elevation G/W MSL: _____

Well Total Depth (ft): _____ Method of Well Purge geopump

One (1) Riser Vol (gal): _____ Dedicated: (Y) / N

Total Volume Purged (gal): 9oz Purged to Dryness: Y / (N)

Purge Observations: Start 1:30 Finish 1:55

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
1:30	5.90		0	5.8	7.49	1.356	10.97	-79.2	3.98	
1:35	6.45		5oz	11.6	7.70	1.285	10.78	-58	1.28	
1:40	6.78		25oz	11.0	7.70	1.274	0.69	-47.8	0.86	
1:45	6.98		45oz	10.8	7.70	1.275	0.18	-43.2	0.78	
1:50	7.03		64oz	10.9	7.69	1.278	-0.64	-38.8	0.73	
1:55	7.06		90oz	10.9	7.69	1.288	-0.84	-36.1	0.79	

Sampled @ 1:55

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: MW 127

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/5/23 Water Level at Sampling (ft) 7.06

Method of Sampling geopump Dedicated: (Y) / N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
1:55	10.9	7.69	1.288	-0.84	-36.1	0.79	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 55°

Sample characteristics: clear no odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PZ 107

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/5/23 Water Level at Sampling (ft) 10.33

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

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
12:20	12.3	7.32	2.209	-2.35	-186	0.58	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: partly Sunny 50°

Sample characteristics: clear no odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PZ 107

Field Personnel: _____ Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/5/23 Condition of seal: (X) Good ( ) Cracked _____ %

( ) None ( ) Buried

Prot. Casing/Riser Height: _____ Condition 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 Matter (Calibration/Reading): _____ Volatiles (ppm): _____

PURGE INFORMATION

Date/Time Initiated: 5/5/23 11:45 Date/Time Completed: _____

Surf. Meas. Point: ( ) Pro Casing (X) Riser Riser Diameter (inches) 2in PVC

Initial Water Level (ft): 8.30 Elevation G/W MSL: _____

Well Total Depth (ft): _____ Method of Well Purge geopump

One (1) Riser Vol (gal): _____ Dedicated: (Y) N

Total Volume Purged (gal): 64oz Purged to Dryness: Y / (N)

Purge Observations: Start 11:55 Finish 12:20

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
11:55	8.30		0	13.0	6.89	2.425	13.56	-90	4.52	
12:00	9.02		10oz	10.7	7.29	2.403	-1.45	-151	1.11	
12:05	9.48		20oz	11.0	7.29	2.393	-2.48	-163	0.86	
12:10	9.90		32oz	11.9	7.30	2.327	-187	-175	0.66	
12:15	10.16		48oz	12.1	7.31	2.281	-2.28	-181	0.62	
12:20	10.33		64oz	12.3	7.32	2.209	-2.35	-186	0.58	

sampled @ 12:20

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR 127

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/5/23 Water Level at Sampling (ft) 19.80

Method of Sampling grab (pumping well) Dedicated: (Y) / N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
2:10	11.1	8.97	3.653	51.46	-22	6.81	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 55°

Sample characteristics: slight odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PW 12

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/5/23 Water Level at Sampling (ft) 4.33

Method of Sampling geo pump Dedicated: (Y) / N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
2:55	11.3	8.99	0.398	1.63	-225	0.61	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 55°

Sample characteristics: clear, slight odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PW 12

Field Personnel: Nick, Rich Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/5/23

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

Prot. Casing/Riser Height:

Condition 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 Matter (Calibration/Reading): Volatiles (ppm):

PURGE INFORMATION

Date/Time Initiated: 5/5/23 2:20

Date/Time Completed:

Surf. Meas. Point: (X) Pro Casing ( ) Riser

Riser Diameter (inches) 6inch st

Initial Water Level (ft): 4.08

Elevation G/W MSL:

Well Total Depth (ft):

Method of Well Purge geopump

One (1) Riser Vol (gal):

Dedicated: (Y) N

Total Volume Purged (gal):

Purged to Dryness: Y / (N)

Purge Observations:

Start 2:30 Finish 2155

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
2:30	4.08		0	12.9	9.0	0.541	7.02	-106	3.29	
2:35	4.20		25 oz	11.8	~~9.0~~ 9.0	0.394	5.31	-111	0.81	
2:40	4.22		48 oz	11.4	9.0	0.396	3.59	-140	0.72	
2:45	4.27		70 oz	11.5	9.0	0.398	2.93	-193	0.66	
2:50	4.30		95 oz	11.5	9.0	0.398	1.77	-216	0.63	
2:55	4.33		128 oz	11.3	8.99	0.398	1.63	-225	0.61	

Sampled @ 2:55

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PZ 106

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/8/23 Water Level at Sampling (ft) 12.84

Method of Sampling Low-flow Dedicated: Y / N

Multi-phased/layered: NAPL ( ) if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
8:42	[illegible]	[illegible]	See	Sheet			

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 55°F

Sample characteristics:

Comments and Observations:

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

Date: 5-8-23 by: [signature] Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PZ-106

Field Personnel: SLM + PB Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/8/23 Condition of seal: (X) Good ( ) Cracked ____ %

( ) None ( ) Buried

Prot. Casing/Riser Height: ____ Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5-8-23 Date/Time Completed: 5/8/23

Surf. Meas. Point: (X) Pro Casing ( ) Riser Riser Diameter (inches) ____

Initial Water Level (ft): 8.24 Elevation G/W MSL: ____

Well Total Depth (ft): ____ Method of Well Purge GeoPump

One (1) Riser Vol (gal): ____ Dedicated: (Y) / N

Total Volume Purged (gal): ~~9000~~ 128 oz. Purged to Dryness: Y / (N)

Purge Observations: Start 8:16 am Finish 8:46 am

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
8:16 am	9.40			9.8	9.14	9.972	~~>1000~~	-168	~~1.42~~	
8:21	10.31			9.9	9.20	9.989	1.23	-178	0.93	
8:26	11.15			10.1	9.22	9.991	1.02	-184	0.80	
8:31	11.82			10.04	9.21	9.993	2.17	-185	0.71	
8:37	12.46			10.05	9.22	9.995	43.35	-191	0.65	
8:42	12.84			10.05	9.22	9.999	43.8	-192	0.63	

Sampled at 8:42

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PW14

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5.8.23 Water Level at Sampling (ft) 8.59

Method of Sampling Low flow Dedicated: Y / N

Multi-phased/layered: Y / (N) if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 55°F

Sample characteristics:

Comments and Observations:

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

Date: 5.8.23 by: Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PW14

Field Personnel: SUM & PB Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5-8-23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5-8-23 Date/Time Completed: 5-8-23

Surf. Meas. Point: ( ) Pro Casing (X) Riser Riser Diameter (inches) ____

Initial Water Level (ft): 8.19 Elevation G/W MSL: ____

Well Total Depth (ft): ____ Method of Well Purge GeoPump

One (1) Riser Vol (gal): ____ Dedicated: (Y) N

Total Volume Purged (gal): 72.02 Purged to Dryness: Y / (N)

Purge Observations: Start 8:53 Finish 9:18

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
8:53	8.29			11.2	10.07	5.265	-2.30	-243	1.60	
8:58	8.40			11.4	10.09	5.264	-2.32	-261	0.66	
9:03	8.48			11.5	10.09	5.266	-1.95	-269	0.59	
9:08	8.59			11.6	10.09	5.276	-1.90	-271	0.52	

Sampled at 9:08 AM

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: B17

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5.8.23 Water Level at Sampling (ft)

Method of Sampling Low flow Dedicated: (Y) N

Multi-phased/layered: Y / (N) if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 60'F

Sample characteristics:

Comments and Observations:

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

Date: 5-8-23 by: Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: B17

Field Personnel: Sum + PB Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5-8-23 Condition of seal: (X) Good ( ) Cracked ( ) None ( ) Buried %

Prot. Casing/Riser Height: Condition 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 Matter (Calibration/Reading): Volatiles (ppm):

PURGE INFORMATION

Date/Time Initiated: 5-8-23 - 9:27 am Date/Time Completed: 5-8-23 9:55

Surf. Meas. Point: ( ) Pro Casing ( ) Riser Riser Diameter (inches) 2"

Initial Water Level (ft): 6.03 Elevation G/W MSL:

Well Total Depth (ft): Method of Well Purge Low flow - Geo Pump

One (1) Riser Vol (gal): Dedicated: (Y) / N

Total Volume Purged (gal): 4202 Purged to Dryness: Y / (N)

Purge Observations: Start 9:27 Finish 9:55

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
9:27	6.05			12.2	8.15	8.113	-1.62	-99	2.06	
9:32	6.05			12.0	8.12	8.134	-1.32	-92	1.33	
9:37	6.05			12.1	8.08	8.133	-1.72	-90	0.87	
9:42	6.05			12.1	8.08	8.133	-1.69	-90	0.82	

Sampled at 9:42 AM

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR 126

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5.8-23 Water Level at Sampling (ft) 8.02

Method of Sampling Low flow Dedicated: (Y) N

Multi-phased/layered: Y / (N) if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 60°F

Sample characteristics:

Comments and Observations:

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

Date: 5.8.23 by: Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR126

Field Personnel: SVM + PB Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5-8-25 Condition of seal: (X) Good ( ) Cracked ____ %

( ) None ( ) Buried

Prot. Casing/Riser Height: ____ Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5-8-25 10:32 Date/Time Completed: 5-8-25

Surf. Meas. Point: ( ) Pro Casing ( ) Riser Riser Diameter (inches) 4"

Initial Water Level (ft): 8.02 Elevation G/W MSL: ____

Well Total Depth (ft): ____ Method of Well Purge Geo Pump

One (1) Riser Vol (gal): ____ Dedicated: (Y) / N

Total Volume Purged (gal): 9.02 Purged to Dryness: Y (N)

Purge Observations: Start 10:32 Finish 11:00

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
10:32	8.11			13.4	7.17	1.442	2.08	-81	4.08	
10:37	8.10			12.5	7.07	1.060	1.29	-87	0.94	
10:42	8.11			12.5	7.07	1.040	8.46	-90	0.74	
10:47	8.11			12.4	7.07	1.038	6.98	-93	0.68	
10:52	8.11			12.5	7.07	1.034	7.01	-94	0.67	

Sampled at 10:52

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: B15

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5-8-23 Water Level at Sampling (ft) 4.48

Method of Sampling Low flow Dedicated: (Y) / N

Multi-phased/layered: Y / (N) if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other

INSTRUMENT CALIBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 60°F

Sample characteristics:

Comments and Observations:

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

Date: 5-8-23 by: Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: B15

Field Personnel: RM & PB Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5.8.23 Condition of seal: (X) Good ( ) Cracked ____ %
( ) None ( ) Buried

Prot. Casing/Riser Height: ____ Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5.8.23 Date/Time Completed: 5.8.23

Surf. Meas. Point: ( ) Pro Casing (✓) Riser Riser Diameter (inches) 2"

Initial Water Level (ft): 2.81 Elevation G/W MSL: ____

Well Total Depth (ft): ____ Method of Well Purge Geo Pump

One (1) Riser Vol (gal): ____ Dedicated: (Y) / N

Total Volume Purged (gal): 96 OZ Purged to Dryness: Y / (N)

Purge Observations: Start 11:15 Finish 11:55

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
11:15	3.18			11.7	7.48	0.627	-1.52	17	5.29	
11:20	3.75			10.7	7.43	0.588	1.87	48	3.92	
11:25	4.21			10.4	7.43	0.587	4.80	62	3.78	
11:30	4.44			10.5	7.42	0.586	1.72	68	3.42	
11:35	4.46			10.5	7.41	0.584	-0.42	69	2.94	
11:40	4.48			10.6	7.40	0.581	-0.87	69	2.50	

Sampled at 11:40 A.M.

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: B16

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5-8-23 Water Level at Sampling (ft) 4.21

Method of Sampling Low Flow Dedicated: Y / N

Multi-phased/layered: Y / (N) if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 60°F

Sample characteristics:

Comments and Observations:

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

Date: 5-9-23 by: Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: B16

Field Personnel: SM + PB Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5.8.23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5.8.23 Date/Time Completed: 5.8.23

Surf. Meas. Point: ( ) Pro Casing (X) Riser Riser Diameter (inches) 2"

Initial Water Level (ft): 3.64 Elevation G/W MSL: ____

Well Total Depth (ft): ____ Method of Well Purge GeoPump

One (1) Riser Vol (gal): ____ Dedicated: (Y) / N

Total Volume Purged (gal): 66.02 Purged to Dryness: Y / (N)

Purge Observations: Start 11:58 Finish 12:31

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
11:58	3.85			11.02	7.21	1.409	175	90	5.11	
12:03	3.94			10.80	7.16	1470	167	86	1.08	
12:08	4.00			10.3	7.17	1.473	79.96	81.8	0.88	
12:13	4.15			9.9	7.18	1.479	63.6	80.1	0.81	
12:18	4.21			10.1	7.20	1.479	66.1	81.0	0.83	

Sampled at 12:18 1.M

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PZ104

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time: 5-8-23 Water Level at Sampling (ft): 13.33

Method of Sampling: Low flow Dedicated: (Y) / N

Multi-phased/layered: Y / (N) if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 60's F

Sample characteristics:

Comments and Observations:

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

Date: 5-8-23 by: Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PZ104

Field Personnel: SLM + PB Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5.8.23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5-8-23 Date/Time Completed: 5-9-23

Surf. Meas. Point: ( ) Pro Casing ( ) Riser Riser Diameter (inches) 2"

Initial Water Level (ft): 13.15 Elevation G/W MSL: ____

Well Total Depth (ft): ____ Method of Well Purge GeoPump

One (1) Riser Vol (gal): ____ Dedicated: (Y) / N

Total Volume Purged (gal): 11202 Purged to Dryness: Y / (N)

Purge Observations: Start 1:31 Finish 2:48

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
1:31	13.30			14.5	7.08	1.855	24.78	95	1.66	
1:36	13.30			14.2	7.06	1.838	-0.78	94	0.90	
1:43	13.31			14.4	7.06	1.848	-1.69	67	0.78	
1:48	13.31			14.2	6.98	2.907	5.52	-41	0.70	
1:53	13.32			14.5	6.96	3.413	5.62	-86	0.66	
1:58	13.33			14.1	6.98	3.547	300.6	-102	0.64	

Sampled at 1:58

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR-8

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/9/23 Water Level at Sampling (ft)

Method of Sampling _____ Dedicated: Y / N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
12:10	13.4	8.95	13,501	3.80	-239	0.49	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 60°

Sample characteristics: ~~[illegible]~~ brownish color

Comments and Observations: _____

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR-8

Field Personnel: Vicka, Ryla Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/9/23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/9/23 11:15

Date/Time Completed: ____

Surf. Meas. Point: ( ) Pro Casing (X) Riser

Riser Diameter (inches) ____

Initial Water Level (ft): 7.07

Elevation G/W MSL: ____

Well Total Depth (ft): ____

Method of Well Purge geo pump

One (1) Riser Vol (gal): ____

Dedicated: (Y) / N

Total Volume Purged (gal): 96oz

Purged to Dryness: Y / (N)

Purge Observations:

Start 11:45 Finish 12:10

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
11:45	7.07		0	15.2	8.85	13.528	130	-182	2.63	
11:50	7.22		15oz	14.0	8.93	13.549	5.61	-213	0.64	
11:55	7.30		32oz	13.7	8.94	13.553	4.3	-219	0.58	
12:00	7.37		50oz	13.5	8.95	13.541	4.34	-224	0.54	
12:05	7.45		75oz	13.5	8.95	13.550	4.75	-232	0.50	
12:10	7.48		96oz	13.4	8.95	13.501	3.80	-239	0.49	

sample @ 12:10

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: E-3

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/9/23 Water Level at Sampling (ft) 4.70

Method of Sampling geopump Dedicated: (Y) / N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
9:45	9.5	7.96	1.716	34.09	-206	0.72	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny, 60°

Sample characteristics: light amber / clear color

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: E-3

Field Personnel: Nick A, Rich R Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/9/23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/9/23 9:25 Date/Time Completed: ____

Surf. Meas. Point: ( ) Pro Casing (X) Riser Riser Diameter (inches) ____

Initial Water Level (ft): 4.41 Elevation G/W MSL: ____

Well Total Depth (ft): ____ Method of Well Purge grab pump

One (1) Riser Vol (gal): ____ Dedicated: (Y) N

Total Volume Purged (gal): 5502 Purged to Dryness: Y (N)

Purge Observations: Start 9:30 Finish 9:45

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
9:30	4.41		0	9.9	7.75	1.672	103.9	-158	2.83	
9:35	4.55		15 02	9.7	7.90	1.709	110.3	-189	1.05	
9:40	4.65		34 02	9.6	7.96	1.715	68.8	-203	0.79	
9:45	4.70		55 02	9.5	7.96	1.716	34.09	-206	0.72	

sample @ 9:45

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR-3

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/9/23 Water Level at Sampling (ft)

Method of Sampling geopump Dedicated: (Y) / N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
10:45	11.0	7.96	2.740	320	-244	0.55	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 60°

Sample characteristics: amber color, no odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR-3

Field Personnel: NickA, RichR Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/9/23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/9/23 10:15 Date/Time Completed: ____

Surf. Meas. Point: (X) Pro Casing ( ) Riser Riser Diameter (inches) 4 in steel

Initial Water Level (ft): 2.70 Elevation G/W MSL: ____

Well Total Depth (ft): ____ Method of Well Purge Geopump

One (1) Riser Vol (gal): ____ Dedicated: (Y) N

Total Volume Purged (gal): ____ Purged to Dryness: Y / (N)

Purge Observations: Start 10:20 Finish 10:45

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
10:20	2.90		0	11.2	7.73	2.708	600	-175	1.68	
10:25	3.12		20 oz	11.0	7.86	2.739	545	-217	0.72	
10:30	3.35		35 oz	11.0	7.90	2.739	532	-230	0.64	
10:35	3.58		50 oz	11.0	7.94	2.741	488	-241	0.59	
10:40	3.85		70 oz	11.0	7.96	2.741	405	-244	0.57	
10:45	4.17		90 oz	11.0	7.96	2.740	320	-244	0.55	

Sample @ 10:45

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PW 16

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/9/23 12:35 Water Level at Sampling (ft) 7.55

Method of Sampling grab (bailer) Dedicated: (Y) / N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
12:35	13.7	[illegible]	5.264	22.46	-149	5.48	
		7.49					

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling:

Sample characteristics: clear, black floating organic

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc.

Sample Point ID: B-7

Field Personnel: Nick A, Rich R

Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/9/23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/9/23 1:50

Date/Time Completed: ____

Surf. Meas. Point: ( ) Pro Casing (X) Riser

Riser Diameter (inches) 2in PVC

Initial Water Level (ft): 12.37

Elevation G/W MSL: ____

Well Total Depth (ft): ____

Method of Well Purge Geopump

One (1) Riser Vol (gal): ____

Dedicated: (Y) / N

Total Volume Purged (gal): ____

Purged to Dryness: Y / (N)

Purge Observations:

Start 1:55 Finish 2:20

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
1:55	12.37		0	15.2	7.02	2.617	64.46	-22.6	2.91	
2:00	13.77		10oz	13.6	6.93	2.332	14.97	54.4	1.35	
2:05	14.62		20oz	13.9	6.91	2.264	23.3	65.7	1.07	
2:10	15.57		35oz	13.5	6.91	2.214	6.85	67.6	0.99	
2:15	16.51		50oz	13.5	6.91	2.198	6.87	64.4	0.92	
2:20	16.98		70oz	13.5	6.91	2.184	6.93	65.6	0.84	

Sampled @ 2:20

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: B-7

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/9/23 Water Level at Sampling (ft) 16.98

Method of Sampling geopump Dedicated: (Y) / N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
2:20	13.5	6.91	2.184	6.93	65.6	0.84	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: sunny 62°

Sample characteristics: light amber color

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PW-13

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/9/23 3:20 Water Level at Sampling (ft) 25.35

Method of Sampling grab Dedicated: (Y) / N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
3:20	14.2	7.18	6.188	47.13	-133	2.61	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 65°

Sample characteristics: dark colored water

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR-7A

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/9/23 Water Level at Sampling (ft) pumping well

Method of Sampling grab Dedicated: (Y) N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
2:50	14.8	7.30	3.416	10.88	-116	6.38	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
	1							
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 65°

Sample characteristics: clear, odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR 1H

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/10/23 Water Level at Sampling (ft) 12.27

Method of Sampling Sp pump Dedicated: (Y) / N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
9:15	11.6	7.99	0.459	7.86	-34.9	1.81	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 60°

Sample characteristics: light brown, no odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR 114

Field Personnel: Nick A, Rich R Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/10/23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/10/23 8:50 Date/Time Completed: ____

Surf. Meas. Point: (X) Pro Casing ( ) Riser Riser Diameter (inches) 6in steel

Initial Water Level (ft): 12.12 Elevation G/W MSL: ____

Well Total Depth (ft): ____ Method of Well Purge Sqpump

One (1) Riser Vol (gal): ____ Dedicated: (Y) / N

Total Volume Purged (gal): ____ Purged to Dryness: Y / (N)

Purge Observations: Start 8:55 Finish 9:15

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
8:55	12.12		0	11.6	8.06	0.539	78.8	66.2	5.53	
9:00	12.18		10 oz	11.2	8.00	0.473	26.3	32.3	2.22	
9:05	12.22		25 oz	11.5	7.99	0.460	14.03	19.5	1.93	
9:10	12.25		40 oz	11.6	7.99	0.458	10.9	-28.1	1.85	
9:15	12.27		55 oz	11.6	7.99	0.459	7.86	-34.9	1.81	

Sampled @ 9:15

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: MW 114

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/10/23 Water Level at Sampling (ft) 11.03

Method of Sampling geopump Dedicated: (Y) N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
9:55	12.6	7.10	1.723	12.84	103.3	2.66	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 62°

Sample characteristics: clear

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc.

Sample Point ID: MW 114

Field Personnel: Nick A, Rich R

Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/10/23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/10/23

Date/Time Completed: ____

Surf. Meas. Point: (X) Pro Casing ( ) Riser

Riser Diameter (inches) 2in PVC

Initial Water Level (ft): 9.28

Elevation G/W MSL: ____

Well Total Depth (ft): ____

Method of Well Purge Geopump

One (1) Riser Vol (gal): ____

Dedicated: (Y) / N

Total Volume Purged (gal): ____

Purged to Dryness: Y / (N)

Purge Observations:

Start 9:30 Finish ____

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
9:30	9.28		0	12.0	7.13	1.433	54.37	80.0	5.46	
9:35	10.26		10 oz	11.9	7.11	1.545	28.8	85.2	3.94	
9:40	10.71		25 oz	11.9	7.11	1.582	26.8	94.1	3.62	
9:45	10.82		40 oz	12.1	7.11	1.601	25.7	98.2	3.50	
9:50	10.98		55 oz	12.3	7.10	1.665	16.29	101.8	3.01	
9:55	11.03		70 oz	12.6	7.10	1.723	12.84	103.3	2.66	

Sampled @ 9:55

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PZ 101

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/10/23 Water Level at Sampling (ft) 11.30

Method of Sampling geopump Dedicated: (Y) N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
10:55	17.9	6.73	3,413	19,6	73,3	0,84	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 62°

Sample characteristics: Clear, no odor, white biomass floaters

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc.

Sample Point ID: PZ 101

Field Personnel: Nick A, Rich R

Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/10/22

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

Prot. Casing/Riser Height:

Condition 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 Matter (Calibration/Reading): Volatiles (ppm):

PURGE INFORMATION

Date/Time Initiated: 5/10/23 10:20

Date/Time Completed:

Surf. Meas. Point: ( ) Pro Casing (X) Riser

Riser Diameter (inches) 2in PVC

Initial Water Level (ft): 10.92

Elevation G/W MSL:

Well Total Depth (ft):

Method of Well Purge gl pump

One (1) Riser Vol (gal):

Dedicated: (Y) / N

Total Volume Purged (gal):

Purged to Dryness: Y (N)

Purge Observations:

Start 10:30 Finish 10:55

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
10:30	10.92		0	18.7	6.41	4.286	12.22	148	2.30	
10:35	11.20		8oz	15.9	6.63	3.770	5.71	141	1.85	
10:40	11.25		20oz	17.5	6.72	3.471	6.34	110	1.08	
10:45	11.27		34oz	17.8	6.73	3.434	9.63	90.7	0.93	
10:50	11.28		50oz	17.8	6.73	3.417	15.30	78.0	0.86	
10:55	11.30		70oz	17.9	6.73	3.413	19.6	73.3	0.84	

Sampled @ 10:55

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PZ 102

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/10/23 Water Level at Sampling (ft) 18.50

Method of Sampling geopump Dedicated: (Y) N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
11:35	18.6	7.06	6.172	6.12	-319	0.44	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 65°

Sample characteristics: Clear, orange/rust colored biomass, stagnant chem odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PZ 102

Field Personnel: Nick A, Rich R Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/10/23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/10/23 11:05 Date/Time Completed: ____

Surf. Meas. Point: ( ) Pro Casing (X) Riser Riser Diameter (inches) 2in PVC

Initial Water Level (ft): 15.41 Elevation G/W MSL: ____

Well Total Depth (ft): ____ Method of Well Purge geo pump

One (1) Riser Vol (gal): ____ Dedicated: (Y) N

Total Volume Purged (gal): ____ Purged to Dryness: Y / (N)

Purge Observations: Start 11:10 Finish 11:35

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
11:10	15.41		0	18.7	7.02	6.332	21.3	-219	1.18	
11:15	16.32		5oz	16.2	7.08	6.363	5.51	-264	0.71	
11:20	17.13		15oz	18.0	7.06	6.208	-0.07	-308	0.50	
11:25	17.62		32oz	18.1	7.07	6.215	0.02	-334	6.47	
11:30	18.10		46oz	18.5	7.06	6.125	2.51	-318	0.44	
11:35	18.50		52oz	18.6	7.06	6.172	6.12	-319	0.44	

Sampled @ 11:35

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PZ 103

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/10/23 Water Level at Sampling (ft) 12.0

Method of Sampling GeoPump Dedicated: (Y) N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
12:30	16.1	7.35	9.094	21.87	-371	0.49	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 65°

Sample characteristics: clear, pungent chemical/stagnant odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PZ 103

Field Personnel: NickA, RichR Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/10/23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/10/23 Date/Time Completed: ____

Surf. Meas. Point: ( ) Pro Casing (X) Riser Riser Diameter (inches) 2in PVC

Initial Water Level (ft): 9.45 Elevation G/W MSL: ____

Well Total Depth (ft): ____ Method of Well Purge geopump

One (1) Riser Vol (gal): ____ Dedicated: (Y) / N

Total Volume Purged (gal): ____ Purged to Dryness: Y / (N)

Purge Observations: Start 12:10 Finish ____

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
12:15	9.45		0	15.2	7.31	9.190	-1.10	-356	0.79	
12:20	10.75		20oz	16.1	7.35	9.094	16.28	-368	0.51	
12:25	11.35		36oz	16.4	7.35	9.093	9.14	-369	0.50	
12:30	12.0		48oz	16.1	7.35	9.094	21.87	-371	0.49	

Sample @ 12:30

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR-9

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/10/23 Water Level at Sampling (ft) unable to get reading with pump in well

Method of Sampling grab Dedicated: (Y) N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
1:40	16.4	7.40	4.155	82.15	-95.7	4.48	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 70°

Sample characteristics: light brown, chemical odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: MW106

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/10/23 Water Level at Sampling (ft) 10.42

Method of Sampling geopump Dedicated: (Y) N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
2:45	16.3	6.88	2.143	167.4	-211	0.57	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 75°

Sample characteristics: light brown, slight chem odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: MW106

Field Personnel: NickA, RichR Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/10/23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/10/23 Date/Time Completed: ____

Surf. Meas. Point: (X) Pro Casing ( ) Riser Riser Diameter (inches) 2in pvc

Initial Water Level (ft): 8.84 Elevation G/W MSL: ____

Well Total Depth (ft): ____ Method of Well Purge geopump

One (1) Riser Vol (gal): ____ Dedicated: (Y) / N

Total Volume Purged (gal): ____ Purged to Dryness: Y / (N)

Purge Observations: Start 2:20 Finish 2:45

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
2:20	8.84		0	14.3	6.93	2.047	86.33	-104	1.09	
2:25	9.52		10 oz	15.4	6.90	2,006	65.73	-105	0.93	
2:30	9.93		20 oz	17.7	6.85	1.954	57.34	-113	0.92	
2:35	10.13		35 oz	17.1	6.86	2.101	41.81	-146	0.67	
2:40	10.33		50 oz	16.6	6.88	2.108	75.44	-189	0.61	
2:45	10.47		75 oz	16.3	6.88	2.145	167.4	-211	0.57	

Sampled @ 2:45

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PW17

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/11/23 Water Level at Sampling (ft) 18;48

Method of Sampling grab (bailer) Dedicated: Y / N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
8:25	12.2	7.92	12.196	31.09	-115	4.16	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 65°

Sample characteristics: amber colored, chem odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: PW15

FIELD OBSERVATIONS

~~PW10~~ MS, MSD

SAMPLING INFORMATION

Date/Time 5/11/23 Water Level at Sampling (ft) 22.50

Method of Sampling grab Dedicated: (Y) / N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
~~8:00~~	13.3	9.27	6.231	4.96	-157	4.98	
9:00							

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 65°

Sample characteristics: amber, strong chem odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR-106

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/11/23 Water Level at Sampling (ft) 22.67

Method of Sampling geopump Dedicated: (Y) N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
9:55	14.1	7.02	6.568	137.8	-340	0.51	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 65°

Sample characteristics: clear, slight black sediment, strong

Comments and Observations: stagnant/chem odor

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR-106

Field Personnel: Nick A, Rich R Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/11/23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/11/23 Date/Time Completed: ____

Surf. Meas. Point: (X) Pro Casing ( ) Riser Riser Diameter (inches) 6 in steel

Initial Water Level (ft): 22.48 Elevation G/W MSL: ____

Well Total Depth (ft): ____ Method of Well Purge Grapump

One (1) Riser Vol (gal): ____ Dedicated: (Y) N

Total Volume Purged (gal): ____ Purged to Dryness: Y / (N)

Purge Observations: Start 9:35 Finish 9:55

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
9:35	22.48		0	15.0	7.03	6.740	140.8	-239	1.83	
9:40	22.57		5 oz	14.1	7.03	6.684	110.7	-285	0.78	
9:45	22.6		15 oz	14.1	7.02	6.567	112.1	-336	0.54	
9:50	22.63		30 oz	14.2	7.02	6.558	110.8	-340	0.52	
9:55	22.67		45 oz	14.1	7.02	6.568	137.8	-340	0.51	

Sampled @ 9:55

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR-105

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/11/23 Water Level at Sampling (ft) 22.15

Method of Sampling Geopump Dedicated: (Y) N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
10:45	15.6	6.85	4.777	-2.10	-208	0.56	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 70°

Sample characteristics: clear, no odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc.

Sample Point ID: BR-105

Field Personnel: NickA, RichR

Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/11/23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/11/23

Date/Time Completed: ____

Surf. Meas. Point: (X) Pro Casing ( ) Riser

Riser Diameter (inches) 6in steel

Initial Water Level (ft): 22.08

Elevation G/W MSL: ____

Well Total Depth (ft): ____

Method of Well Purge Grundfos pump

One (1) Riser Vol (gal): ____

Dedicated: (Y) N

Total Volume Purged (gal): ____

Purged to Dryness: Y / (N)

Purge Observations:

Start 10:20 Finish 10:45

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
10:20	22.08		0	19.0	6.99	5.866	4.66	-141	1.76	
10:25	22.13		10oz	15.6	6.88	6.404	-1.29	-171	0.75	
10:30	22.15		30oz	15.6	6.86	6.101	-2.30	-192	0.61	
10:35	22.16		50oz	15.8	6.85	5.588	-2.41	-205	0.58	
10:40	22.08		65oz	15.9	6.85	5.158	-2.11	-208	0.57	
10:45	22.15		82oz	15.6	6.85	4.777	-2.10	-208	0.56	

Sampled @ 10:45

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR-105D

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/11/23 Water Level at Sampling (ft) 26.80

Method of Sampling geopump Dedicated: (Y) N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
11:25	15.0	6.82	24.249	19.19	-328	0.53	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 75°

Sample characteristics: darker color, stagnant odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc.

Sample Point ID: BR-105D

Field Personnel: Nick A, Rich R

Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/11/23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/11/23

Date/Time Completed: ____

Surf. Meas. Point: ( ) Pro Casing ( ) Riser

Riser Diameter (inches) 2in PVC

Initial Water Level (ft): 25.43

Elevation G/W MSL: ____

Well Total Depth (ft): ____

Method of Well Purge Geopump

One (1) Riser Vol (gal): ____

Dedicated: (Y) / N

Total Volume Purged (gal): ____

Purged to Dryness: Y / (N)

Purge Observations: ____

Start 11:05 Finish 11:25

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
11:05	25.43		0	18.2	6.81	23.344	9.62	-317	0.78	
11:10	26.31		15 oz	15.0	6.87	23.739	10.04	-325	0.51	
11:15	26.47		30 oz	14.9	6.85	24.257	30.24	-328	0.52	
11:20	26.79		45 oz	14.9	6.84	24.305	50.61	-329	0.53	
11:25	26.80		60 oz	15.0	6.82	24.249	19.19	-328	0.53	

Sampled @ 11:25

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR-112 D

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/11/23 Water Level at Sampling (ft) 36.41

Method of Sampling gdb (bailer) Dedicated: (Y) N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
3:10	16.1	7.25	5.864	10.89	-273	2.22	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling:

Sample characteristics:

Comments and Observations: well bent at surface, unable to insert bladder pump

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR 117D

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/11/23 Water Level at Sampling (ft)

Method of Sampling bladder pump Dedicated: (Y) N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
1:50	12.8	6.42	89.428	32.4	-303	0.45	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 75°

Sample characteristics: clear, stagnant odor, sulfur odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc.

Sample Point ID: BR-117D

Field Personnel: NzkA, RzkR

Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/11/23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/11/23

Date/Time Completed: ____

Surf. Meas. Point: ( ) Pro Casing (X) Riser

Riser Diameter (inches): 4in steel

Initial Water Level (ft): 47.30

Elevation G/W MSL: ____

Well Total Depth (ft): ____

Method of Well Purge: bladder pump

One (1) Riser Vol (gal): ____

Dedicated: (Y) / N

Total Volume Purged (gal): ____

Purged to Dryness: Y / (N)

Purge Observations: ____

Start 1:25 Finish 1:50

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
1:25	47.30		0	14.2	6.44	64.08	107.4	-298	1.01	
1:30	47.31		20oz	11.1	6.41	84.683	473	-292	0.57	
1:35	47.31		40oz	10.9	6.37	94.527	299	-294	0.47	
1:40	47.31		60oz	12.5	6.39	92.807	167	-301	0.43	
1:45	47.32		75oz	12.6	6.2	90.8 300	133	-306	0.44	
1:50	47.32		90oz	12.8	6.42	89.428	32.4	-303	0.45	

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: QO-2

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/12/23 Water Level at Sampling (ft) ✓

Method of Sampling grab Dedicated: Y / (N)

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
1:00	18.4	8.55	2165	2.27	-47.2	10.64	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 75°

Sample characteristics: clear

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

2 5 1

Facility: Arch Chemicals, Inc. Sample Point ID: QO - [illegible]

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/12/23 Water Level at Sampling (ft) /

Method of Sampling Grab Dedicated: Y / (N)

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
1:15	16.1	8.81	0.754	0.79	[illegible]	11.56	
					-73.5		

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 75°

Sample characteristics: clear

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: QD-1

FIELD OBSERVATIONS

MS, MSD

SAMPLING INFORMATION

Date/Time 5/17/23 Water Level at Sampling (ft) /

Method of Sampling grab Dedicated: Y / N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
1:30	[illegible]	8.00	2.198	-0.08	-8.1	9.95	
	13.8						

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 75°

Sample characteristics: clear

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: QS-4

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/12/23 Water Level at Sampling (ft) /

Method of Sampling Grab Dedicated: Y / N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
1:45	18.1	8.45	1.800	-2.90	-0.2	9.31	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 75

Sample characteristics: clear, sulfur odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR-123D

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/12/23 Water Level at Sampling (ft) 45.35

Method of Sampling Bladder pump Dedicated: (Y) N

Multi-phased/layered: Y / N If yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
12:40	15.7	7.85	1.874	41.08	-232	0.55	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 75°

Sample characteristics: clear/light amber

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR-123D

Field Personnel: NickA, RichR Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/12/23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/12/23 Date/Time Completed: ____

Surf. Meas. Point: ( ) Pro Casing (X) Riser Riser Diameter (inches) 4 inch steel

Initial Water Level (ft): 45.33 Elevation G/W MSL: ____

Well Total Depth (ft): ____ Method of Well Purge bladder pump

One (1) Riser Vol (gal): ____ Dedicated: (Y) N

Total Volume Purged (gal): ____ Purged to Dryness: Y / (N)

Purge Observations: Start 12:15 Finish ____

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
12:15	45.33		0	16.1	7.87	1.971	8.24	-183	2.12	
12:20	45.35		15 oz	16.0	7.84	1.889	8.40	-212	0.87	
12:25	45.35		30 oz	15.60	7.84	1.880	17.79	-222	0.69	
12:30	45.36		50 oz	15.1	7.84	1.876	26.50	-226	0.62	
12:35	45.35		75 oz	15.3	7.85	1.871	34.8	-228	0.57	
12:40	45.35		95 oz	15.7	7.85	1.874	41.08	-232	0.55	

Sampled @ 12:40

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR 122D

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/12/23 Water Level at Sampling (ft) 45.11

Method of Sampling bladder pump Dedicated: (Y) / N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
11:45	21.3	6.88	3.554	-0.82	-281	0.49	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 75°

Sample characteristics: clear, no odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc.

Sample Point ID: BR 122 D

Field Personnel: Nick A, Rich R

Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/12/23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: ____

Date/Time Completed: ____

Surf. Meas. Point: ( ) Pro Casing ( ) Riser

Riser Diameter (inches) 4 in steel

Initial Water Level (ft): 45.07

Elevation G/W MSL: ____

Well Total Depth (ft): ____

Method of Well Purge bladder pump

One (1) Riser Vol (gal): ____

Dedicated: (Y) N

Total Volume Purged (gal): 17 oz

Purged to Dryness: Y / (N)

Purge Observations:

Start 11:20 Finish 11:45

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
	45.07									
11:20	~~45.07~~		0	24.1	7.33	1.738	11.86	-201	3.26	
11:25	45.07		5 oz	23.0	7.27	1.647	16.16	-227	2.23	
11:30	45.09		10 oz	22.4	6.89	2.018	9.14	-305	0.55	
11:35	45.10		12 oz	22.6	6.87	3.012	2.37	-294	0.46	
11:40	45.10		15 oz	21.9	6.88	3.354	0.58	-285	0.54	
11:45	45.11		17 oz	21.3	6.88	3.554	-0.82	-281	0.49	

Sampled @ 11:45

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR 113D

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/12/23 Water Level at Sampling (ft) 31.70

Method of Sampling bladder pump Dedicated: (Y) N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
10:25	13.8	7.01	3.414	1.35	-309	0.55	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 75°

Sample characteristics: clear no odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR 113 D

Field Personnel: Nick A, Rich R Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/12/23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/12/23

Surf. Meas. Point: ( ) Pro Casing (X) Riser

Initial Water Level (ft): 31.69

Well Total Depth (ft): ____

One (1) Riser Vol (gal): ____

Total Volume Purged (gal): 64oz

Purge Observations: ____

Date/Time Completed: ____

Riser Diameter (inches) 2in PVC

Elevation G/W MSL: ____

Method of Well Purge bladder pump

Dedicated: (Y) N

Purged to Dryness: Y / (N)

Start 10:10 Finish 10:25

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
10:10	31.70		0	14.9	7.06	3.475	27.1	-229	2.88	
10:15	31.70		30oz	11.4	7.02	3.446	4.92	-309	0.73	
10:20	31.70		50oz	13.6	7.01	3.414	1.84	-305	0.58	
10:25	31.70		64oz	13.8	7.01	3.414	1.35	-309	0.55	

Sampled @ 10:25

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc.

Sample Point ID: BR 118D

Field Personnel: Nick A, Rich R

Sample Matrix: Groundwater

MONITORING WELL INSPECTION

Date/Time: 5/12/23

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

Prot. Casing/Riser Height: ____

Condition 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 Matter (Calibration/Reading): ____ Volatiles (ppm): ____

PURGE INFORMATION

Date/Time Initiated: 5/12/23

Date/Time Completed: ____

Surf. Meas. Point: ( ) Pro Casing (X) Riser

Riser Diameter (inches) 4in steel

Initial Water Level (ft): 46.46

Elevation G/W MSL: ____

Well Total Depth (ft): ____

Method of Well Purge bladder pump

One (1) Riser Vol (gal): ____

Dedicated: (Y) / N

Total Volume Purged (gal): ____

Purged to Dryness: Y / (N)

Purge Observations:

Start 9:00 Finish ____

PURGE DATA (if applicable)

Time	Water Level	Purge Rate (gpm/htz)	Cumulative Volume	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
9:00	46.63		0	12.1	7.90	1.016	15.46	-132	3.82	
9:05	46.67		15oz	11.6	7.59	1.064	5.01	-167	1.94	
9:10	46.68		30oz	11.1	7.54	1.090	2.19	-193	1.18	
9:15	46.68		45oz	10.9	7.55	1.077	2.92	-210	1.20	
9:20	46.68		70oz	11.4	7.56	1.064	3.63	-222	1.02	
9:25	46.68		85oz	11.4	7.56	1.062	4.22	-227	0.95	

Sampled @ 9:25

FIELD OBSERVATIONS

Facility: Arch Chemicals, Inc. Sample Point ID: BR 118D

FIELD OBSERVATIONS

SAMPLING INFORMATION

Date/Time 5/12/23 Water Level at Sampling (ft)

Method of Sampling bladder pump Dedicated: (Y) N

Multi-phased/layered: Y / N if yes: ( ) Light ( ) Heavy

SAMPLING DATA

Time	Temp (C)	pH (SU)	Conductivity (umhos/cm)	Turb. (NTU)	ORP	DO	Other
9:25	11.4	7.56	1,062	4.22	-227	0.95	

INSTRUMENT CALIFBRATION/CHECK DATA

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std. 10.0 SU	Check Std 7.0 SU (+/- 10%)	Cal.Std. 1413 umhos/cm	Check Std 1413 umhos/cm (+/- 10%)	Cal Std. 10 NTU	Check Std 10 NTU (+/- 10%)
Solution ID#								

GENERAL INFORMATION

Weather conditions at time of sampling: Sunny 70°

Sample characteristics: Clear, stagnant odor

Comments and Observations:

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

Date: _____ by: _____ Company: Matrix Environmental Technologies

Table 2
Groundwater Elevation Report
Arch Chemicals, Inc., Rochester, NY

Sample Location		Zone	Date	Depth to water	Casing Elevation	GW Elevation	Time	Comments
B-1	On-Site	OB	5/4/23	6.94			-	
B-10	On-Site	OB		7.31			-	
B-15	On-Site	OB		2.78			-	
B-16	Off-Site	OB		3.73			-	
B-17	On-Site	OB		6.52			-	
B-2	On-Site	OB		5.00			-	
B-4	On-Site	OB		10.76			-	
B-5	On-Site	OB		7.21			-	
B-7	On-Site	OB		12.61			-	
B-8	On-Site	OB		4.25			-	
BR-1	On-Site	BR		5.47			-	
BR-102	On-Site	BR		23.10			-	
BR-103	Off-Site	BR		0.50			-	
BR-104	Off-Site	BR		10.00			-	
BR-105D	Off-Site	BR Deep		30.91			-	Broken Lid
BR-105	Off-Site	BR deep		24.40			-	
BR-106	Off-Site	BR		25.45			-	
BR-108	Off-Site	BR		28.74			-	
BR-111	Off-Site	BR		30.48			-	
BR-111D	Off-Site	BR		32.20			-	
BR-112D	Off-Site	BR deep		39.55			-	
BR-113	Off-Site	BR		34.35			-	
BR-113D	Off-Site	BR deep		39.60			-	
BR-114	Off-Site	BR		12.35			-	
BR-116	Off-Site	BR		28.41			-	
BR-116D	Off-Site	BR deep		38.08			-	
BR-117	Off-Site	BR		33.80			-	
BR-117D	Off-Site	BR deep		45.78			-	
BR-118	Off-Site	BR		22.05			-	
BR-118D	Off-Site	BR deep		45.35			-	
BR-122D	Off-Site	BR deep		47.50			-	
BR-123D	Off-Site	BR deep		47.42			-	
BR-124D	Off-Site	BR deep		36.35			-	
BR-126	Off-Site	BR		8.20			-	
BR-127	On-Site	BR		14.63			-	
BR-3	On-Site	BR		2.38			-	
BR-3D	On-Site	BR deep		0.20			-	Same as surface
BR-4	On-Site	BR		12.56			-	
BR-5	On-Site	BR		3.44			-	
BR-5A	On-Site	pumping well		4.18			-	
BR-6A	On-Site	BR		12.20			-	
BR-7	On-Site	BR		16.80			-	
BR-7A	On-Site	pumping well		—			-	unable to get past pump
BR-8	On-Site	BR		7.20			-	
BR-9	On-Site	pumping well		—			-	unable to get past pump
C-5	On-Site	OB		7.08			-	
CANAL	Off-Site	SW		41.30			-	
E-2	On-Site	OB		—			-	Well Missing, rail project
E-3	On-Site	OB		4.31			-	
E-5	On-Site	OB		5.47			-	
EC-2	Off-Site	BR		—			-	Dry 12.7

Table 2
Groundwater Elevation Report
Arch Chemicals, Inc., Rochester, NY

Sample Location		Zone	Date	Depth to water	Casing Elevation	GW Elevation	Time	Comments
MW-103	Off-Site	OB	5/4/23	0.47			-	
MW-104	Off-Site	OB		7.82			-	
MW-105	Off-Site	OB		13.35			-	
MW-106	Off-Site	OB		8.82			-	
MW-114	Off-Site	OB		9.48			-	
MW-127	On-Site	OB		5.93			-	
MW-16	Off-Site	BR		10.70			-	
MW-3	Off-Site	OB		—			-	** Packed over / missing
MW-G6	Off-Site	OB					-	Missing/destroyed
MW-G8	Off-Site	OB		7.42			-	
MW-G9	Off-Site	OB		27.35			-	
N-2	On-Site	OB		—			-	broken @ 3.10
N-3	On-Site	OB		4.45			-	
NESS-E	Off-Site	BR deep		27.36			-	
NESS-W	Off-Site	BR deep		—			-	Inaccessible
PW-12	On-Site	BR		4.07			-	
PW-13	On-Site	pumping well		24.60			-	Pump not running
PW-14	On-Site	pumping well		9.05			-	
PW-15	On-Site	pumping well		22.81			-	
PW-16	On-Site	pumping well		7.42			-	Pump not running
PW-17	On-Site	pumping well		20.36			-	
PZ-101	Off-Site	BR		11.00			-	
PZ-102	Off-Site	BR		16.25			-	
PZ-103	Off-Site	BR		9.64			-	
PZ-104	Off-Site	BR		13.17			-	
PZ-105	On-Site	BR		7.11			-	
PZ-106	On-Site	BR		3.64			-	
PZ-107	On-Site	BR		8.35			-	
PZ-109	On-Site	BR		6.34			-	
PZ-110	On-Site	BR		11.31			-	
PZ-111	On-Site	BR					-	Missing/destroyed
W-5	On-Site	OB		—			-	Missing/destroyed

NM = Not Measured
NA = Not Applicable

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM

CHAIN OF CUSTODY

REPORT TO:
CLIENT: Arch Chemicals, Inc.
ADDRESS: 100 McKee Rd P.O. Box 30205
CITY: Rochester STATE: NY ZIP 14603
PHONE:
ATTN: David Harris

INVOICE TO:
CLIENT: Same
ADDRESS:
CITY: STATE: ZIP:
PHONE:
ATTN:

LAB PROJECT ID
Quotation #:
Email:

PROJECT REFERENCE
2023 Spring GW Event
May 2023

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	Site Specific SVOCs	TCL Volatiles	REMARKS	PARADIGM LAB SAMPLE NUMBER
5/5/23	9:25		X	BR-5A	WG	3	X	X		
5/5/23	10:30		X	PZ-105	WG	3	X	X		
5/5/23	11:20		X	BR-6A	WG	3	X	X		
5/5/23	1:55		X	MW-127	WG	3	X	X		
5/5/23	12:20		X	PZ-107	WG	3	X	X		
5/5/23	2:10		X	BR-127	WG	3	X	X		
5/5/23	2:55		X	PW-12	WG	3	X	X		

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	None Required	☐	None Required	☐
10 day	☒	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Date Needed _____ please indicate date needed		Other ☐ please indicate package needed: _____		Other EDD ☐ please indicate EDD needed: _____	

Sampled By — Date/Time: 5/5/23 1500
Relinquished By — Date/Time: 5/5/23 1520
Received By — Date/Time: 05/MAY/23 1530 (5/5/23 1530)
Received @ Lab By — Date/Time:

Total Cost:
P.I.F.

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See additional page for sample conditions.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM

CHAIN OF CUSTODY

REPORT TO:
CLIENT: Arch Chemicals Inc.
ADDRESS: 100 McKee Rd. PO Box 30205
CITY: Rochester STATE: ZIP
PHONE:
ATTN: David Harris

INVOICE TO:
CLIENT: Same
ADDRESS:
CITY: STATE: ZIP:
PHONE:
ATTN:

LAB PROJECT ID
Quotation #:
Email:

PROJECT REFERENCE
2023 Spring Sampling

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	TCL Volatiles	Site Specific SVOCs	MS	MSD	REMARKS	PARADIGM LAB SAMPLE NUMBER
5-8-23	8:42		X	P2-106	WG	3	X	X				
5-8-23	9:08		X	PW14	WG	3	X	X				
5-8-23	9:42		X	B17	WG	3	X	X				
5-8-23	10:52		X	BR126	WG	3	X	X				
5-8-23	11:40		X	B15	WG	3	X	X				
5-8-23	12:18		X	B16	WG	3	X	X				
5-8-23	1:58		X	PZ104	WG	9	X	X	X	X		

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☑	None Required	☐	None Required	☐
10 day	☐	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Date Needed _____ please indicate date needed	☐	Other please indicate package needed	☐	Other EDD please indicate EDD needed	☐

Sampled By: [signature] Date/Time: 5-8-23 1:58 PM
Relinquished By: [signature] Date/Time: 5.8.23 14:45
Received By: [signature] Date/Time: 5/8/23 1445
Received @ Lab By: Date/Time:

Total Cost:
P.I.F.

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See additional page for sample conditions.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM

CHAIN OF CUSTODY

REPORT TO:

CLIENT: Arch Chemicals Inc.
ADDRESS: 100 McKee Rd P.O. Box 30205
CITY: Rochester STATE: NY ZIP: 14603
PHONE:
ATTN: David Harris

INVOICE TO:

CLIENT: Same
ADDRESS:
CITY: STATE: ZIP:
PHONE:
ATTN:

LAB PROJECT ID

Quotation #:

Email:

PROJECT REFERENCE
2023 Spring Sampling Event

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	Site Specific SVOCs	TCL Volatiles	REMARKS	PARADIGM LAB SAMPLE NUMBER
5/9/23	9:45		X	E-3	WG	3	X	X		
5/9/23	10:45		X	BR-3	WG	3	X	X		
5/9/23	12:10		X	BR-8	WG	3	X	X		
5/9/23	12:35		X	PW-16	WG	3	X	X		
5/9/23	2:20		X	B-7	WG	3	X	X		
5/9/23	2:50		X	BR-7A	WG	3	X	X		
5/9/23	3:20		X	PW-13	WG	3	X	X		

Turnaround Time		Report Supplements		
Availability contingent upon lab approval; additional fees may apply.				
Standard 5 day	☐	None Required	☐	None Required ☐
10 day	☒	Batch QC	☐	Basic EDD ☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD ☐
Rush 2 day	☐	Category B	☐	
Rush 1 day	☐			
Date Needed _____ please indicate date needed		Other ☐ please indicate package needed:		Other EDD ☐ please indicate EDD needed:

Sampled By: _____ Date/Time: 5/9/23

Relinquished By: _____ Date/Time: 5/9/23 4:11 pm

Received By: _____ Date/Time: 09/MAY/2023 5/9/23 1611

Received @ Lab By: _____ Date/Time: _____

Total Cost:

P.I.F.

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See additional page for sample conditions.

See additional page for sample conditions.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:		
CLIENT:	Arch Chemicals Inc.	CLIENT:	Same	LAB PROJECT ID
ADDRESS:	100 McKee Rd P.O. Box 30295	ADDRESS:		
CITY:	Rochester STATE: NY ZIP 14603	CITY: STATE: ZIP:		Quotation #:
PHONE:		PHONE:		Email:
ATTN:	David Harris	ATTN:		

PROJECT REFERENCE
2023 Spring Sampling Event

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	REQUESTED ANALYSIS: Site Specific SVOCs	REQUESTED ANALYSIS: TCL Volatiles	REMARKS	PARADIGM LAB SAMPLE NUMBER
5/10/23	9:15		X	BR-114	WG	3	X	X		
5/10/23	9:55		X	MW-114	WG	3	X	X		
5/10/23	10:55		X	PZ-101	WG	3	X	X		
5/10/23	11:35		X	PZ-102	WG	3	X	X		
5/10/23	12:30		X	PZ-103	WG	3	X	X		
5/10/23	1:40		X	BR-9	WG	3	X	X		
5/10/23	2:45 (14)		X	MW-106	WG	3	X	X		

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	None Required	☐	None Required	☐
10 day	☒	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☒		
Rush 1 day	☐				
Date Needed _____ please indicate date needed		Other please indicate package needed	☐	Other EDD please indicate EDD needed	☐

Sampled By _____ Date/Time 5/10/23

Relinquished By _____ Date/Time 5/10/23 3:30 pm

Received By _____ Date/Time 10/MAY/2023 15:45 / 5/10/23 1545

Received @ Lab By _____ Date/Time

Total Cost: ☐

P.I.F. ☐

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See additional page for sample conditions.

PARADIGM

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:		
CLIENT:	Arch Chemicals Inc.	CLIENT:	Same	LAB PROJECT ID
ADDRESS:	100 Mckee Rd PO box 30705	ADDRESS:		
CITY:	Rochester STATE: NY ZIP 14603	CITY: STATE: ZIP:		Quotation #:
PHONE:		PHONE:		Email:
ATTN:	David Harris	ATTN:		

PROJECT REFERENCE
2023 Spring Sampling Event

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	Site Specific SVOCs	Tcl Volatiles	MS	MSD							REMARKS	PARADIGM LAB SAMPLE NUMBER
5/11/23	8:25		X	PW17	WG	3	X	X										
5/11/23	9:00		X	PW15	WG	9	X	X	X	X								
5/11/23	9:55		X	BR-106	WG	3	X	X										
5/11/23	10:45		X	BR-105	WG	3	X	X										
5/11/23	11:25		X	BR-105D	WG	3	X	X										
5/11/23	1:50		X	BR-117D	WG	1	X	X									NA	
5/11/23	3:10		X	BR-112D	WG	1	X	X										

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	None Required	☐	None Required	☐
10 day	☒	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☒		
Rush 1 day	☐				
Date Needed _____ please indicate date needed		Other please indicate package needed:	☐	Other EDD please indicate EDD needed:	☐

Sampled By — Date/Time: 5/11/23

Relinquished By — Date/Time: 5/11/23 15:50

Received By — Date/Time: JLG 11/MAY/23 @ 1555

Received @ Lab By — Date/Time: 5/11/23 15:15

Total Cost:

P.I.F.

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PARADIGM

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:		
CLIENT: Arch Chemicals Inc		CLIENT: Same		LAB PROJECT ID
ADDRESS: 100 McKee Rd PO box 30205		ADDRESS:		
CITY: Rochester STATE: NY ZIP: 14603		CITY: STATE: ZIP:		Quotation #:
PHONE:		PHONE:		Email:
ATTN: David Harris		ATTN:		

PROJECT REFERENCE
2023 Spring Sampling Event

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	Site Specific SVOCs	MS	MSD	REMARKS	PARADIGM LAB SAMPLE NUMBER
5/12/23	9:25		X	BR 118D	WG	1	X				
5/12/23	10:25		X	BR 113D	WG	1	X				
5/12/23	11:45		X	BR 122D	WG	1	X				
5/12/23	12:40		X	BR 123D	WG	1	X				
5/12/23	1:00		X	QD-2	WG	1	X				
5/12/23	1:15		X	QD-251	WG	1	X				
5/12/23	1:30		X	QD-1	WG	3	X	X	X		
5/12/23	1:45		X	QS-4	WG	1	X				

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	None Required	☐	None Required	☐
10 day	☒	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☒		
Rush 1 day	☐				
Date Needed _____ (please indicate date needed)		Other (please indicate package needed)	☐	Other EDD (please indicate EDD needed)	☐

Sampled By — Date/Time: 5/12/23

Relinquished By — Date/Time: 5/12/23 14:00

Received By — Date/Time: 5/12/23 1400

Received @ Lab By — Date/Time:

Total Cost:

P.I.F.

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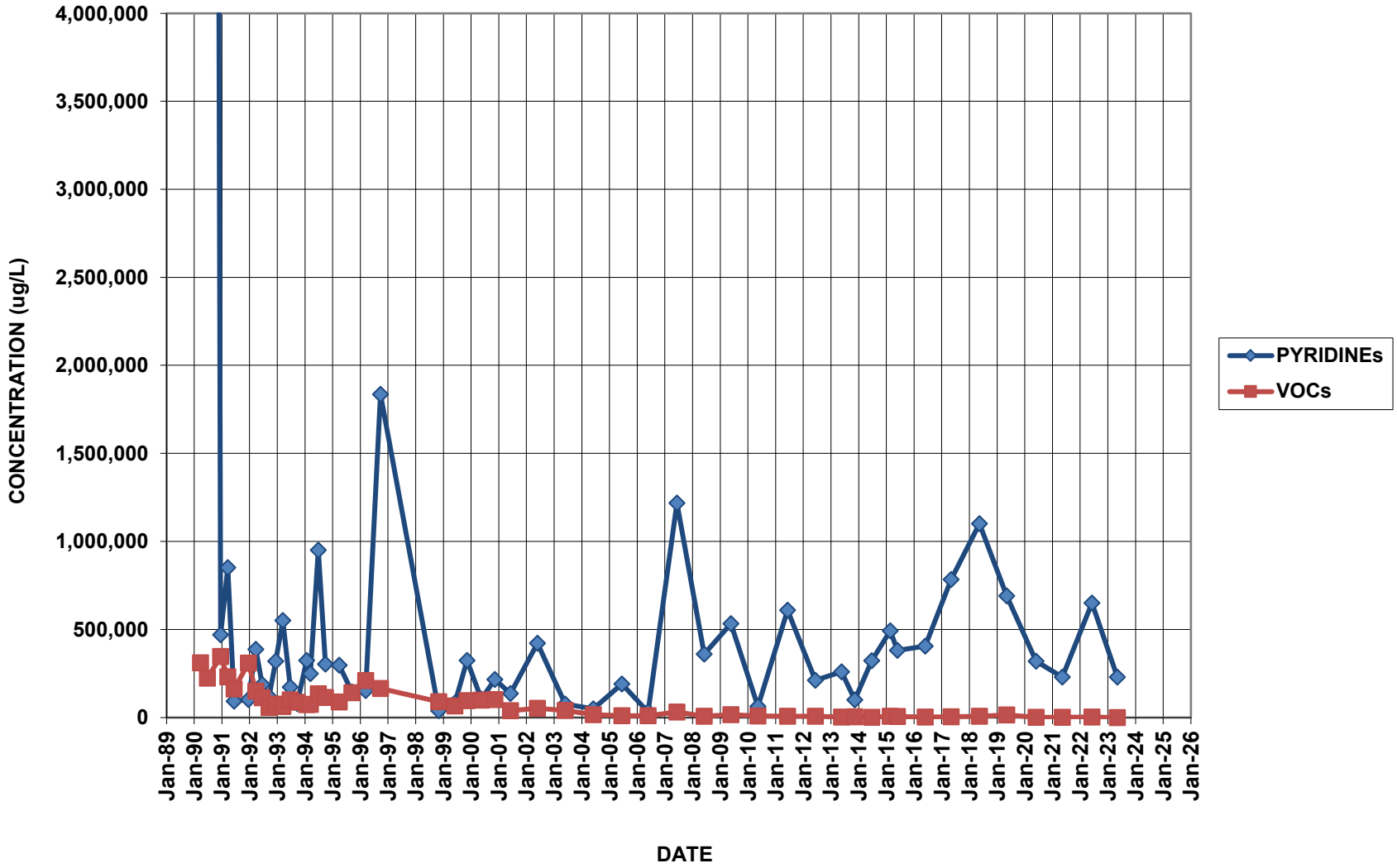
See additional page for sample conditions.

Appendix B

Well Trend Data

B-17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2,000,000
1,500,000
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500,000
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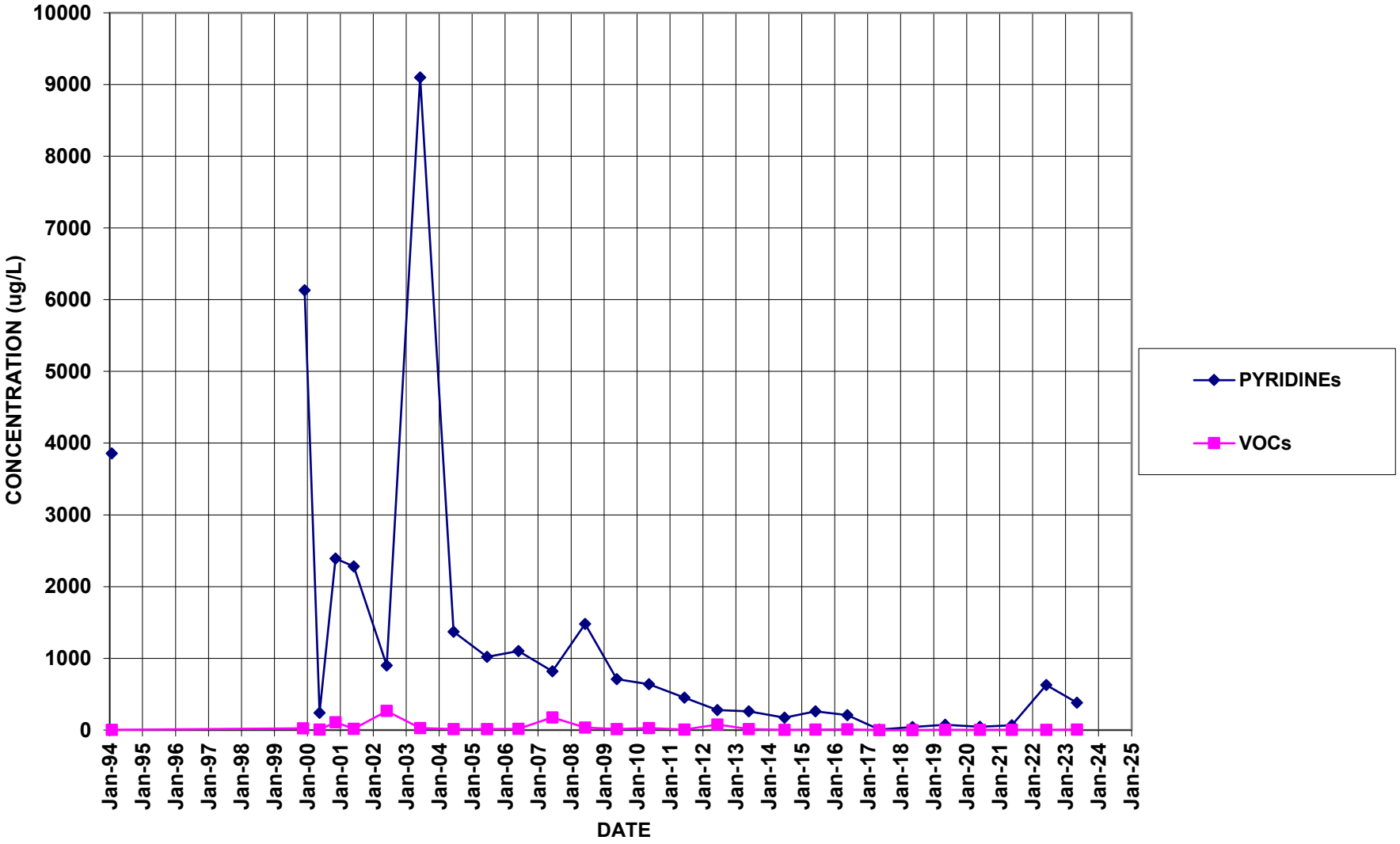
Jan-89
Jan-90
Jan-91
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Jan-24
Jan-25
Jan-26
DATE
PYRIDINEs
VOCs

B-7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7000
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5000
4000
3000
2000
1000
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Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
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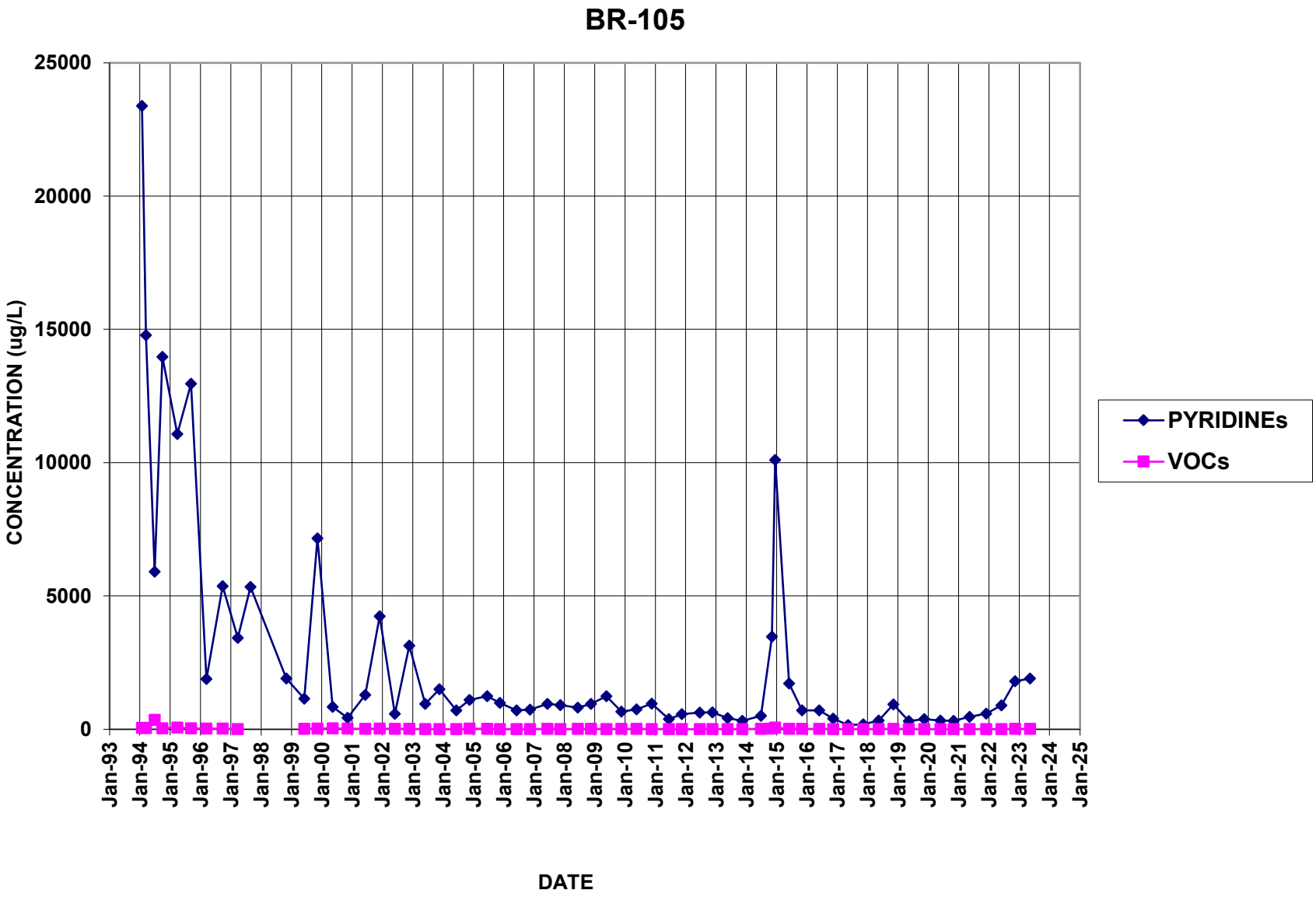
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Jan-24
Jan-25
DATE
PYRIDINEs
VOCs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Jan-00
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Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
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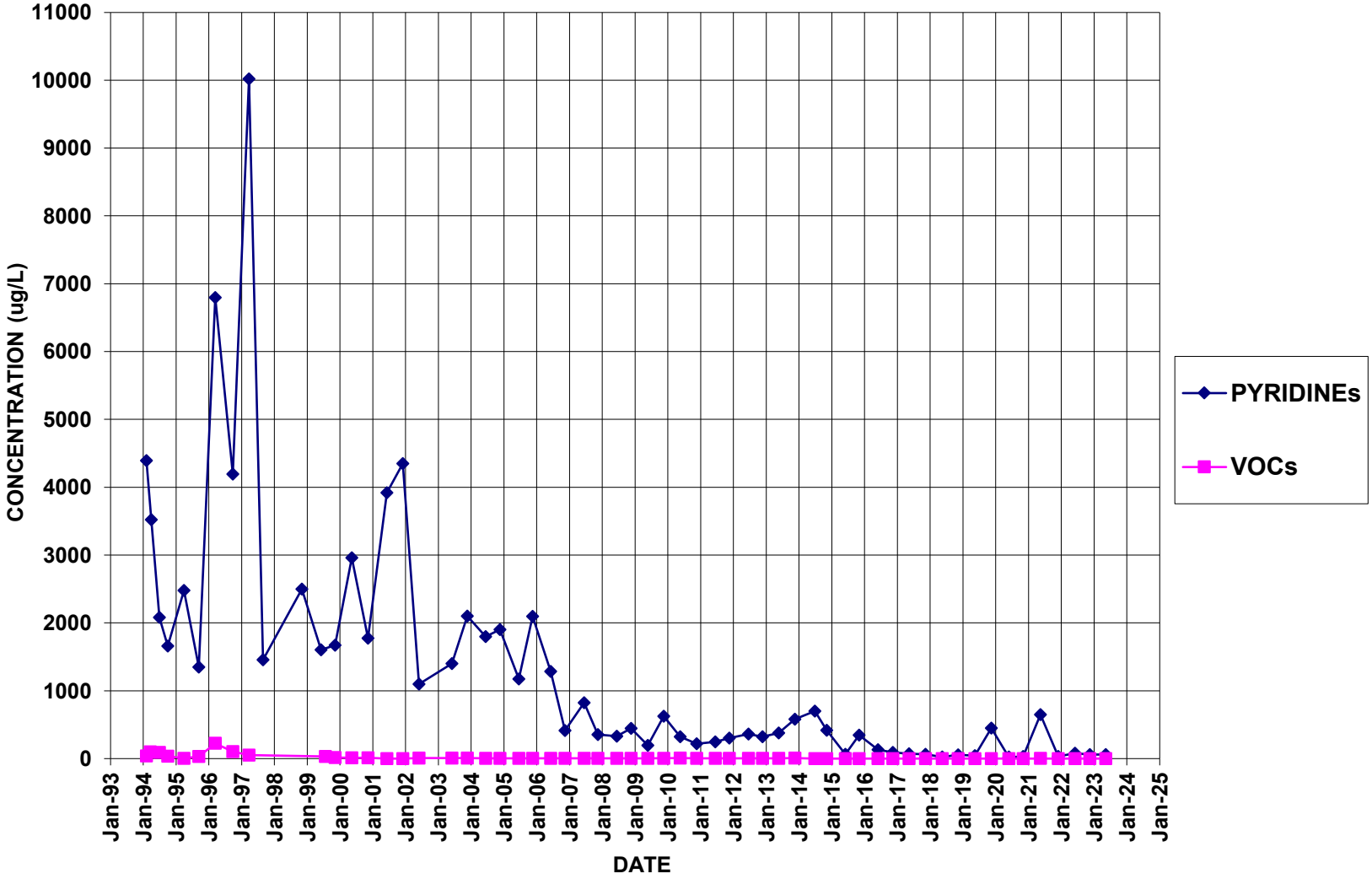
Jan-22
Jan-23
Jan-24
Jan-25
DATE
PYRIDINEs
VOCs

BR-105D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4000
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2000
1000
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Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
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Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
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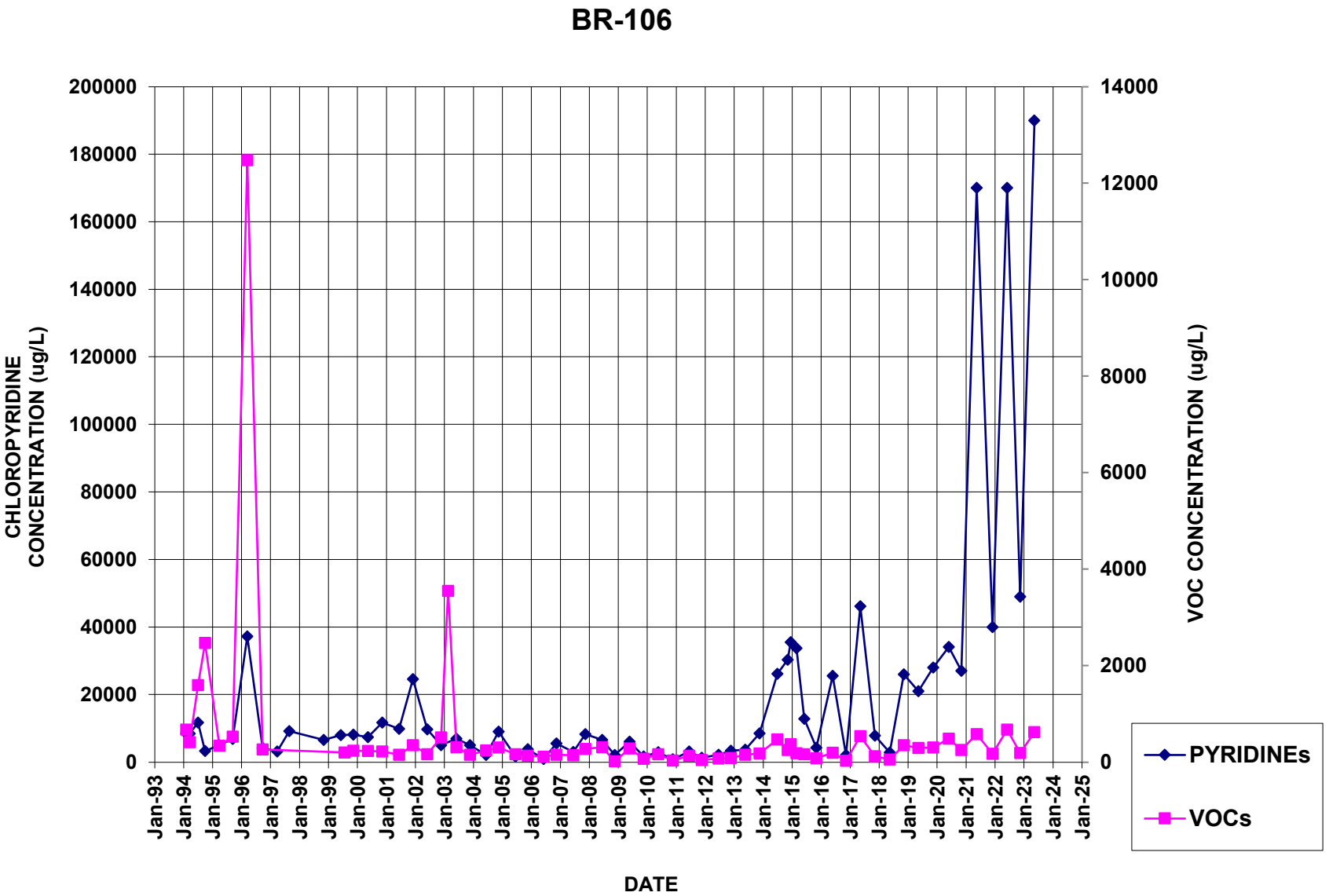
Jan-24
Jan-25
DATE
PYRIDINEs
VOCs


BR-106
CHLOROPYRIDINE CONCENTRATION (ug/L)
VOC CONCENTRATION (ug/L)
DATE
PYRIDINEs
VOCs
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160000
140000
120000
100000
80000
60000
40000
20000
0
14000
12000
10000
8000
6000
4000
2000
0
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Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
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Jan-11
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Jan-13
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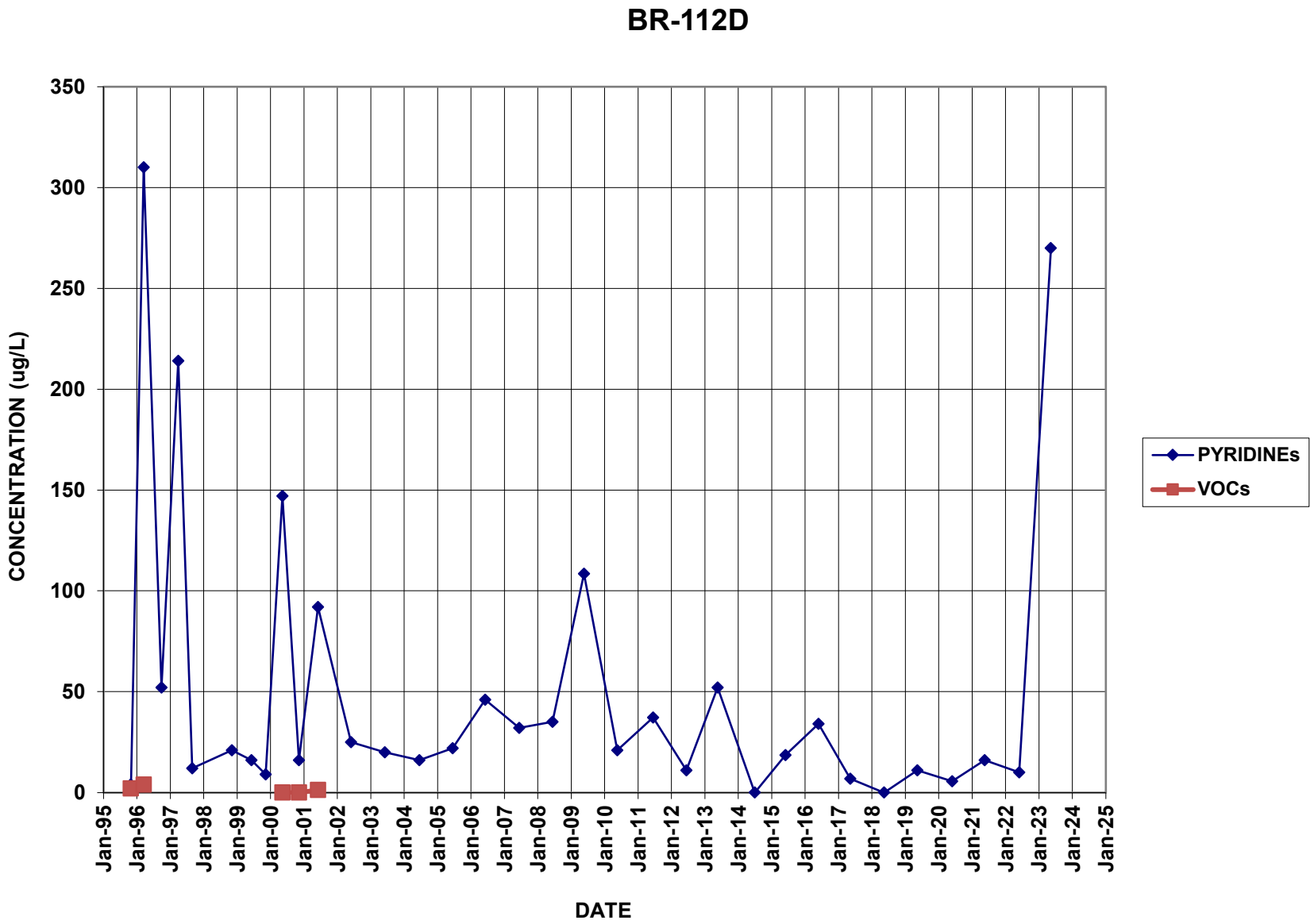
Jan-25


BR-112D
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Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
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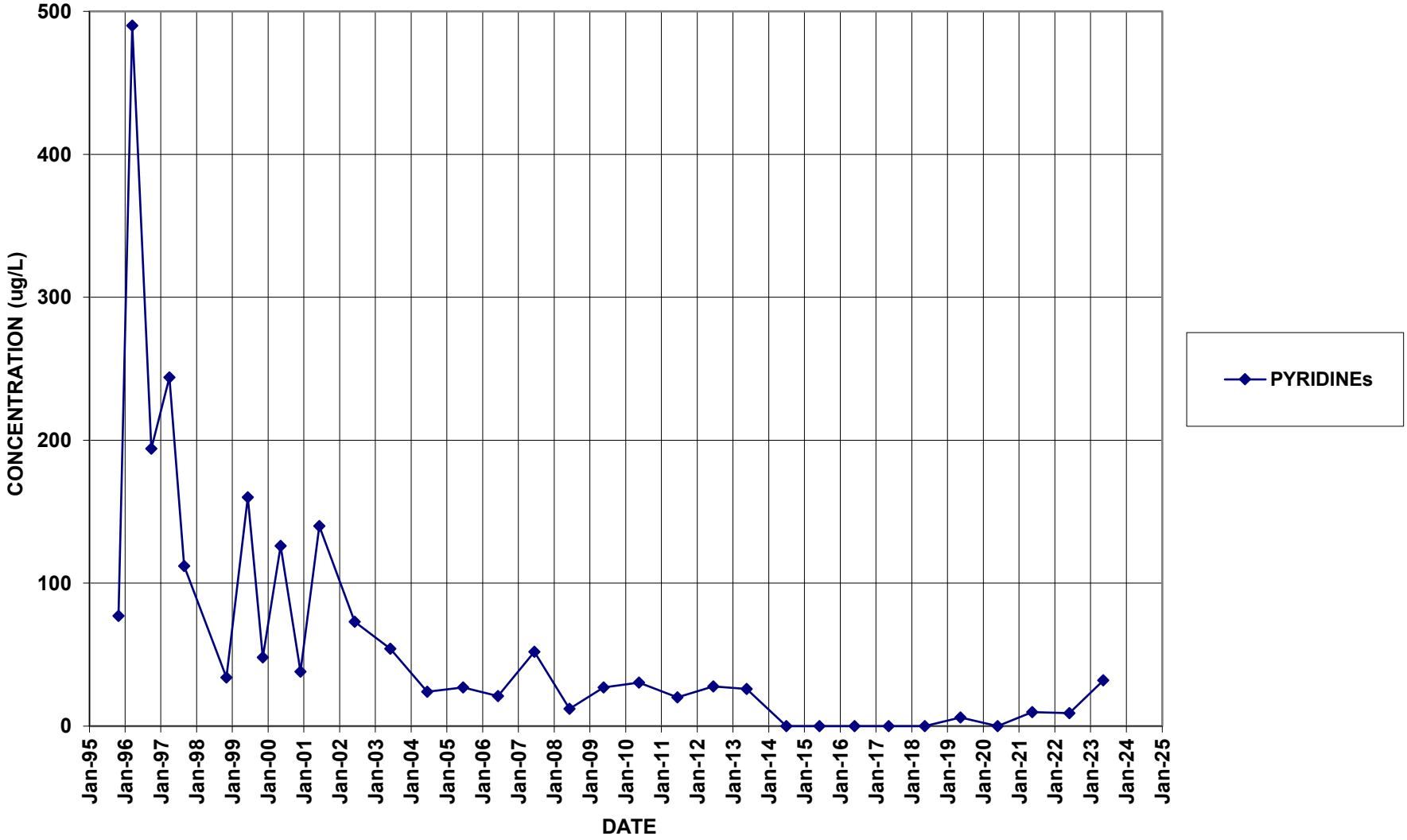
Jan-23
Jan-24
Jan-25
DATE
PYRIDINEs
VOCs

BR-113D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Jan-98
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Jan-00
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Jan-14
Jan-15
Jan-16
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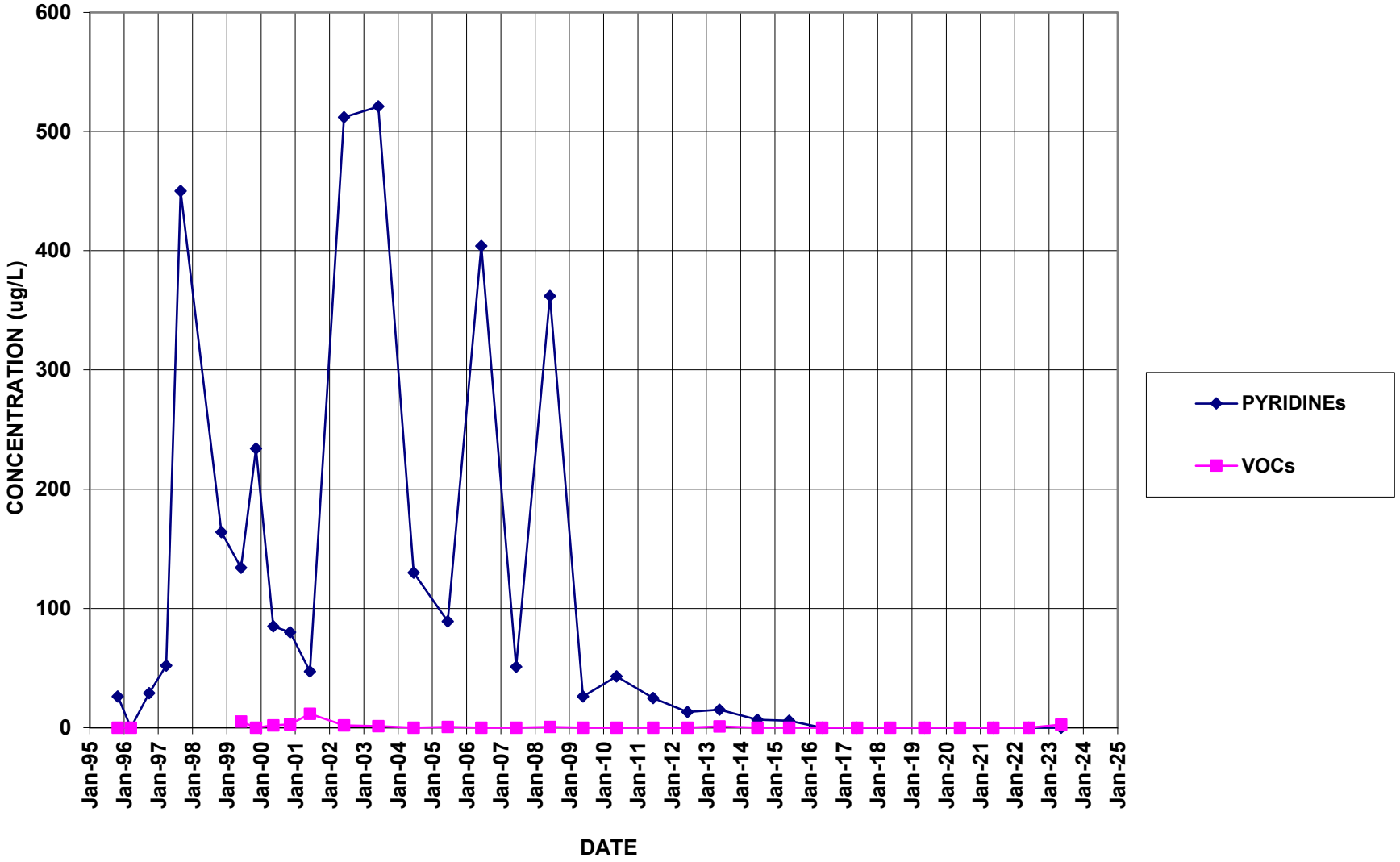
Jan-23
Jan-24
Jan-25
DATE
PYRIDINEs

BR-114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200
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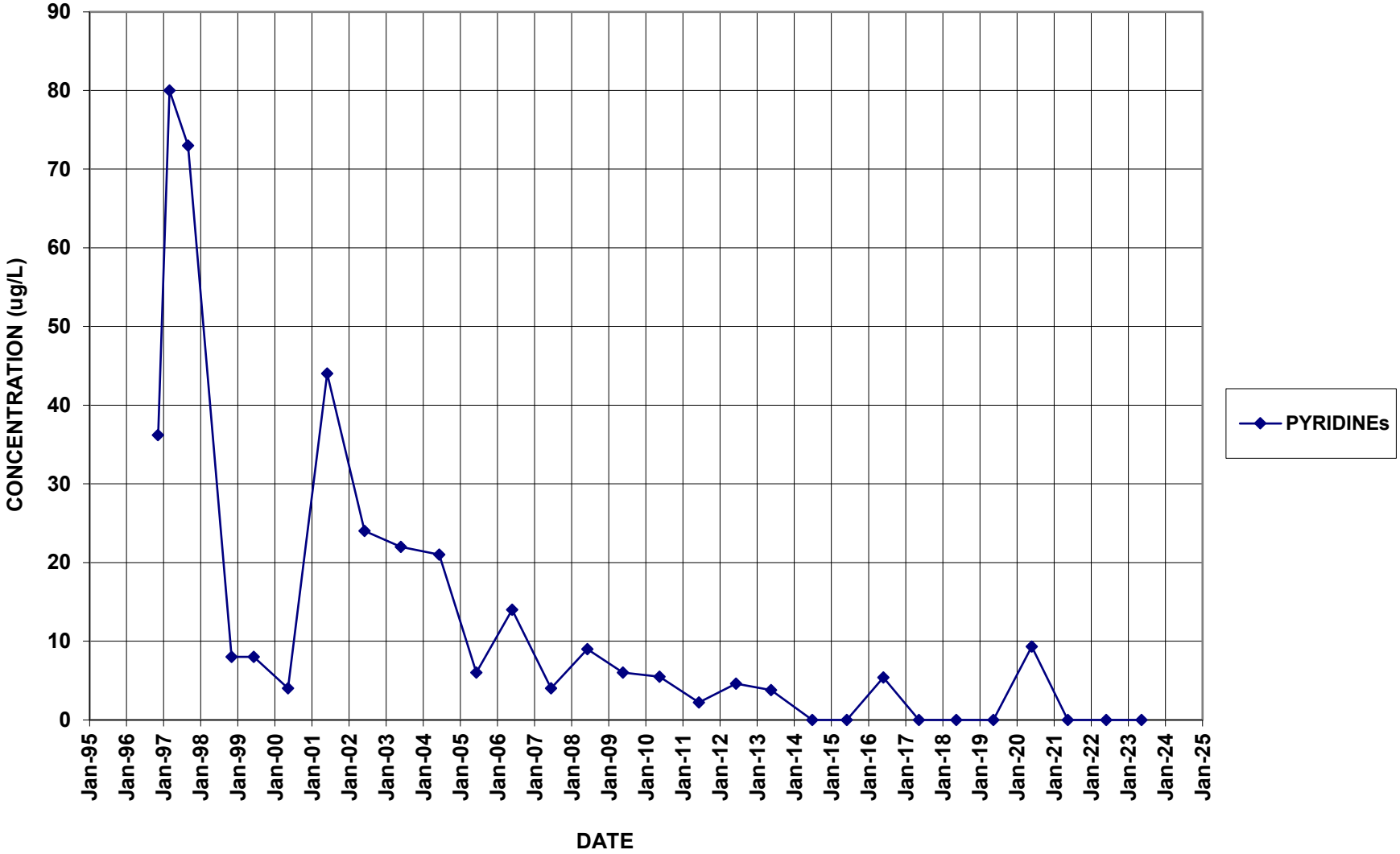
Jan-25
DATE
PYRIDINEs
VOCs

BR-117D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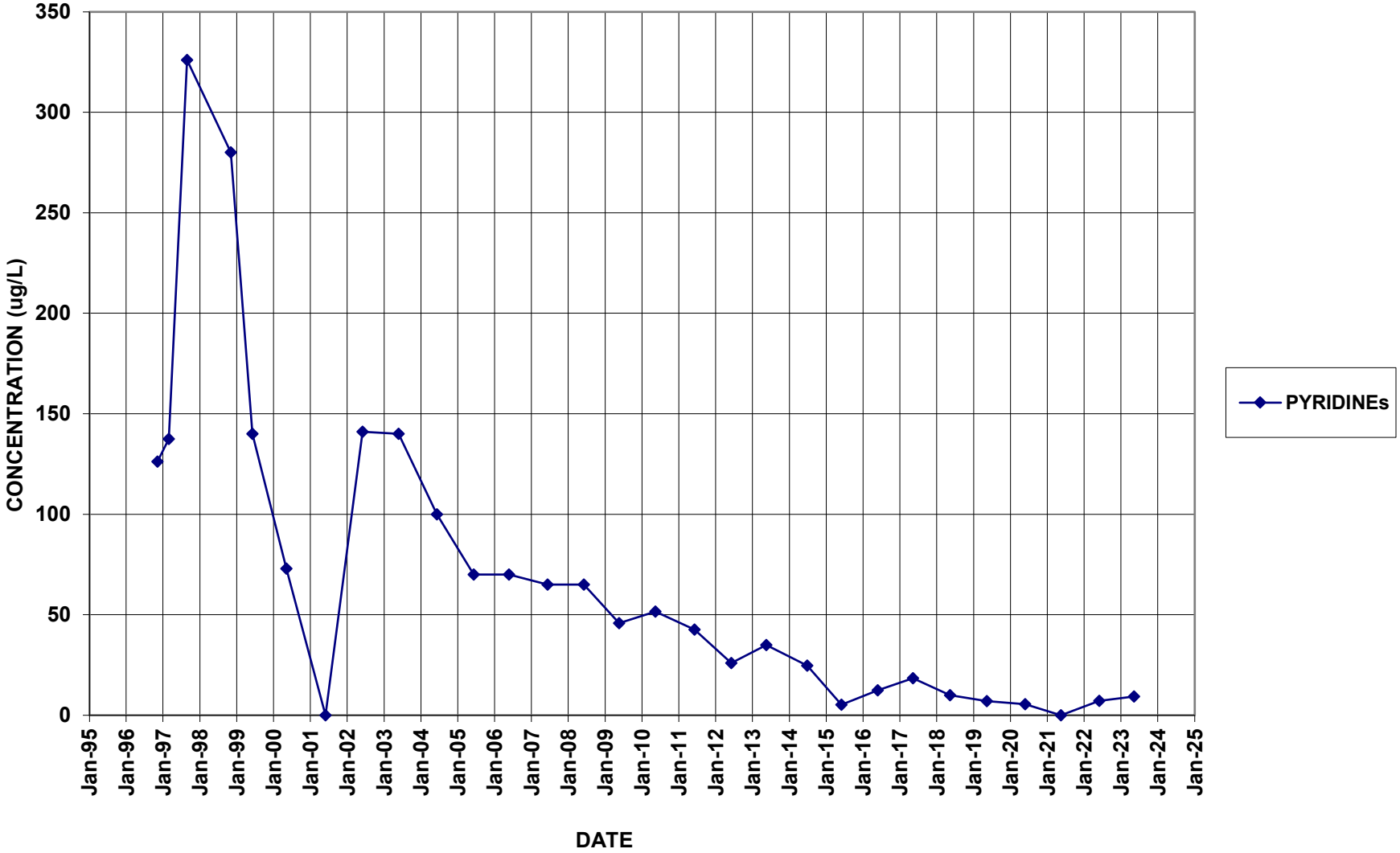
DATE
PYRIDINEs

BR-118D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Jan-14
Jan-15
Jan-16
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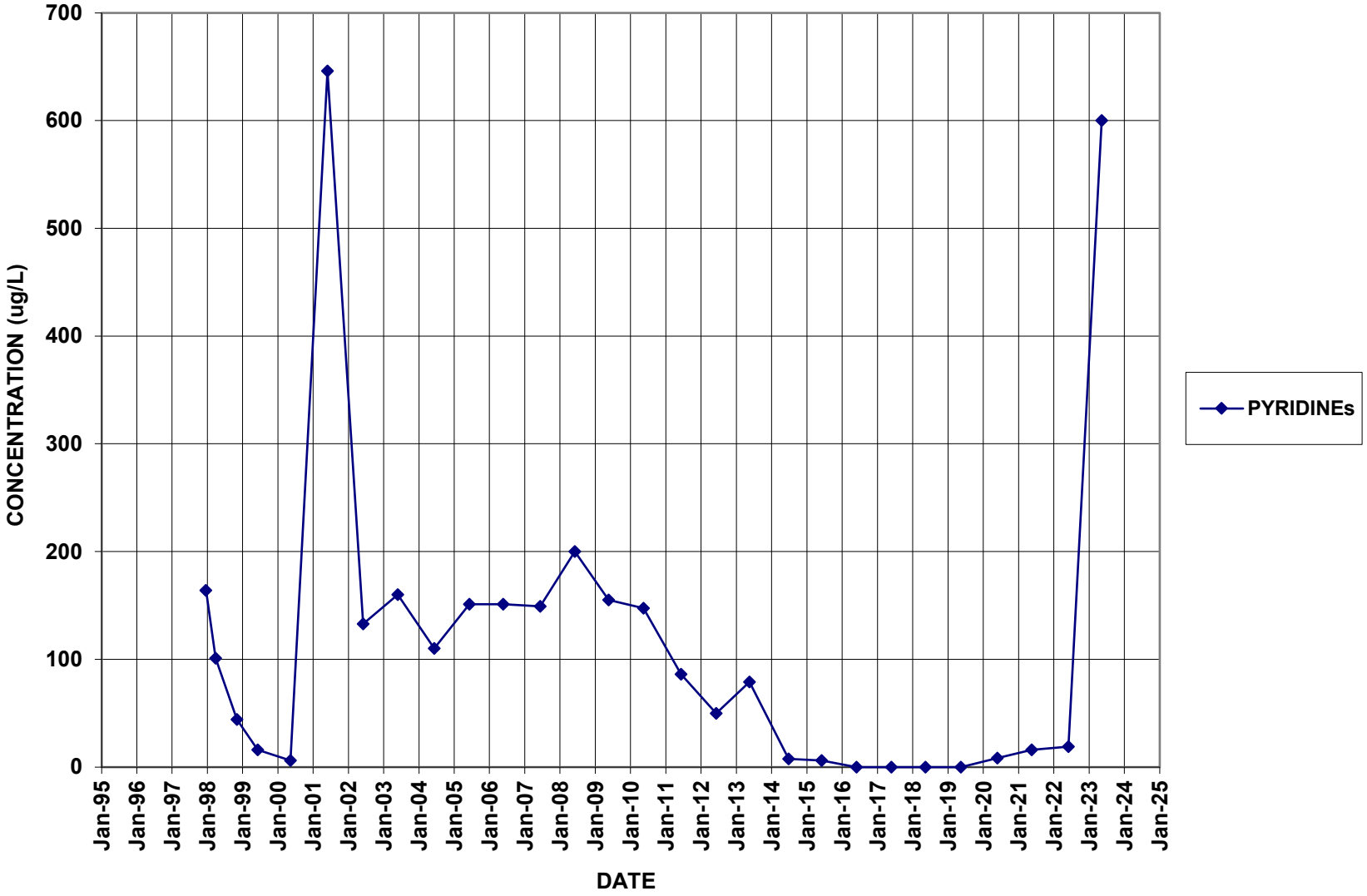
Jan-25
DATE
PYRIDINEs

BR-122D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CONCENTRATION (ug/L)
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Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
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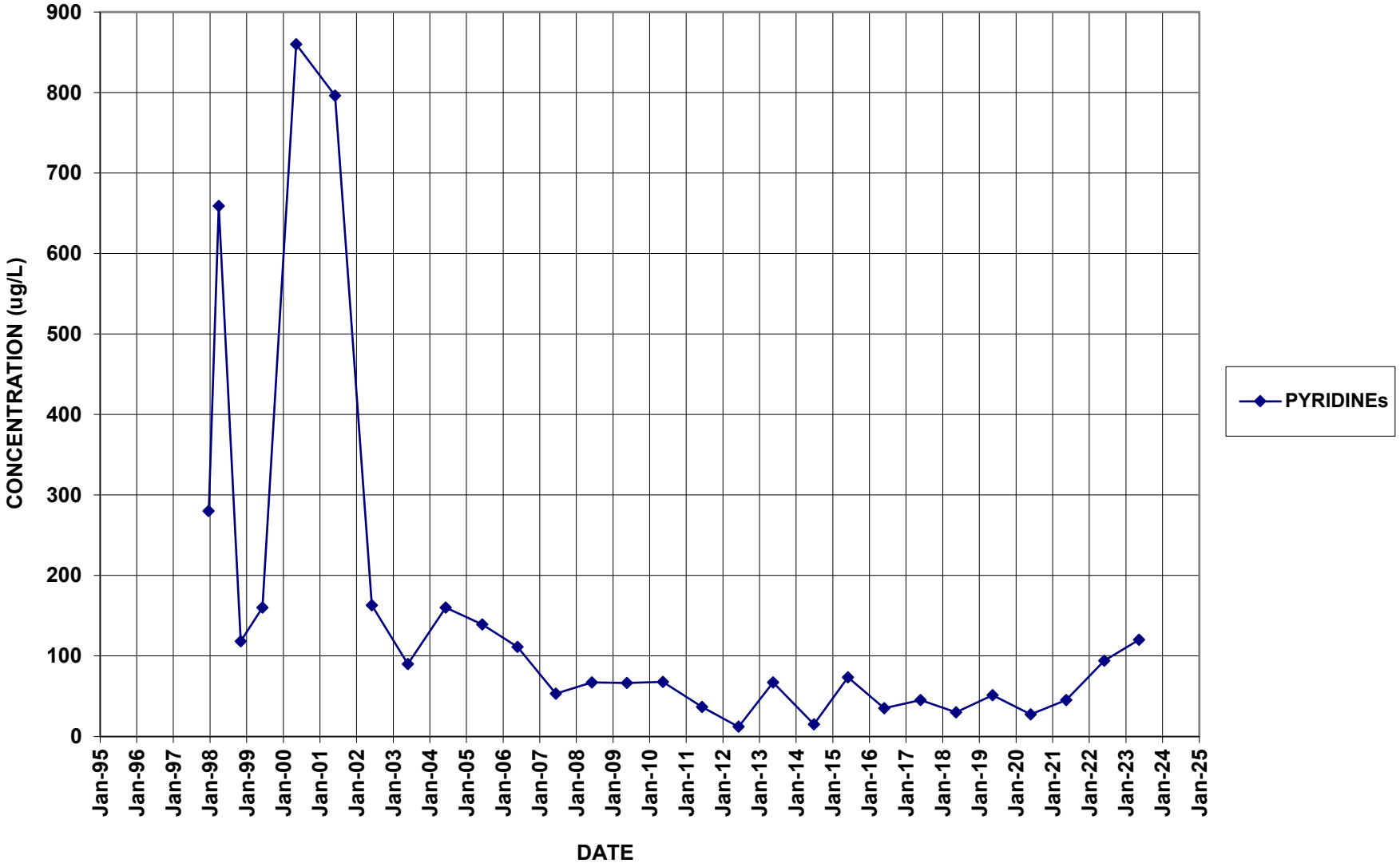
Jan-23
Jan-24
Jan-25
DATE
PYRIDINEs

BR-123D


900
800
700
600
500
400
300
200
100
0
CONCENTRATION (ug/L)
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
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Jan-12
Jan-13
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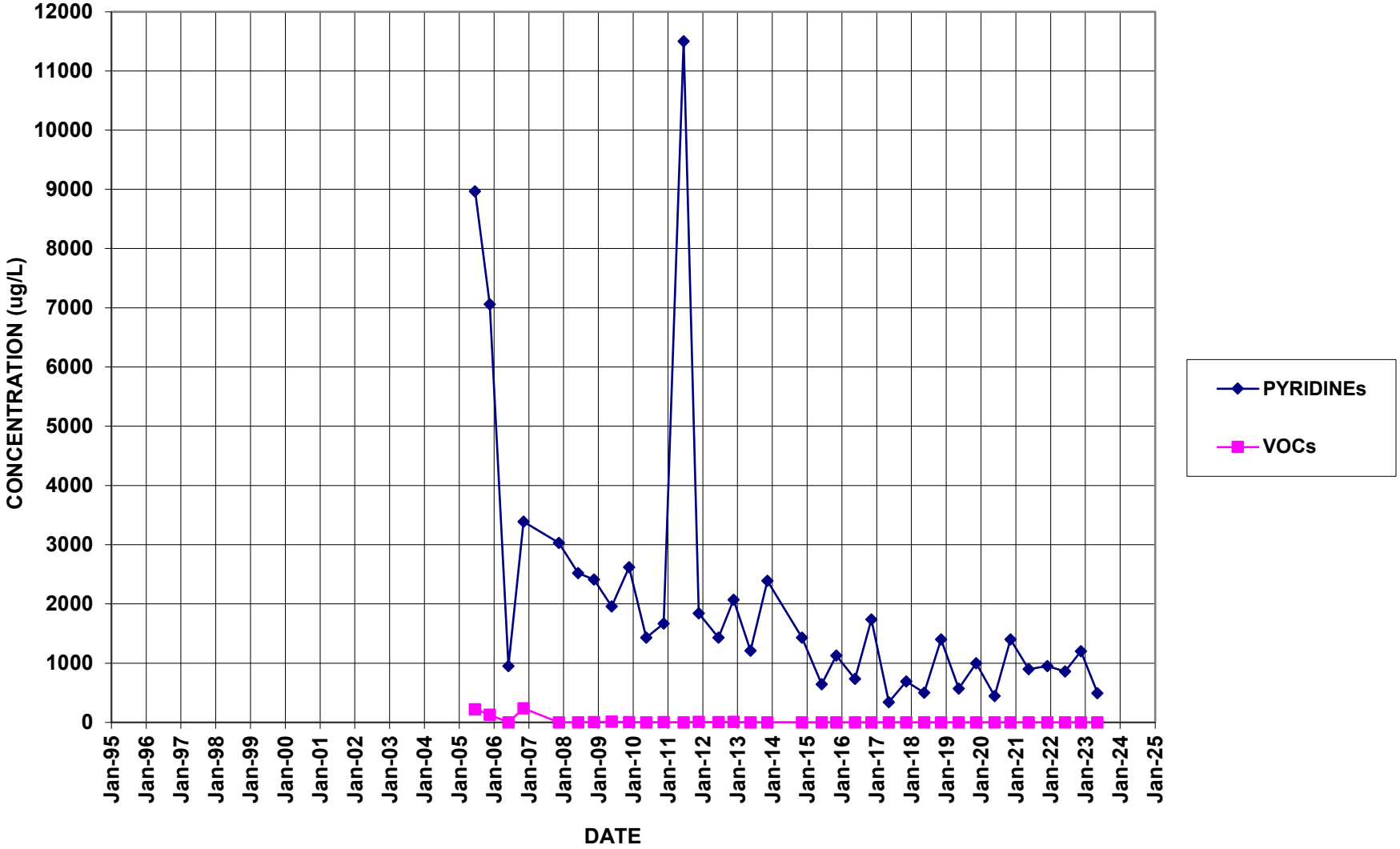
Jan-20
Jan-21
Jan-22
Jan-23
Jan-24
Jan-25
DATE
PYRIDINEs

BR-126


12000
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
CONCENTRATION (ug/L)
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
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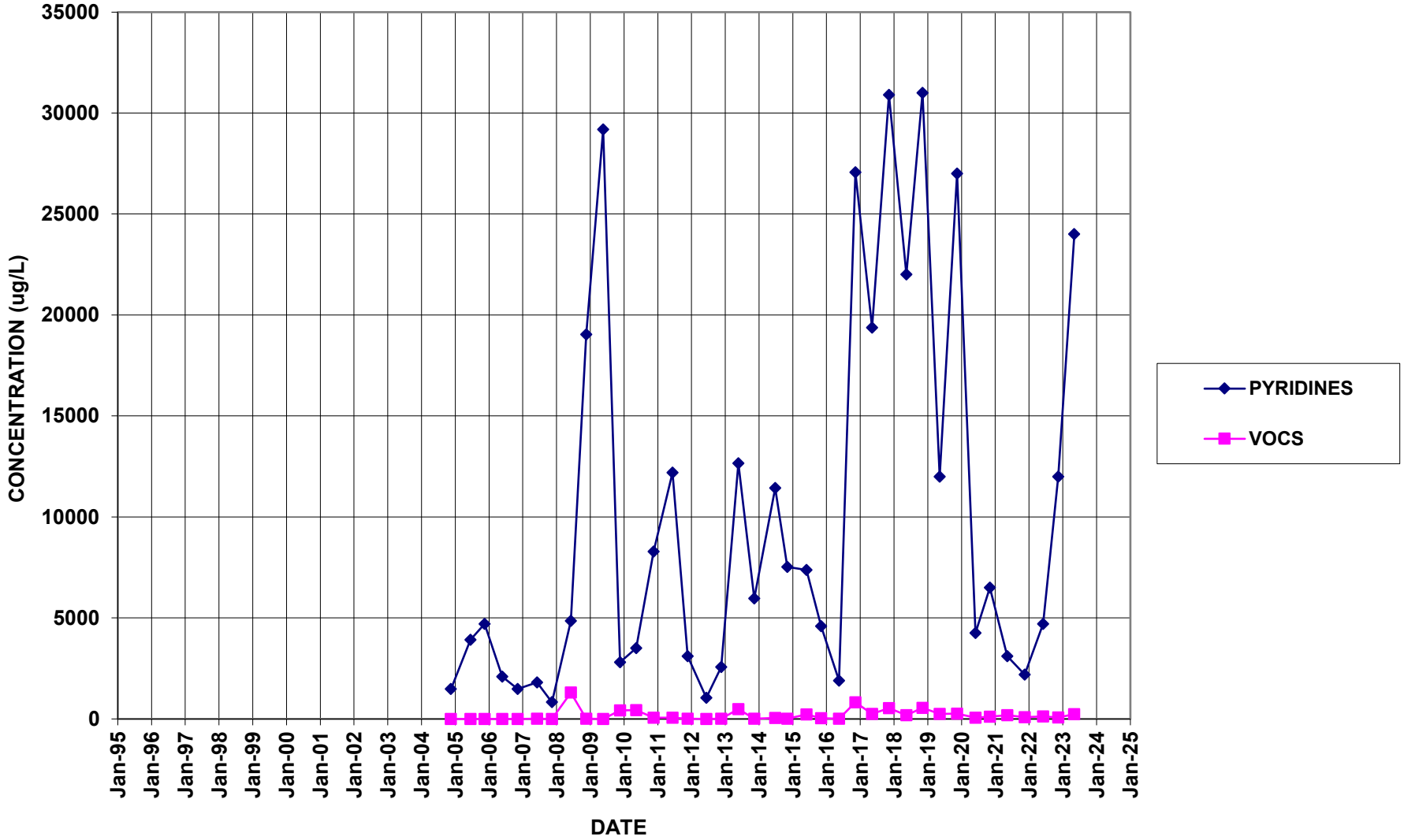
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Jan-24
Jan-25
DATE
PYRIDINEs
VOCs

BR-127


35000
30000
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20000
15000
10000
5000
0
CONCENTRATION (ug/L)
Jan-95
Jan-96
Jan-97
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Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
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Jan-12
Jan-13
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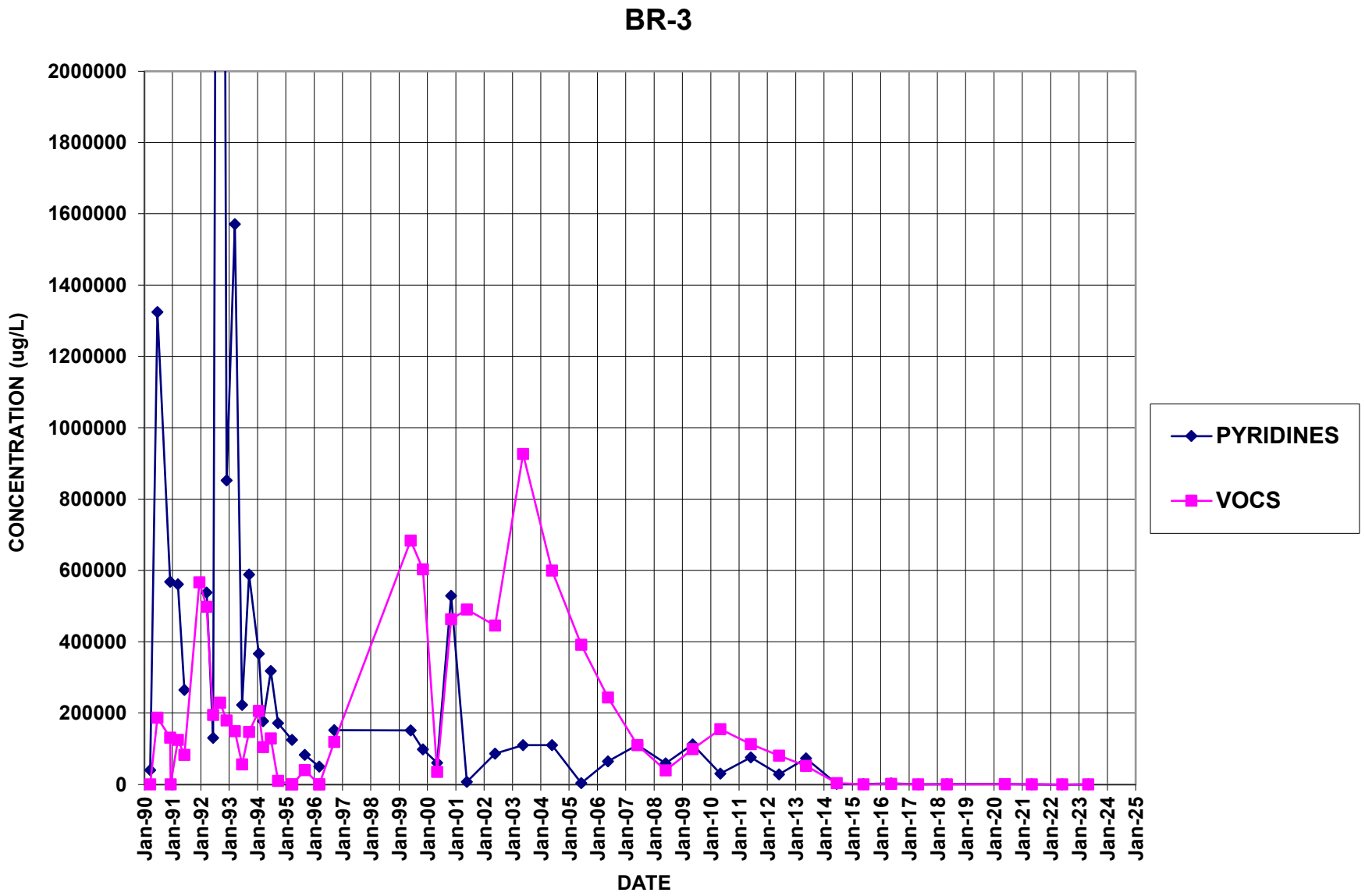
Jan-22
Jan-23
Jan-24
Jan-25
DATE
PYRIDINES
VOCS


BR-3
CONCENTRATION (ug/L)
2000000
1800000
1600000
1400000
1200000
1000000
800000
600000
400000
200000
0
Jan-90
Jan-91
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
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Jan-00
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Jan-03
Jan-04
Jan-05
Jan-06
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Jan-13
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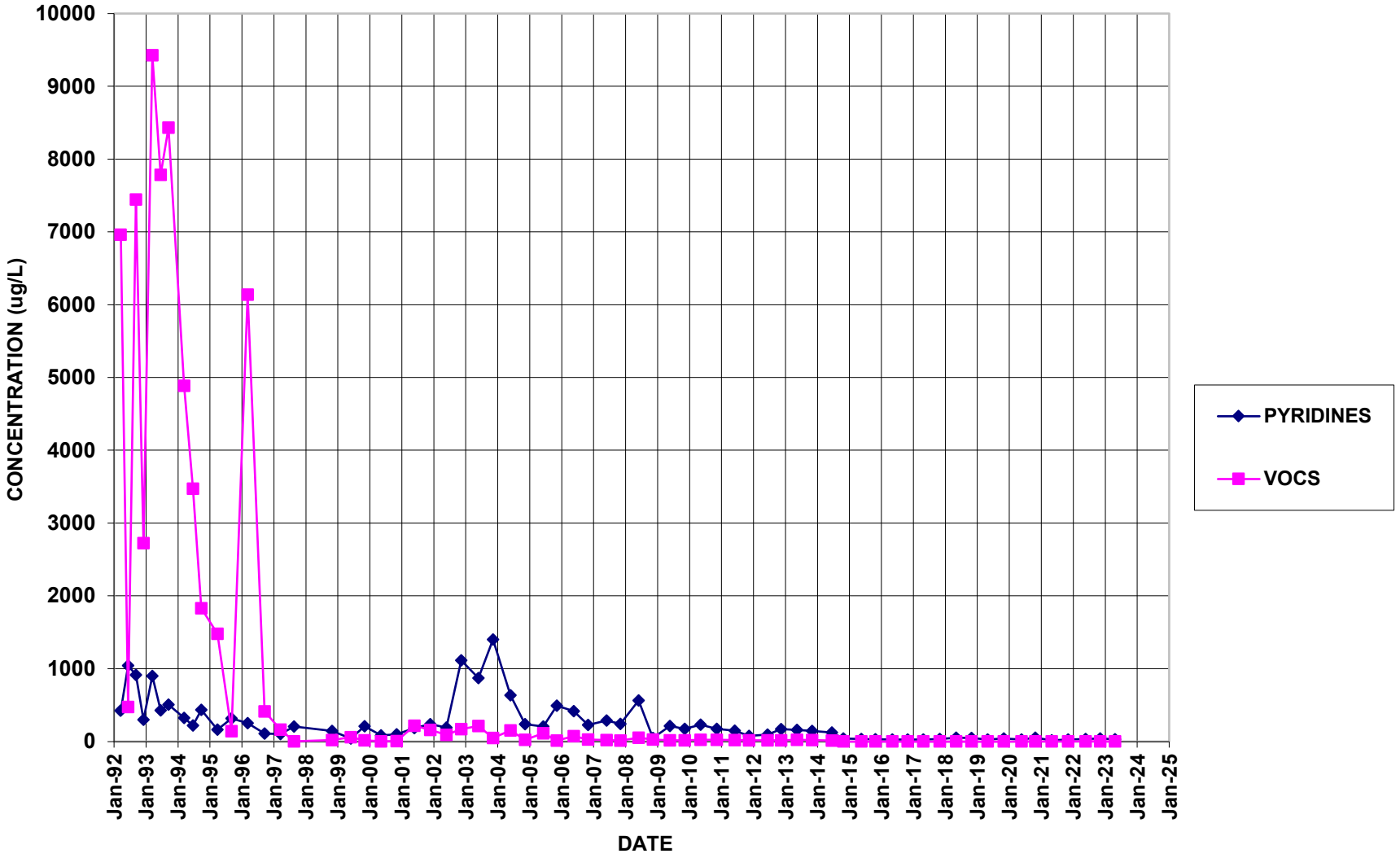
Jan-24
Jan-25
DATE
PYRIDINES
VOCS

BR-5A


10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
CONCENTRATION (ug/L)
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
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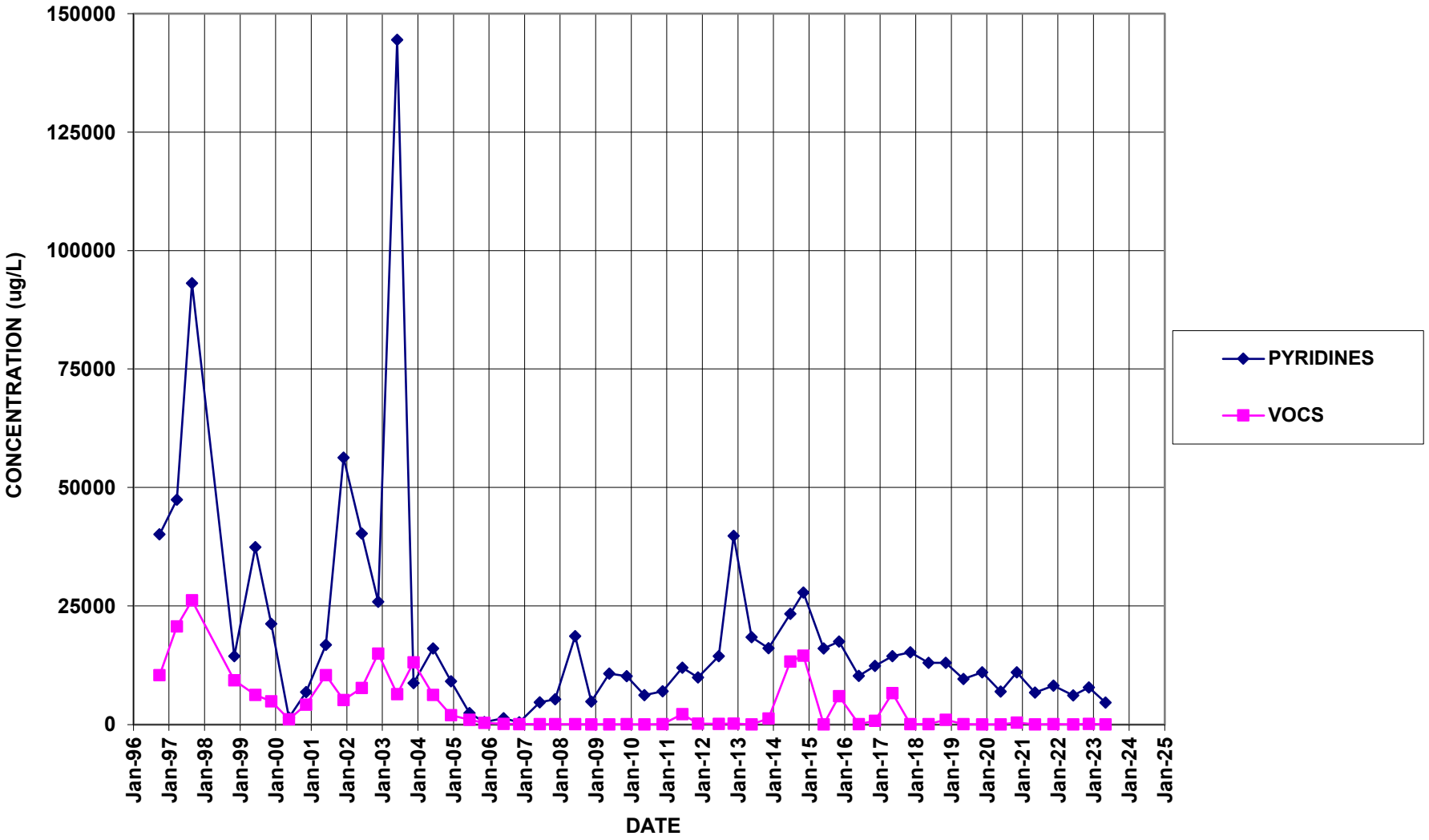
Jan-23
Jan-24
Jan-25
DATE
PYRIDINES
VOCS

BR-6A


150000
125000
100000
75000
50000
25000
0
CONCENTRATION (ug/L)
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
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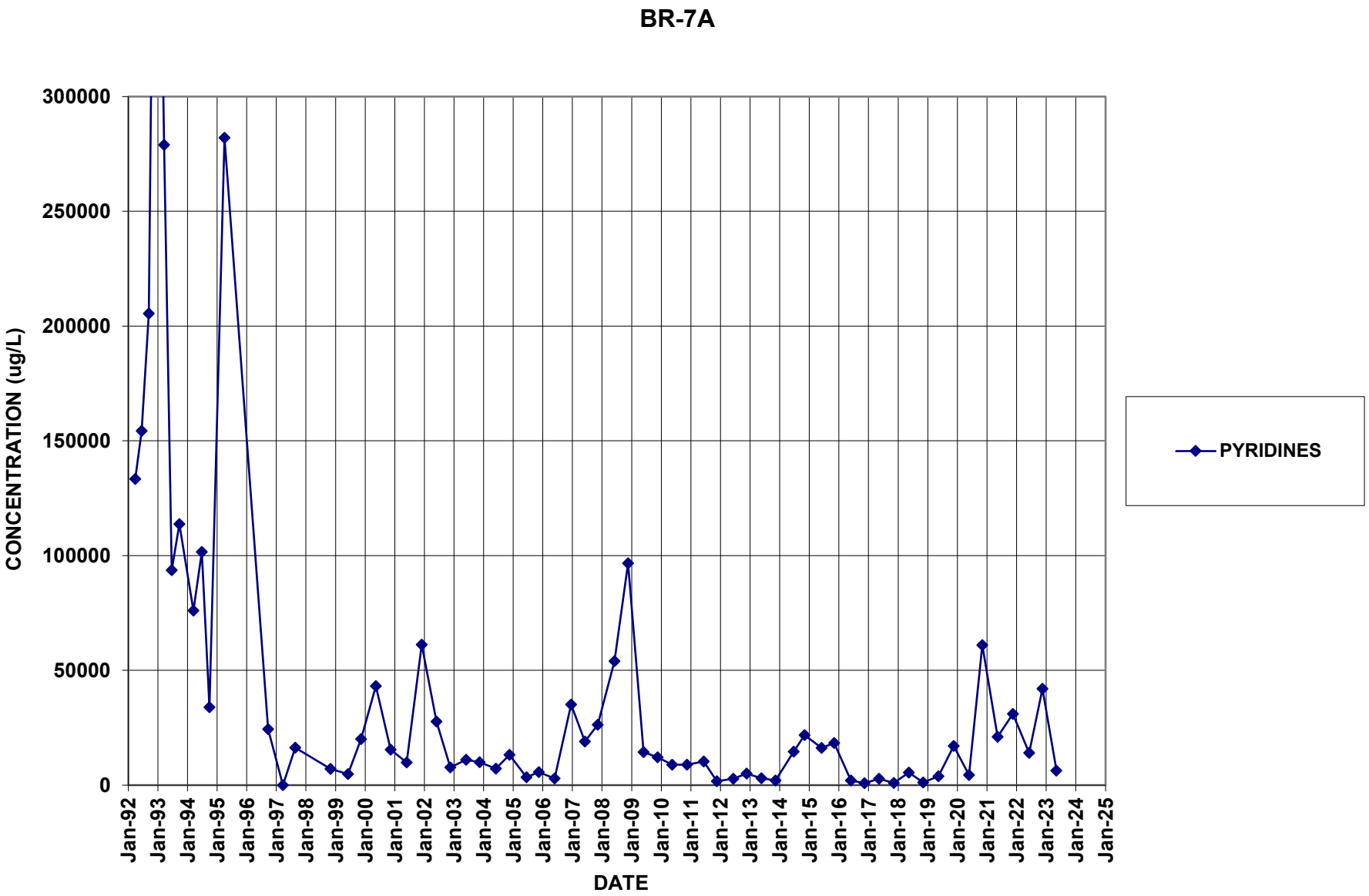
Jan-22
Jan-23
Jan-24
Jan-25
DATE
PYRIDINES
VOCS


BR-7A
300000
250000
200000
150000
100000
50000
0
CONCENTRATION (ug/L)
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
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Jan-11
Jan-12
Jan-13
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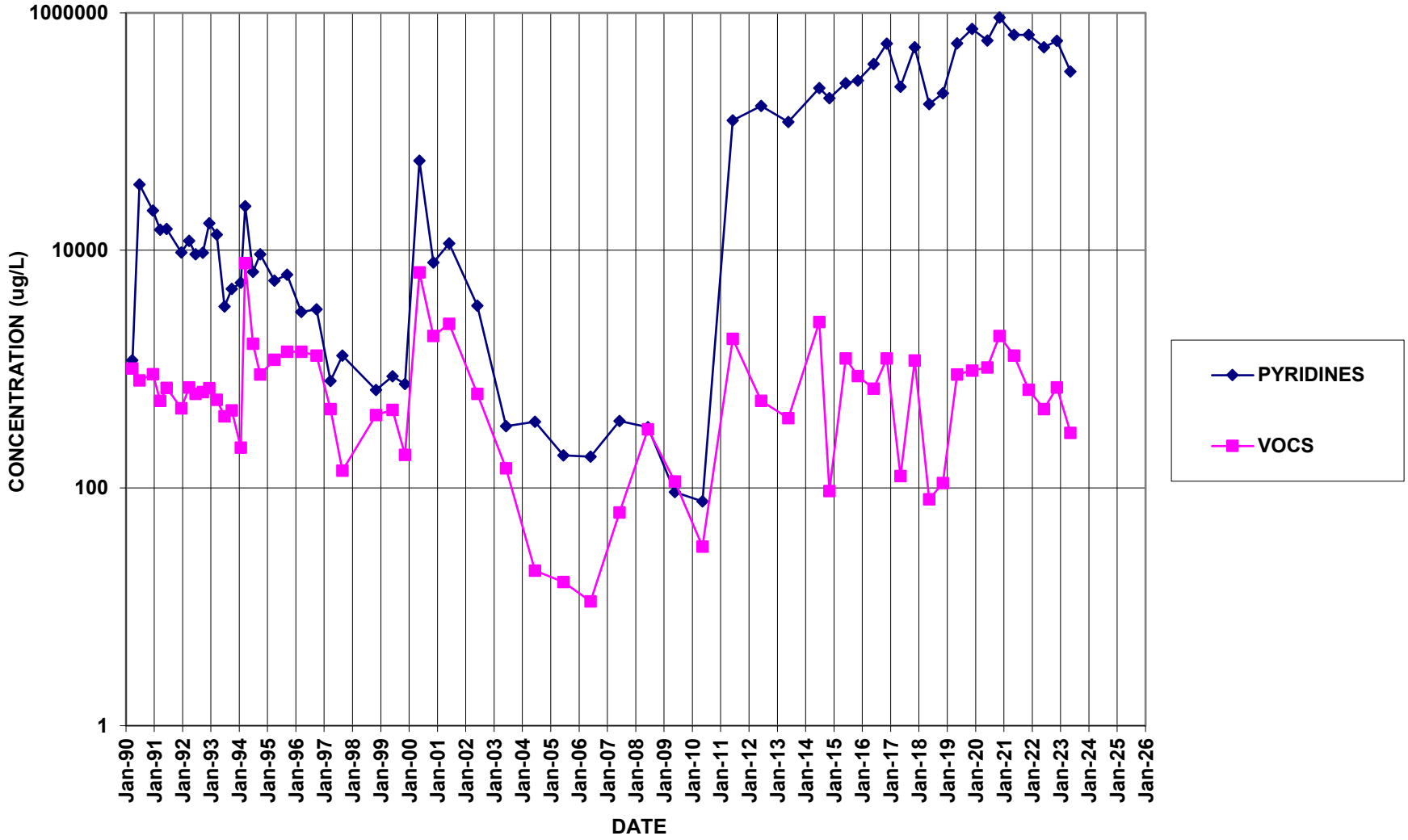
Jan-24
Jan-25
DATE
PYRIDINES

BR-8


1000000
10000
100
1
CONCENTRATION (ug/L)
Jan-90
Jan-91
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
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Jan-14
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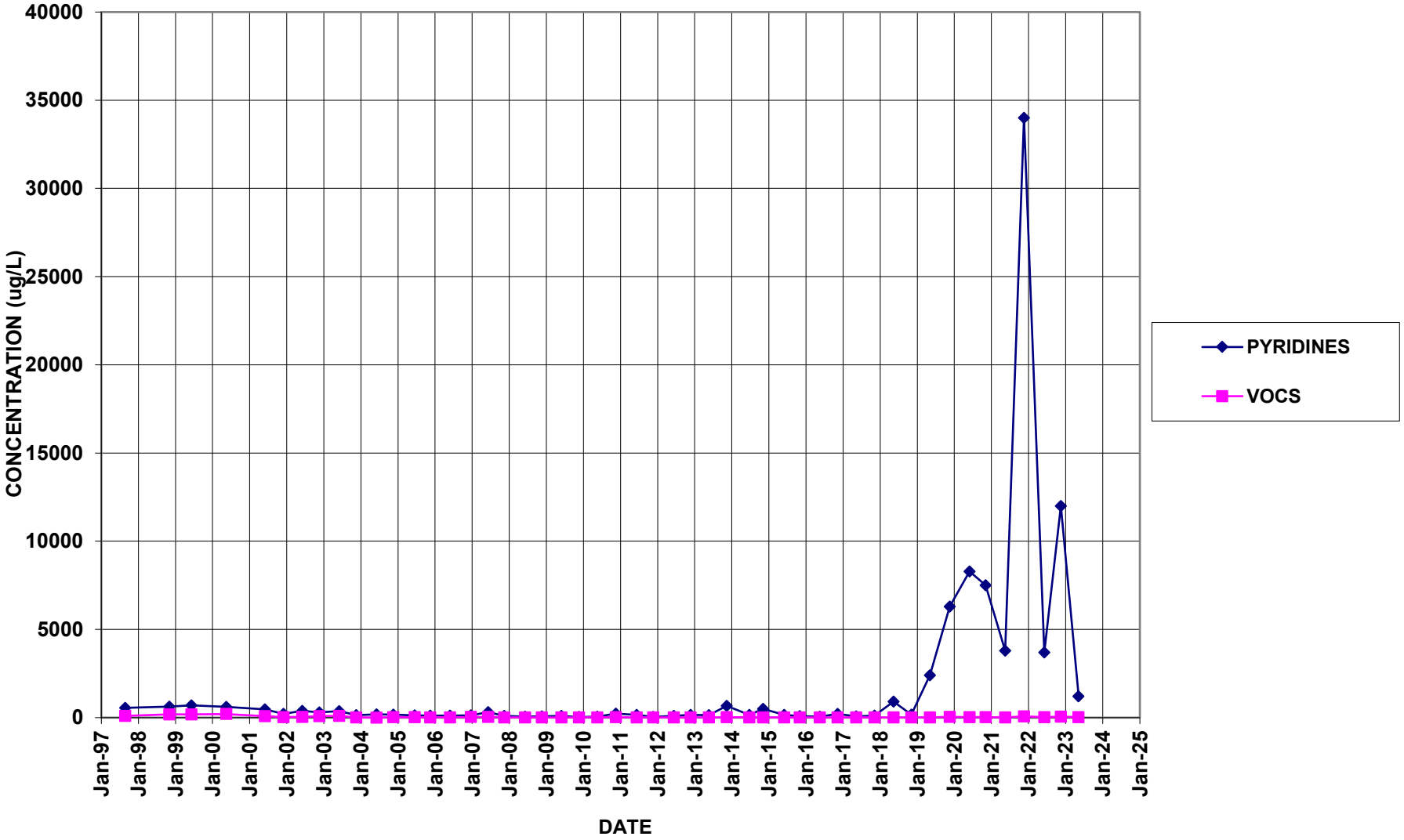
Jan-25
Jan-26
DATE
PYRIDINES
VOCS

BR-9


40000
35000
30000
25000
20000
15000
10000
5000
0
CONCENTRATION (ug/L)
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
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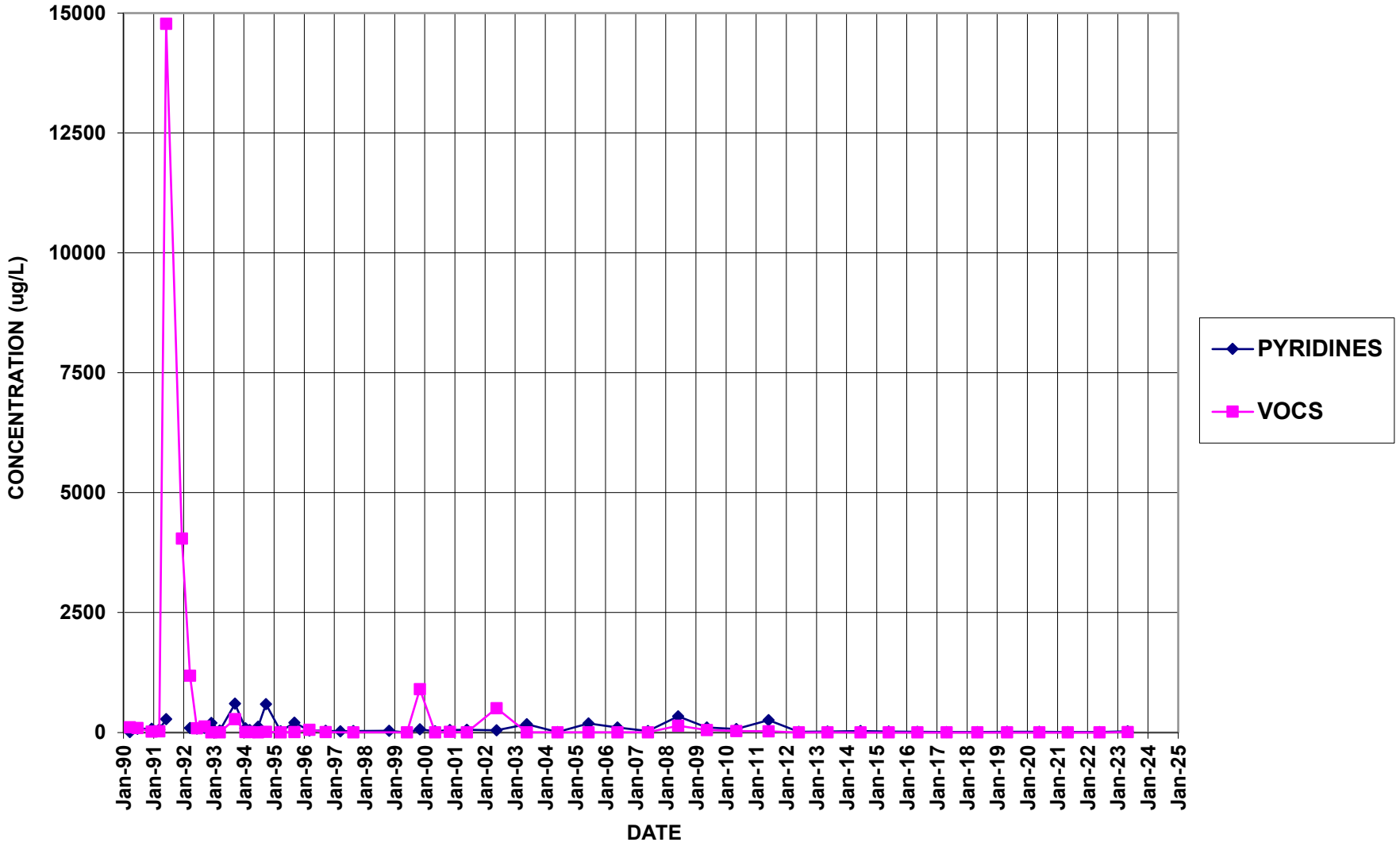
Jan-21
Jan-22
Jan-23
Jan-24
Jan-25
DATE
PYRIDINES
VOCS

E-3


15000
12500
10000
7500
5000
2500
0
CONCENTRATION (ug/L)
Jan-90
Jan-91
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
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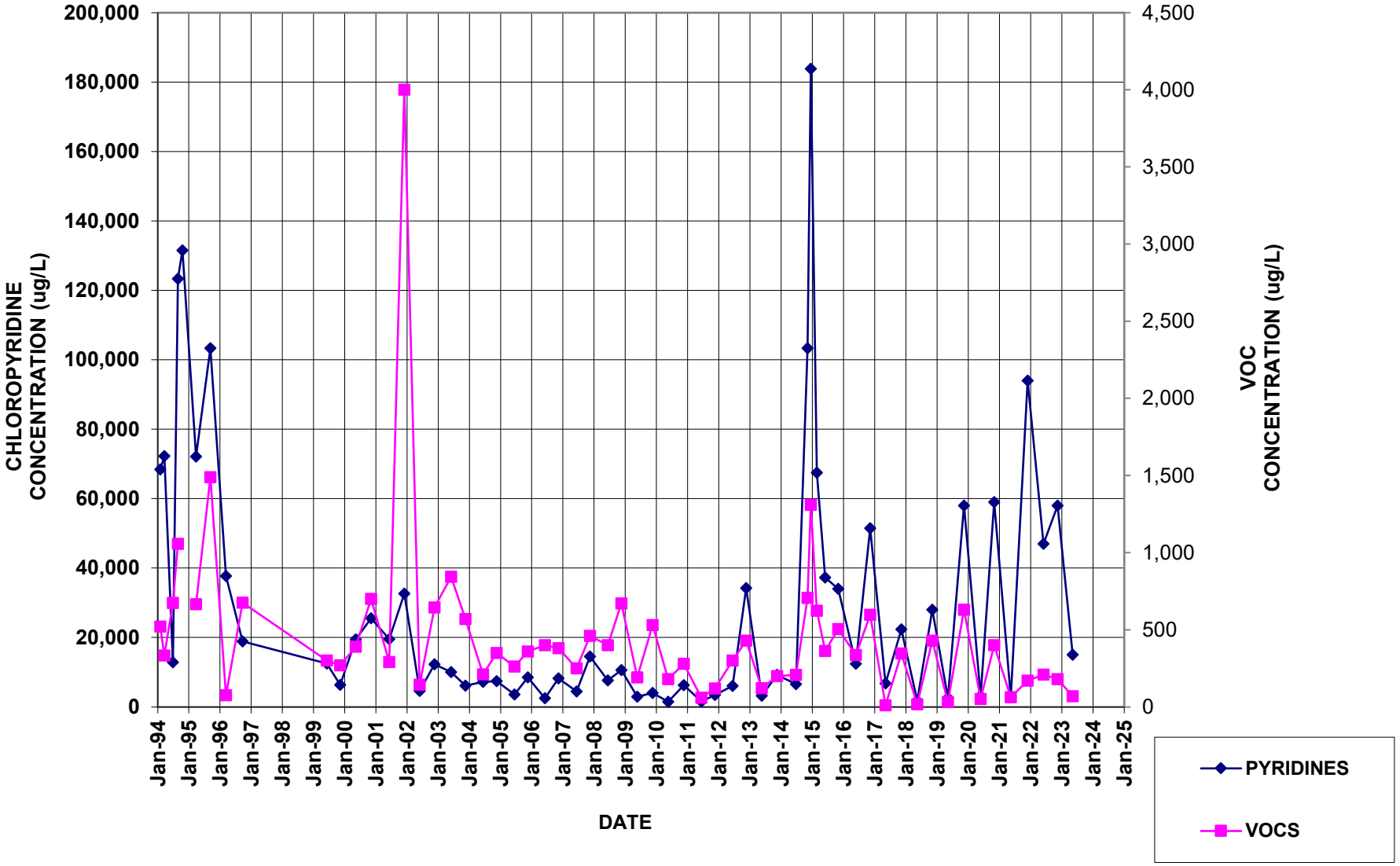
Jan-24
Jan-25
DATE
PYRIDINES
VOCS

MW-106


CHLOROPYRIDINE CONCENTRATION (ug/L)
VOC CONCENTRATION (ug/L)
DATE
200,000
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Jan-94
Jan-95
Jan-96
Jan-97
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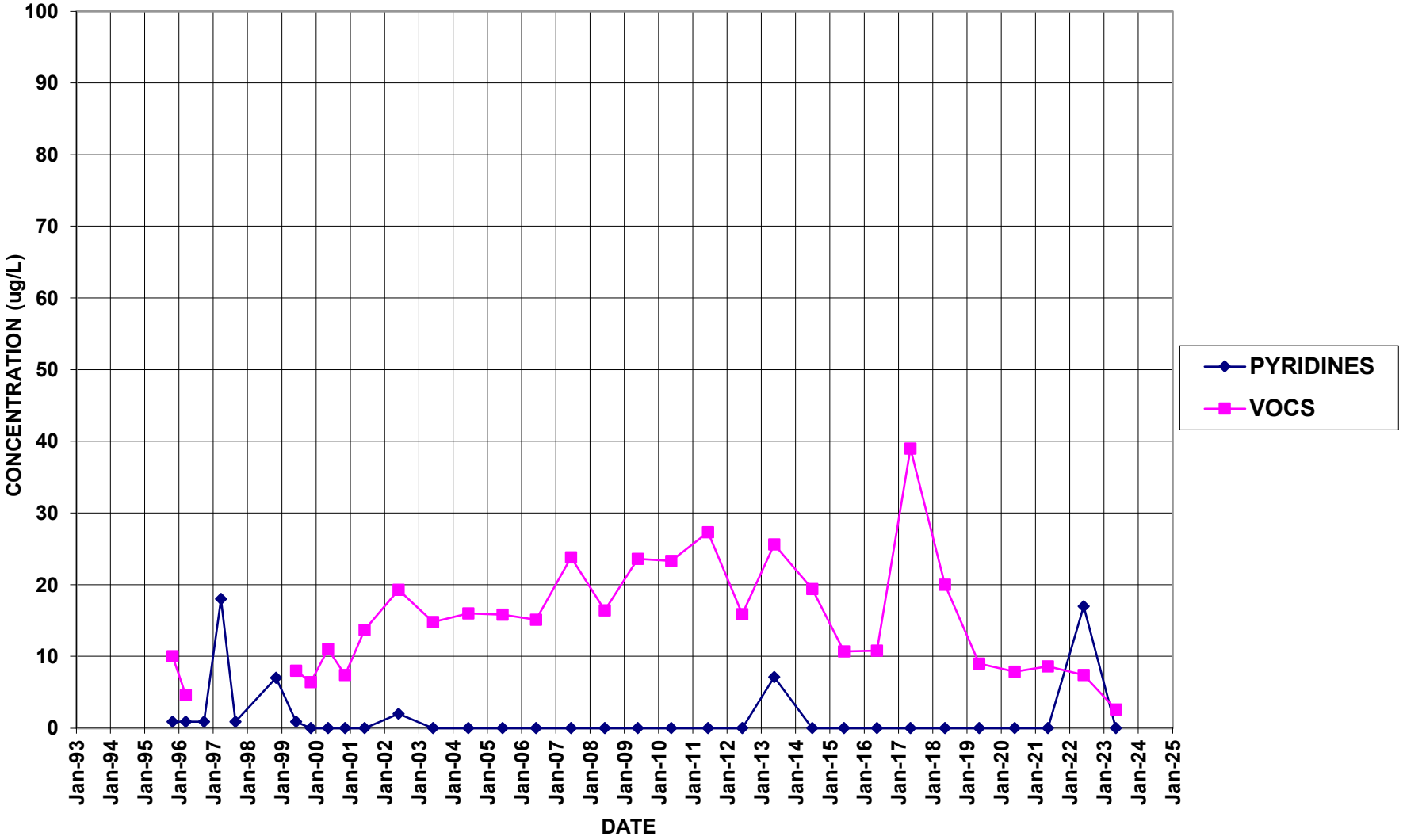
Jan-23
Jan-24
Jan-25
PYRIDINES
VOCS

MW-114


100
90
80
70
60
50
40
30
20
10
0
CONCENTRATION (ug/L)
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
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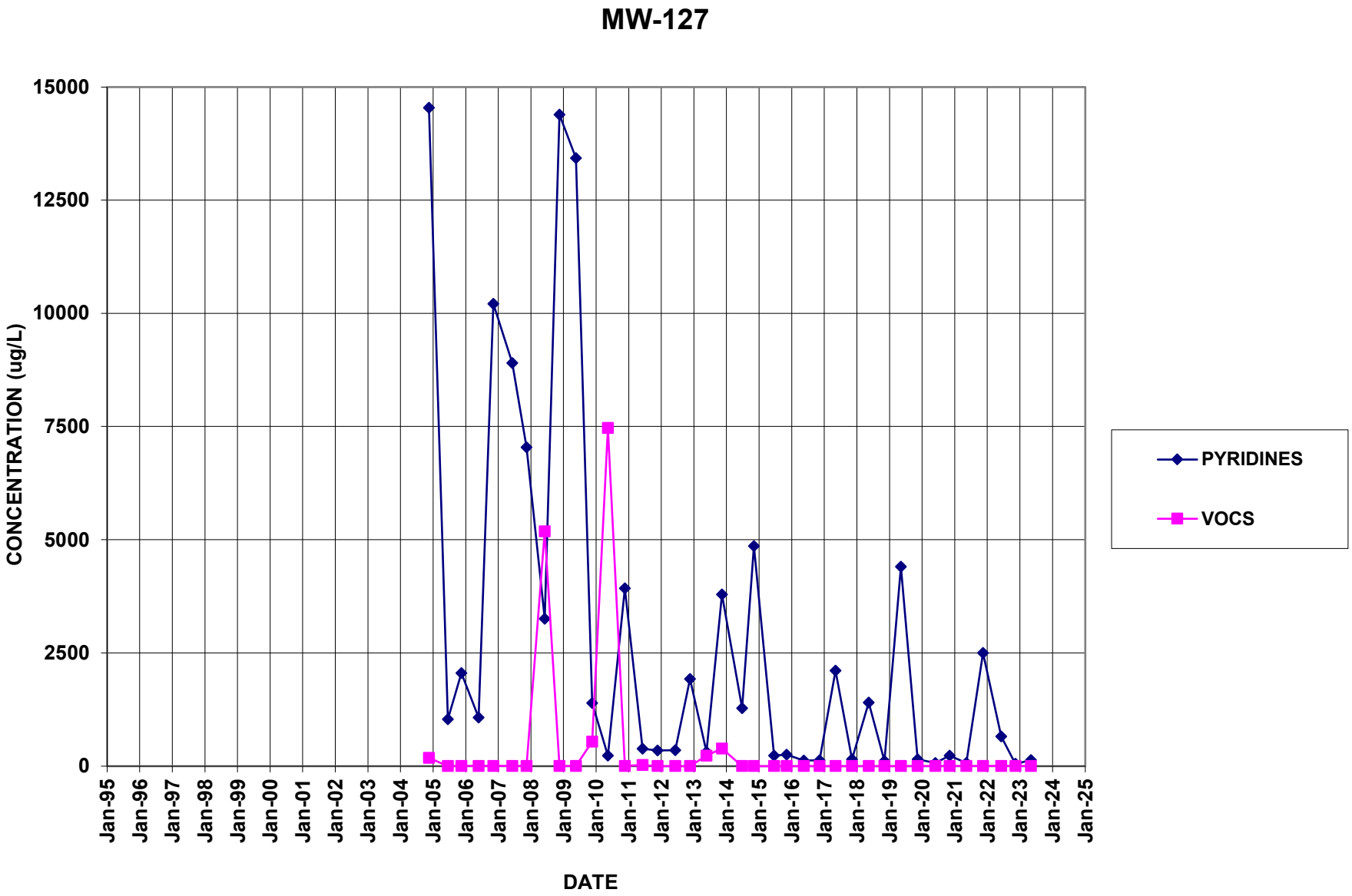
Jan-22
Jan-23
Jan-24
Jan-25
DATE
PYRIDINES
VOCS


MW-127
15000
12500
10000
7500
5000
2500
0
CONCENTRATION (ug/L)
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
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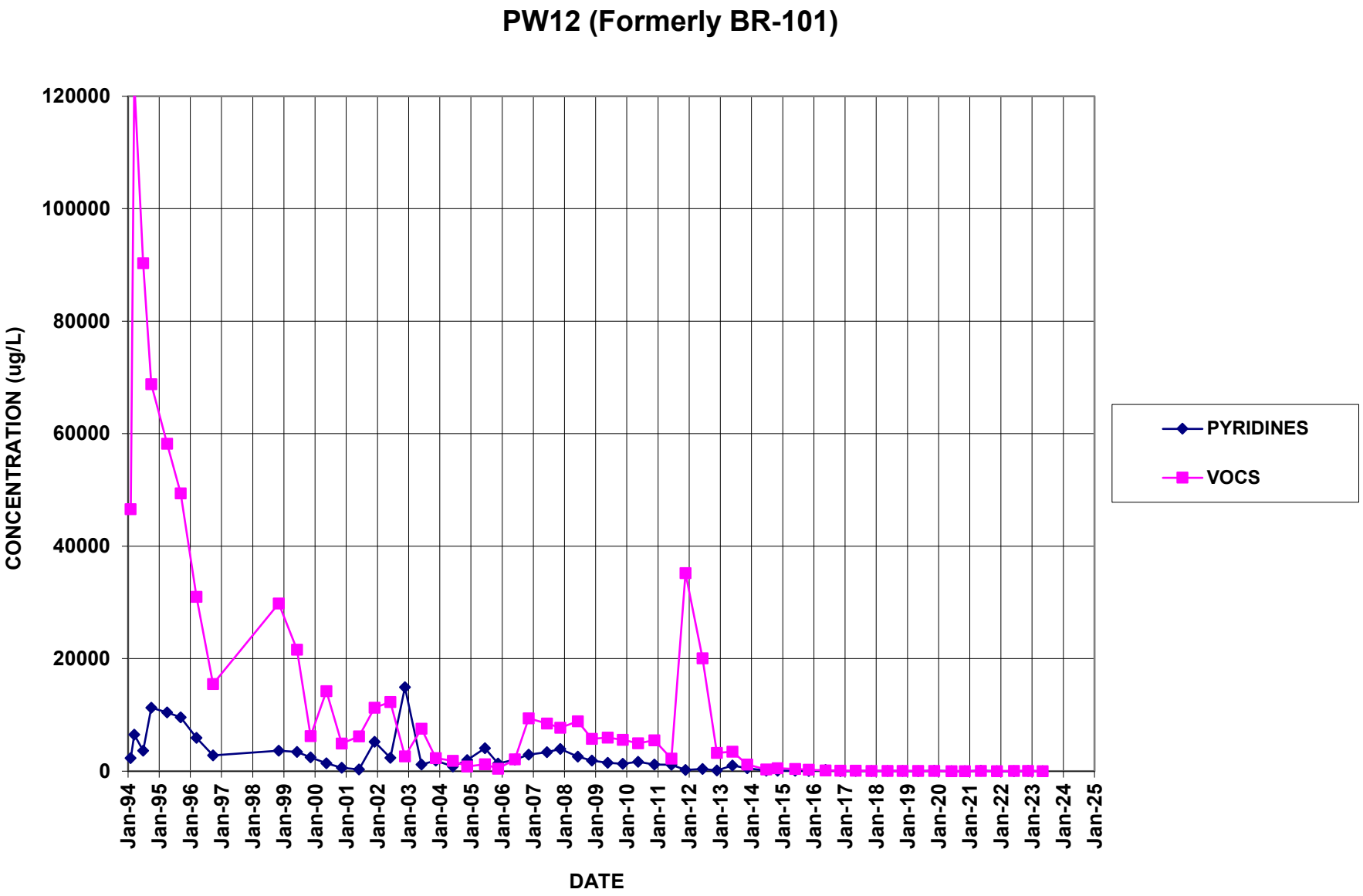
Jan-23
Jan-24
Jan-25
DATE
PYRIDINES
VOCS


PW12 (Formerly BR-101)
CONCENTRATION (ug/L)
120000
100000
80000
60000
40000
20000
0
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
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Jan-07
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Jan-09
Jan-10
Jan-11
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Jan-13
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Jan-21
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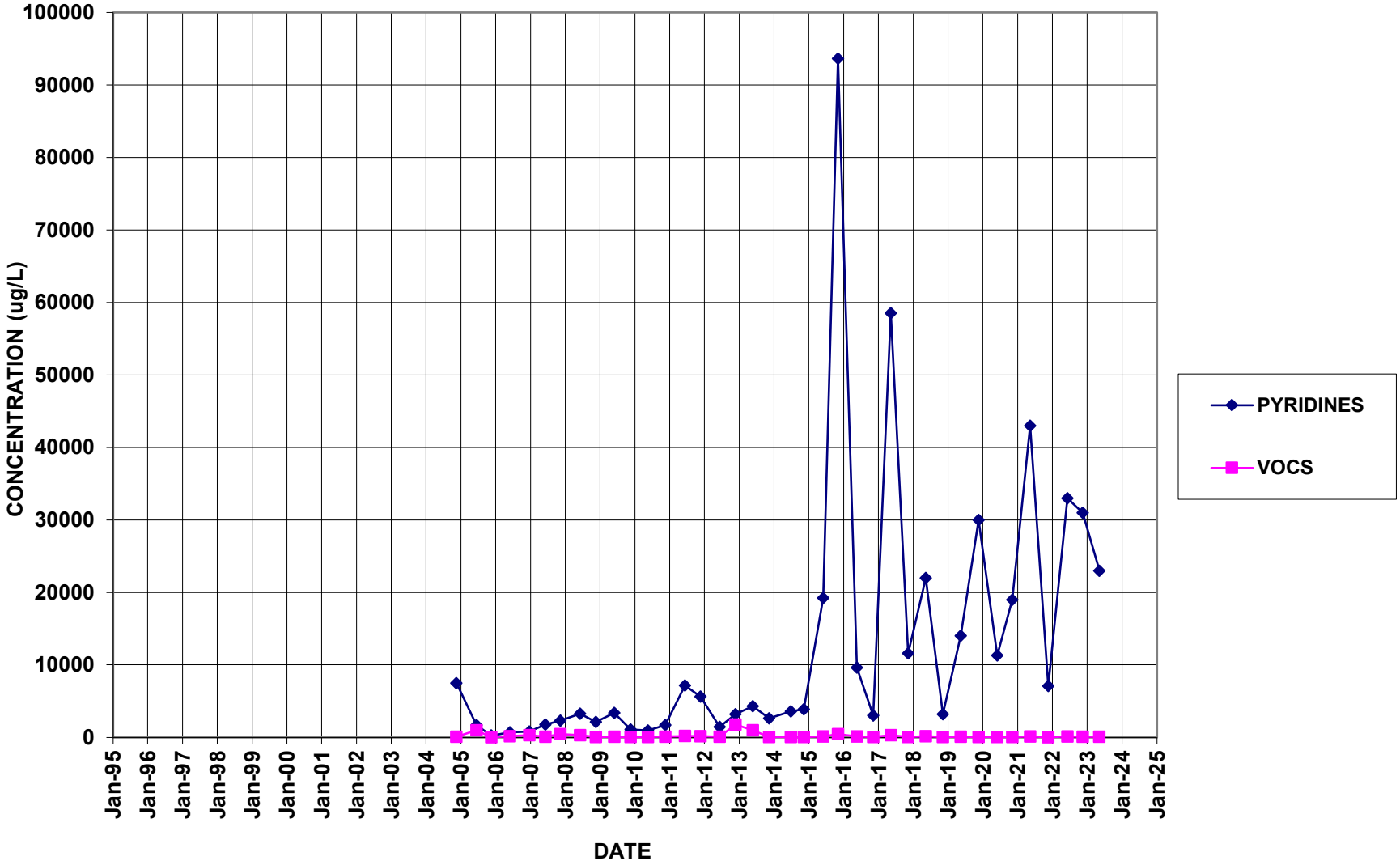
Jan-23
Jan-24
Jan-25
DATE
PYRIDINES
VOCS

PW13


100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
CONCENTRATION (ug/L)
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
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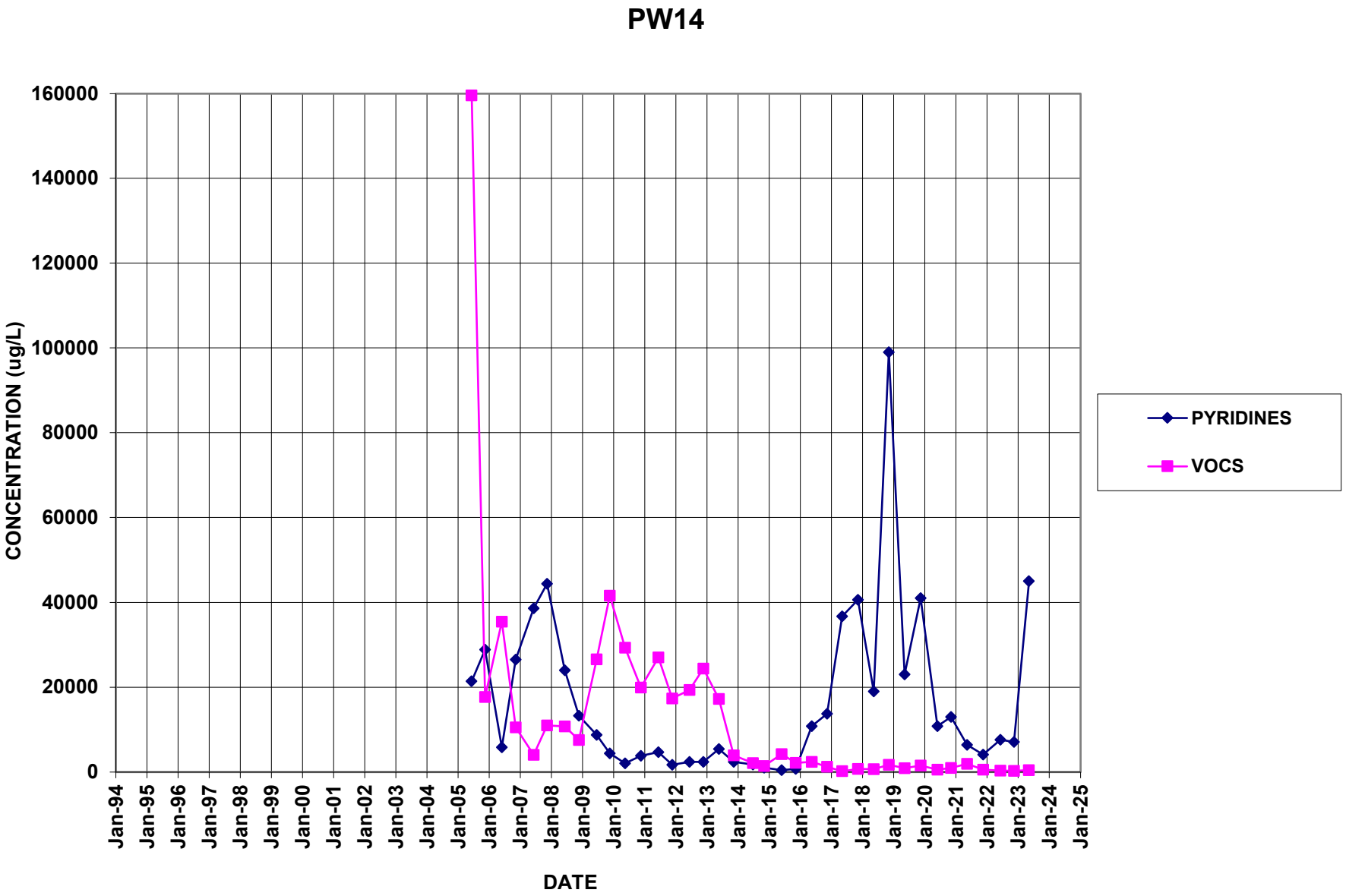
Jan-24
Jan-25
DATE
PYRIDINES
VOCS


PW14
160000
140000
120000
100000
80000
60000
40000
20000
0
CONCENTRATION (ug/L)
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
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Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
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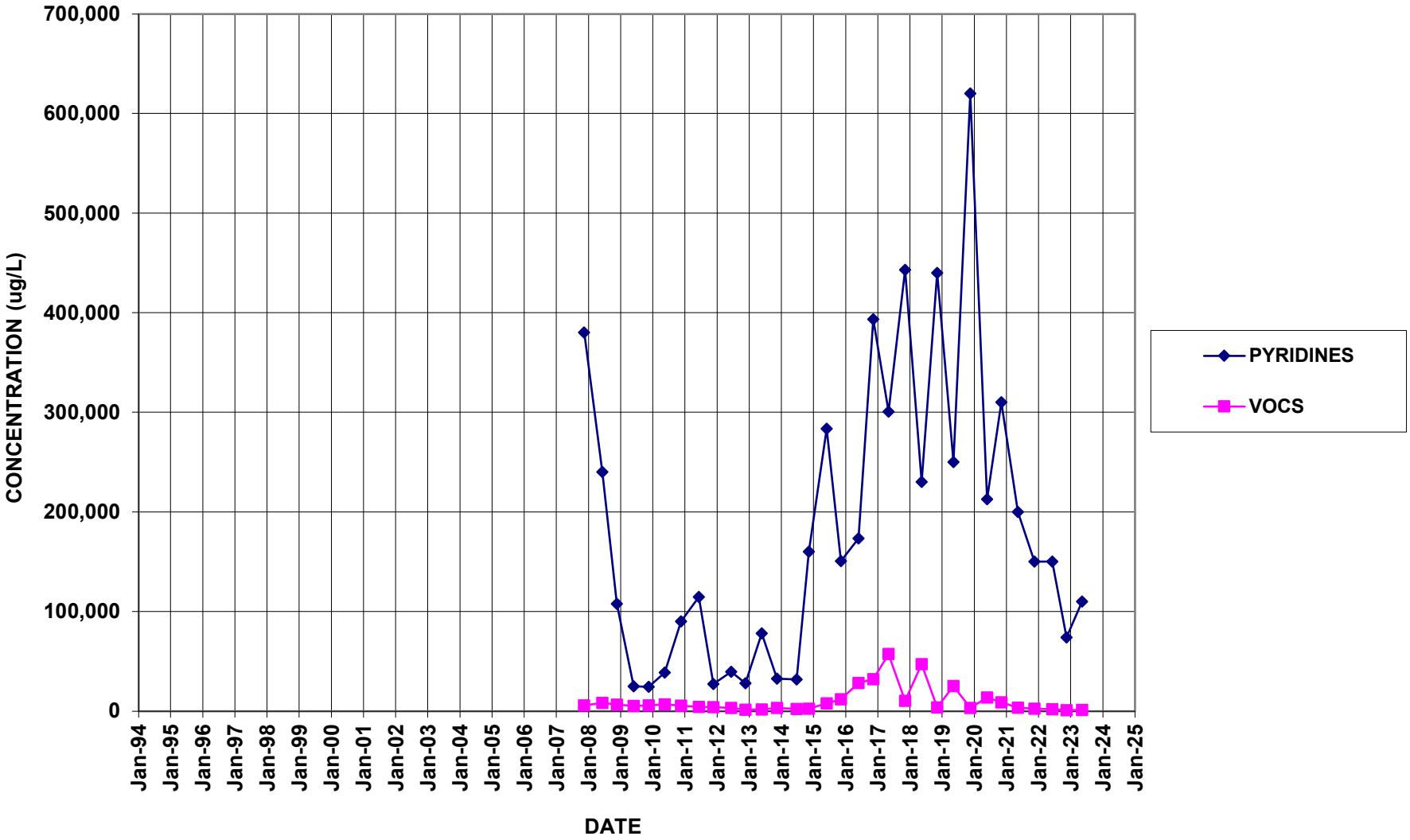
Jan-24
Jan-25
DATE
PYRIDINES
VOCS

PW15


700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
CONCENTRATION (ug/L)
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
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Jan-05
Jan-06
Jan-07
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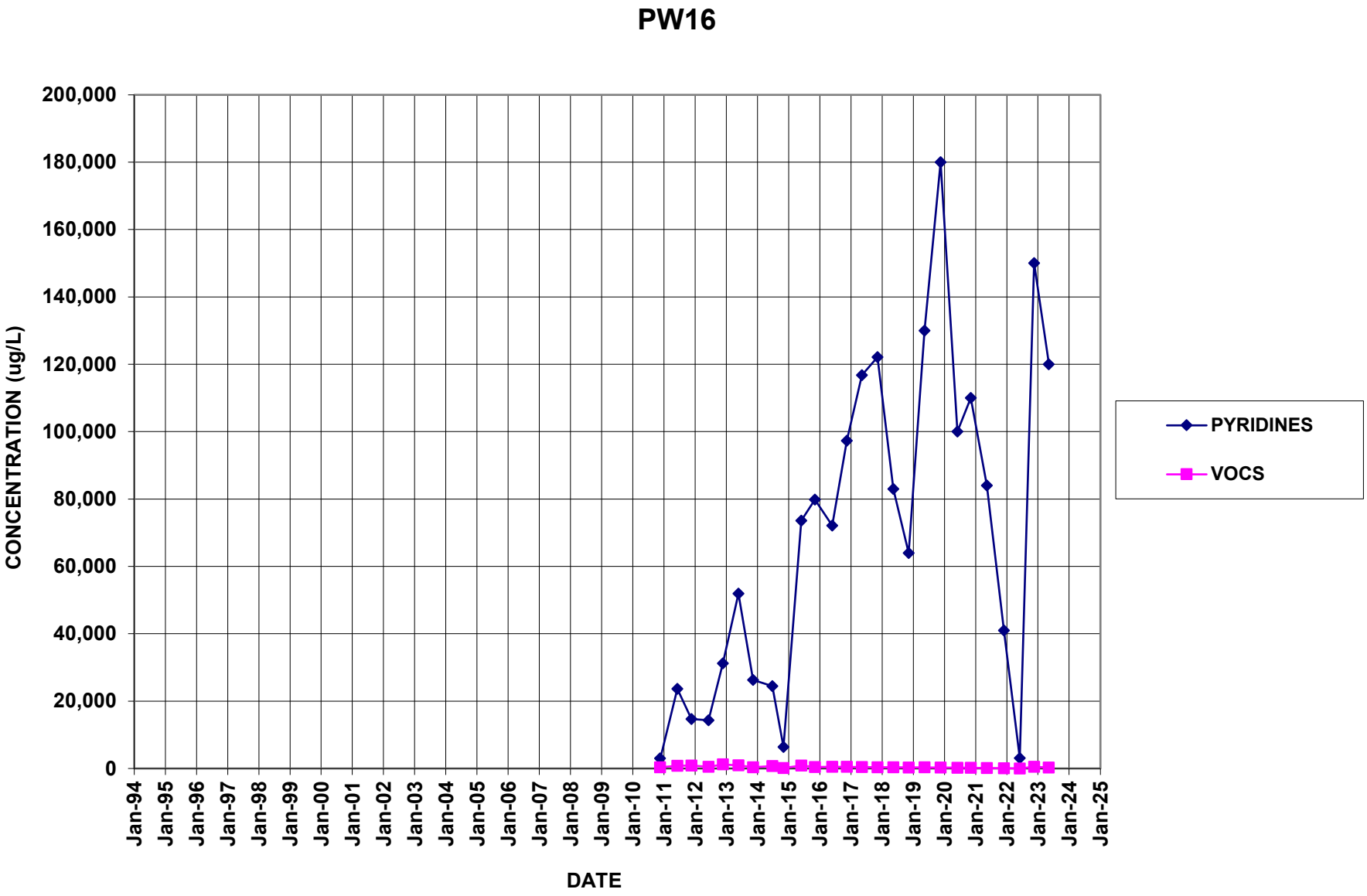
Jan-25
DATE
PYRIDINES
VOCS


PW16
CONCENTRATION (ug/L)
200,000
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
Jan-94
Jan-95
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Jan-07
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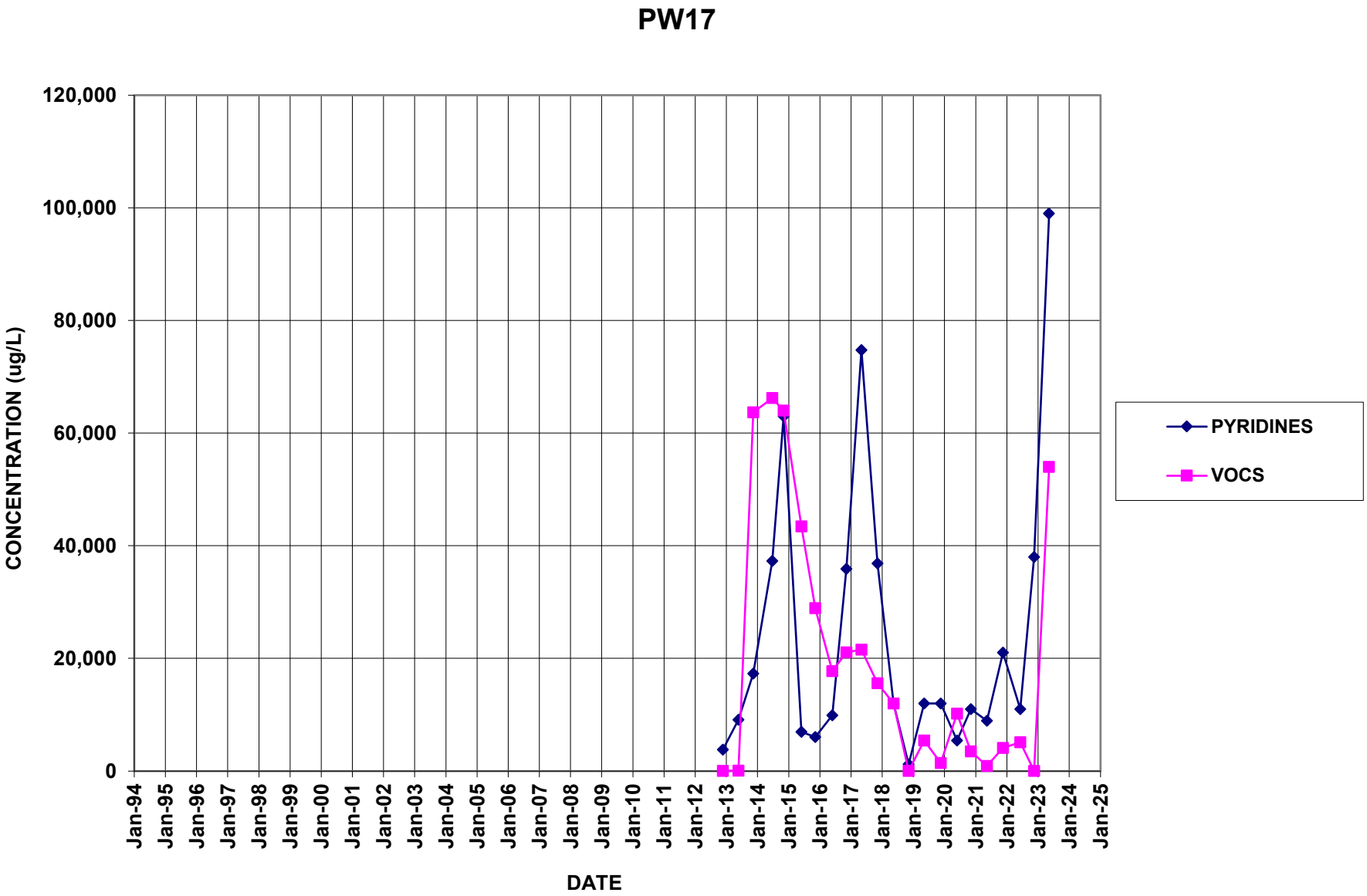
Jan-24
Jan-25
DATE
PYRIDINES
VOCS


PW17
120,000
100,000
80,000
60,000
40,000
20,000
0
CONCENTRATION (ug/L)
Jan-94
Jan-95
Jan-96
Jan-97
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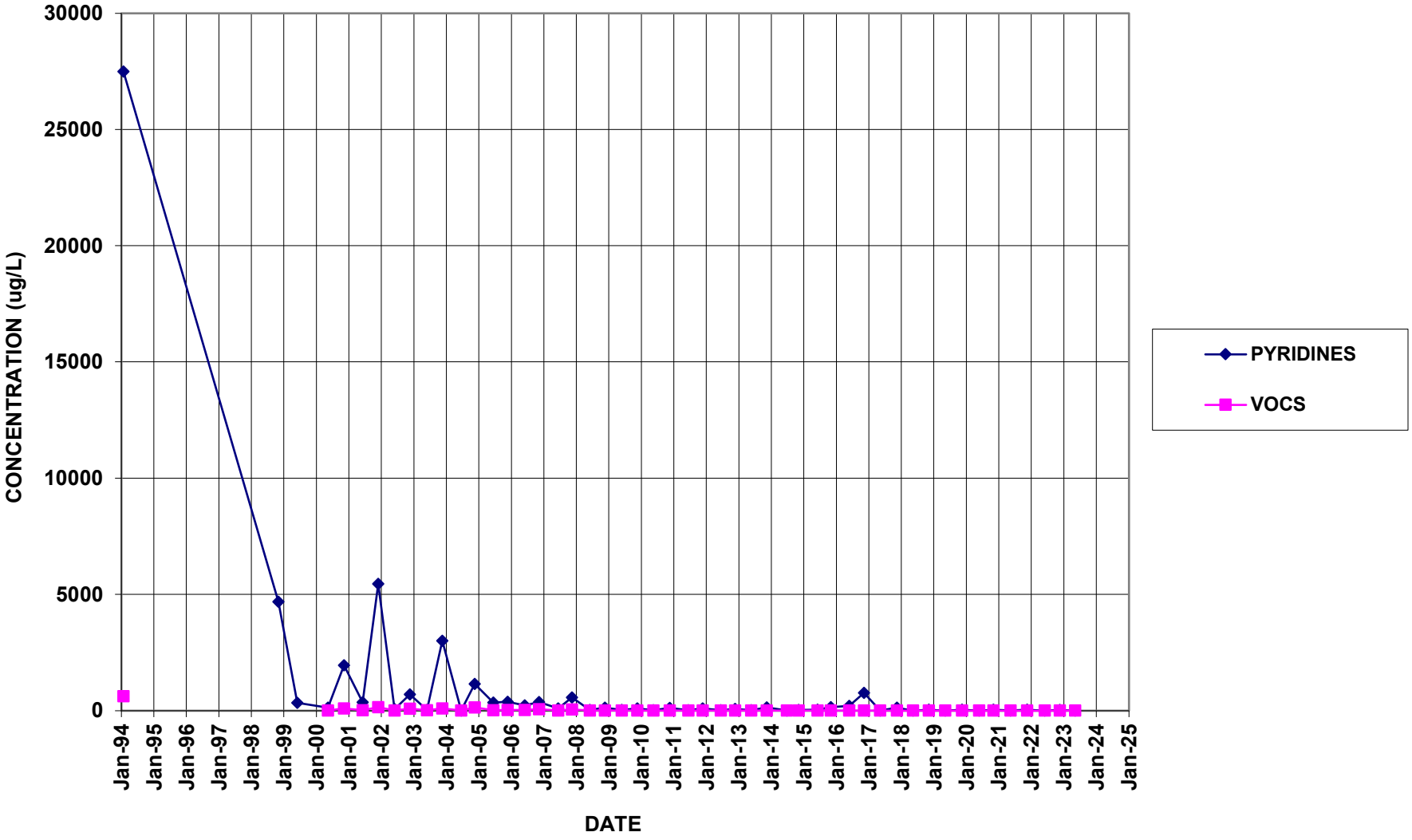
Jan-25
DATE
PYRIDINES
VOCS

PZ-101


30000
25000
20000
15000
10000
5000
0
CONCENTRATION (ug/L)
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
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Jan-25
DATE
PYRIDINES
VOCS

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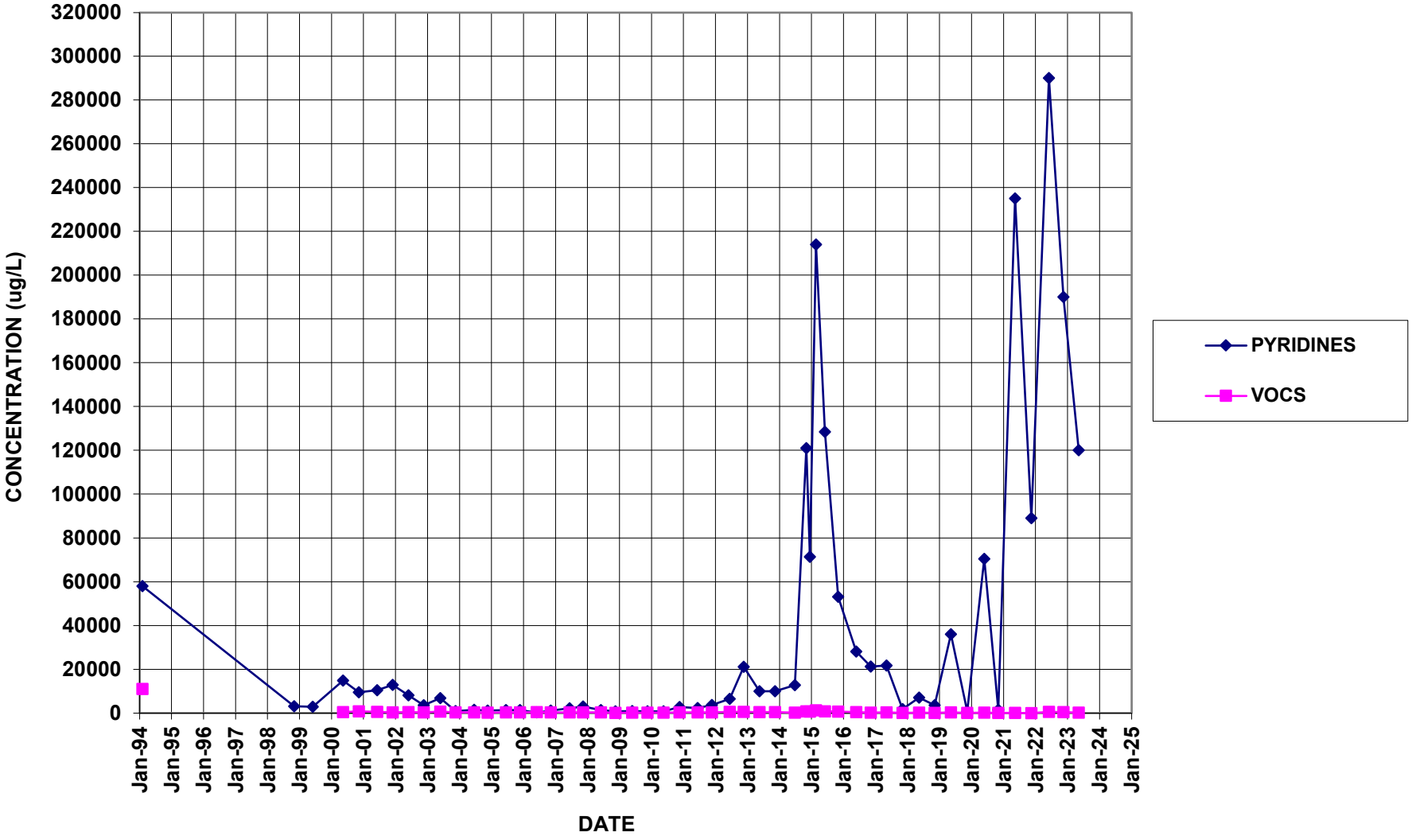
PZ-102


CONCENTRATION (ug/L)
320000
300000
280000
260000
240000
220000
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
Jan-94
Jan-95
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Jan-07
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Jan-09
Jan-10
Jan-11
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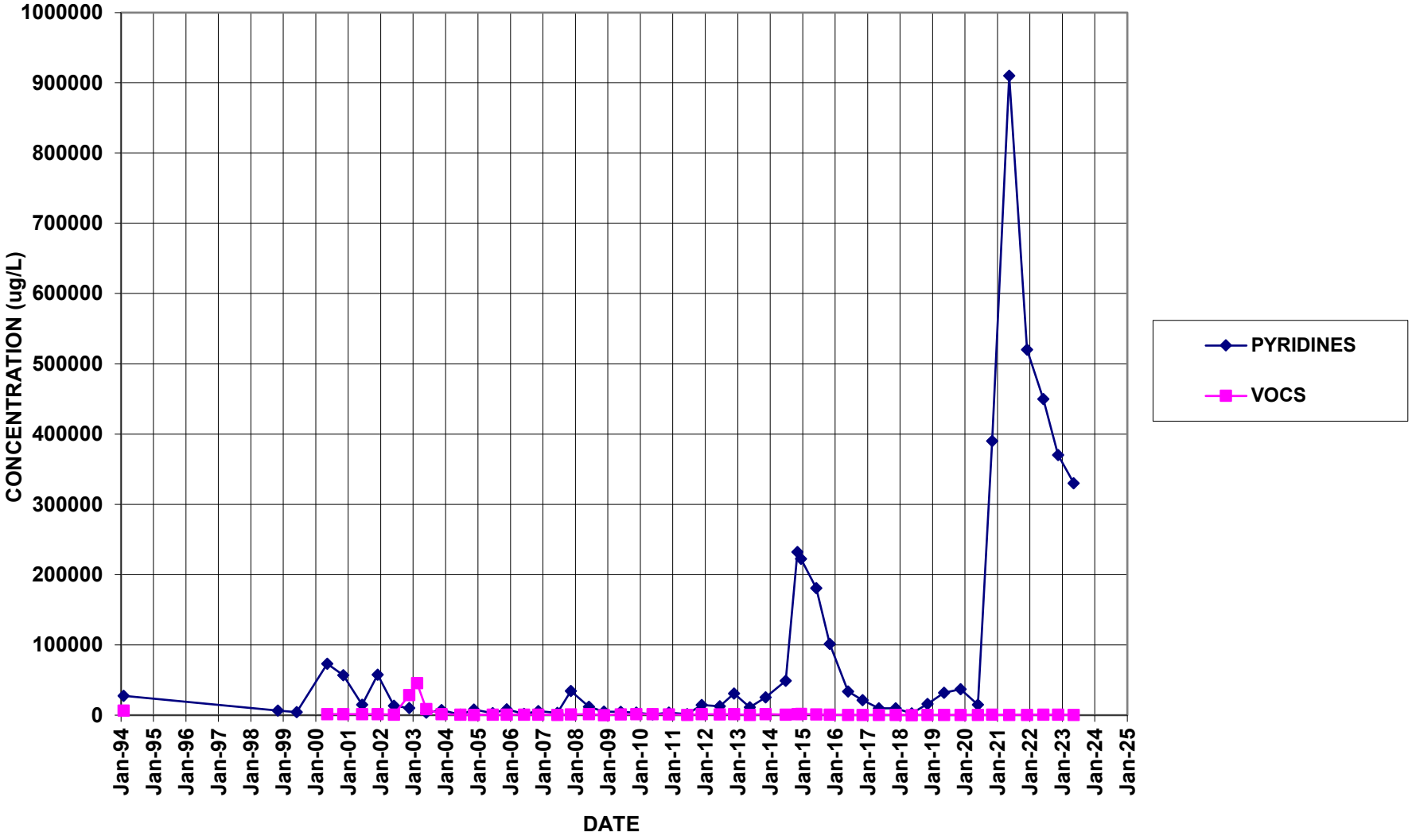
Jan-25
DATE
PYRIDINES
VOCS

PZ-103


1000000
900000
800000
700000
600000
500000
400000
300000
200000
100000
0
CONCENTRATION (ug/L)
Jan-94
Jan-95
Jan-96
Jan-97
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Jan-05
Jan-06
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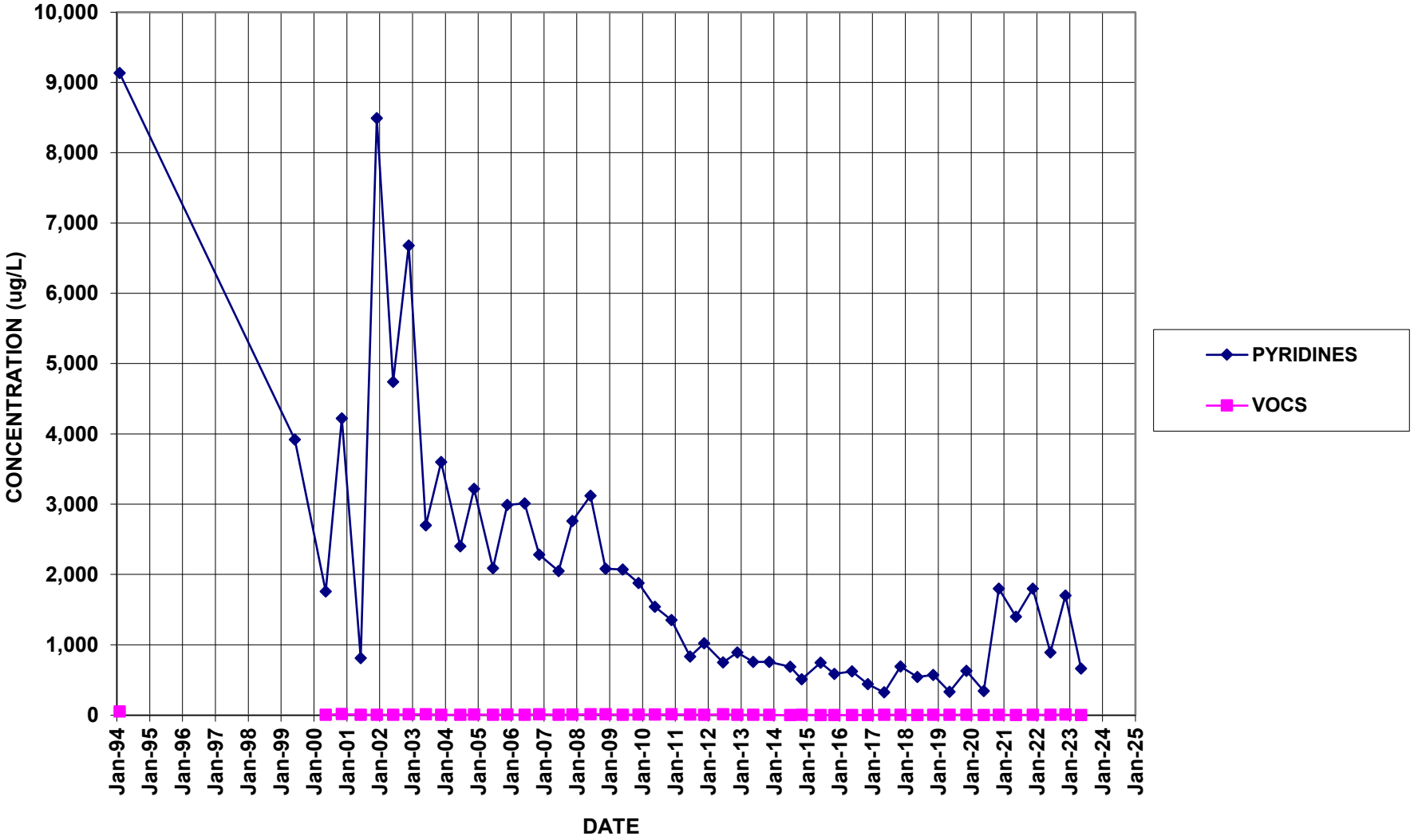
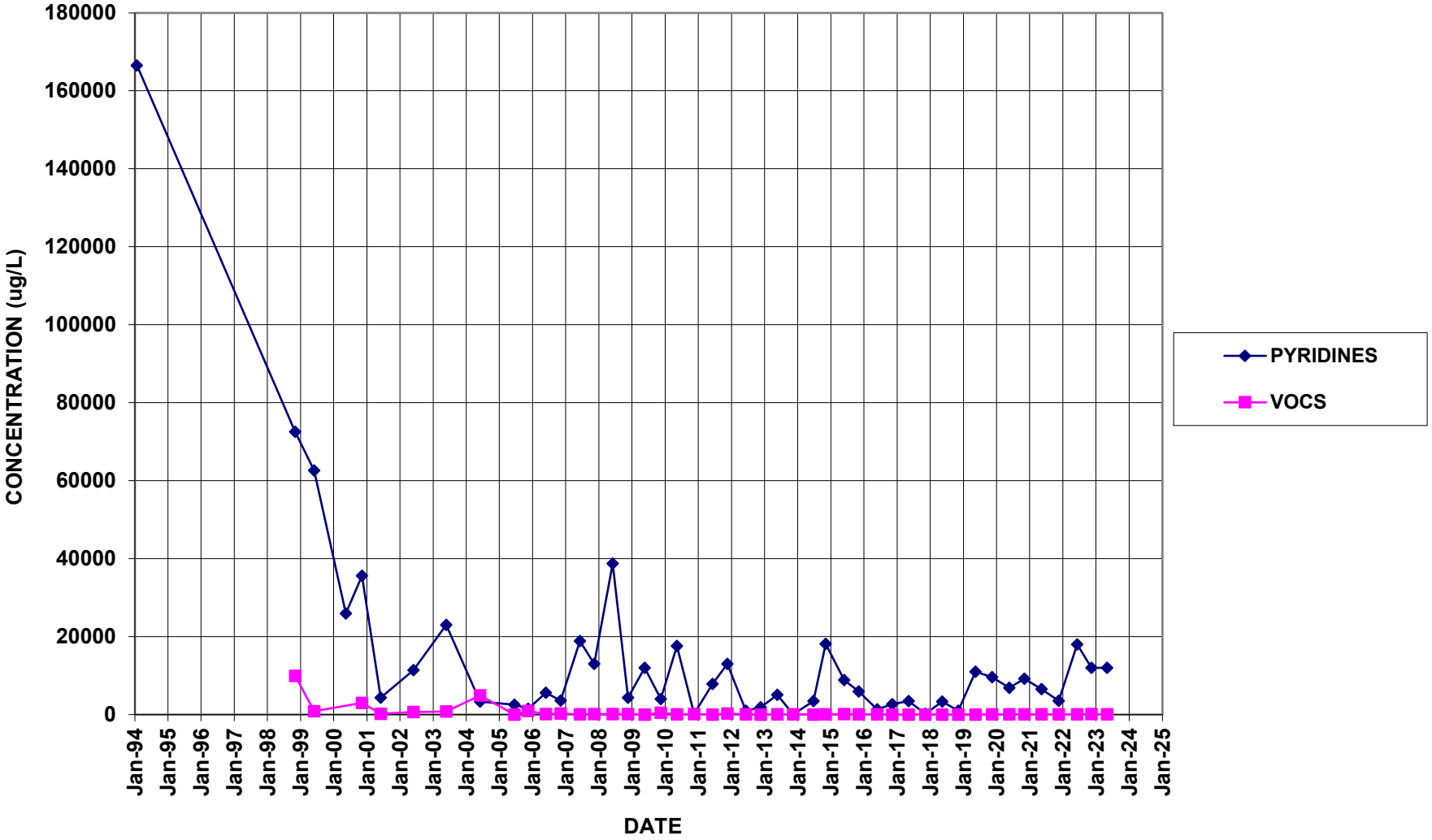
DATE
PYRIDINES
VOCS

:

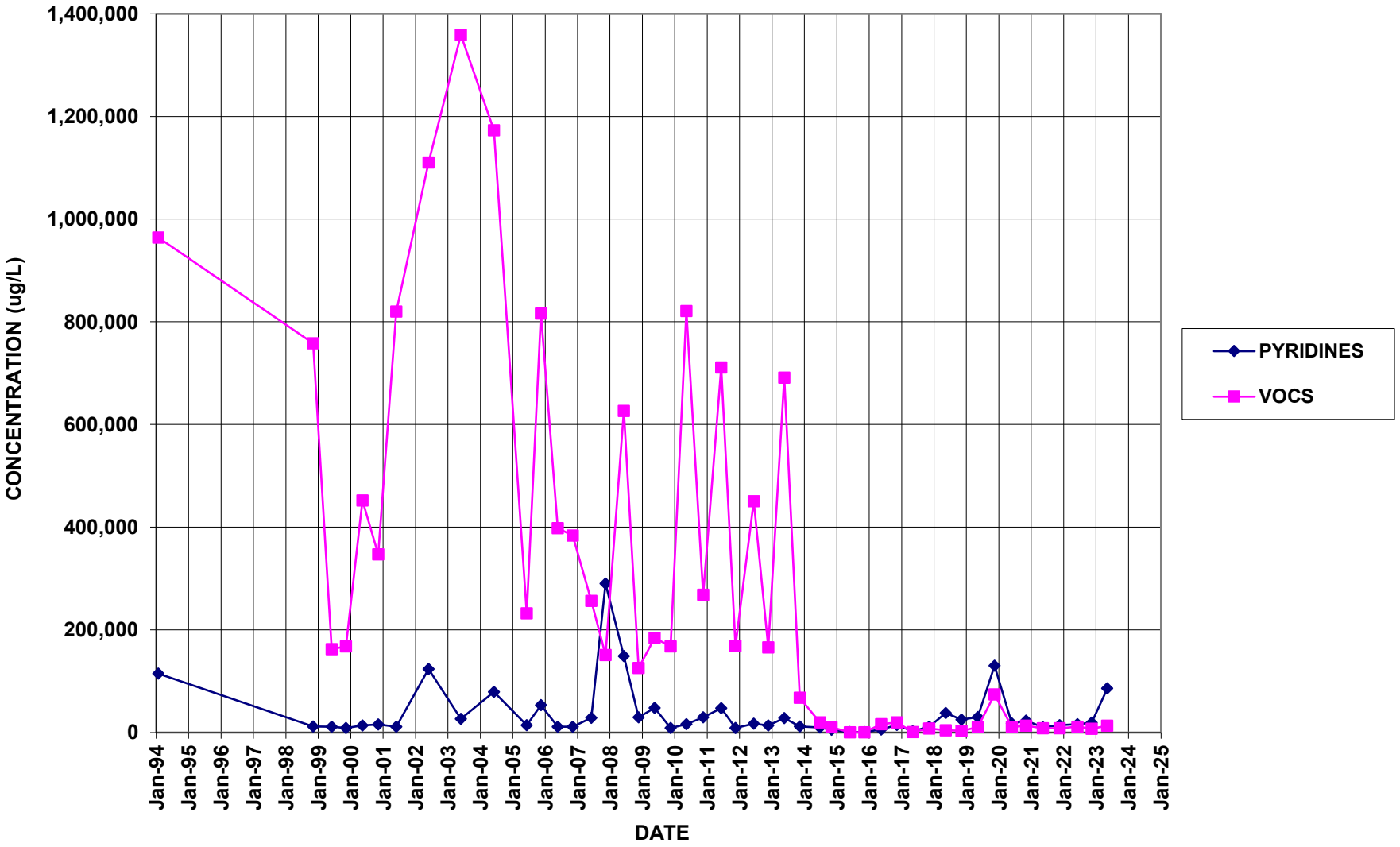
PZ-104


10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
CONCENTRATION (ug/L)
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Jan-24
Jan-25
DATE
PYRIDINES
VOCS

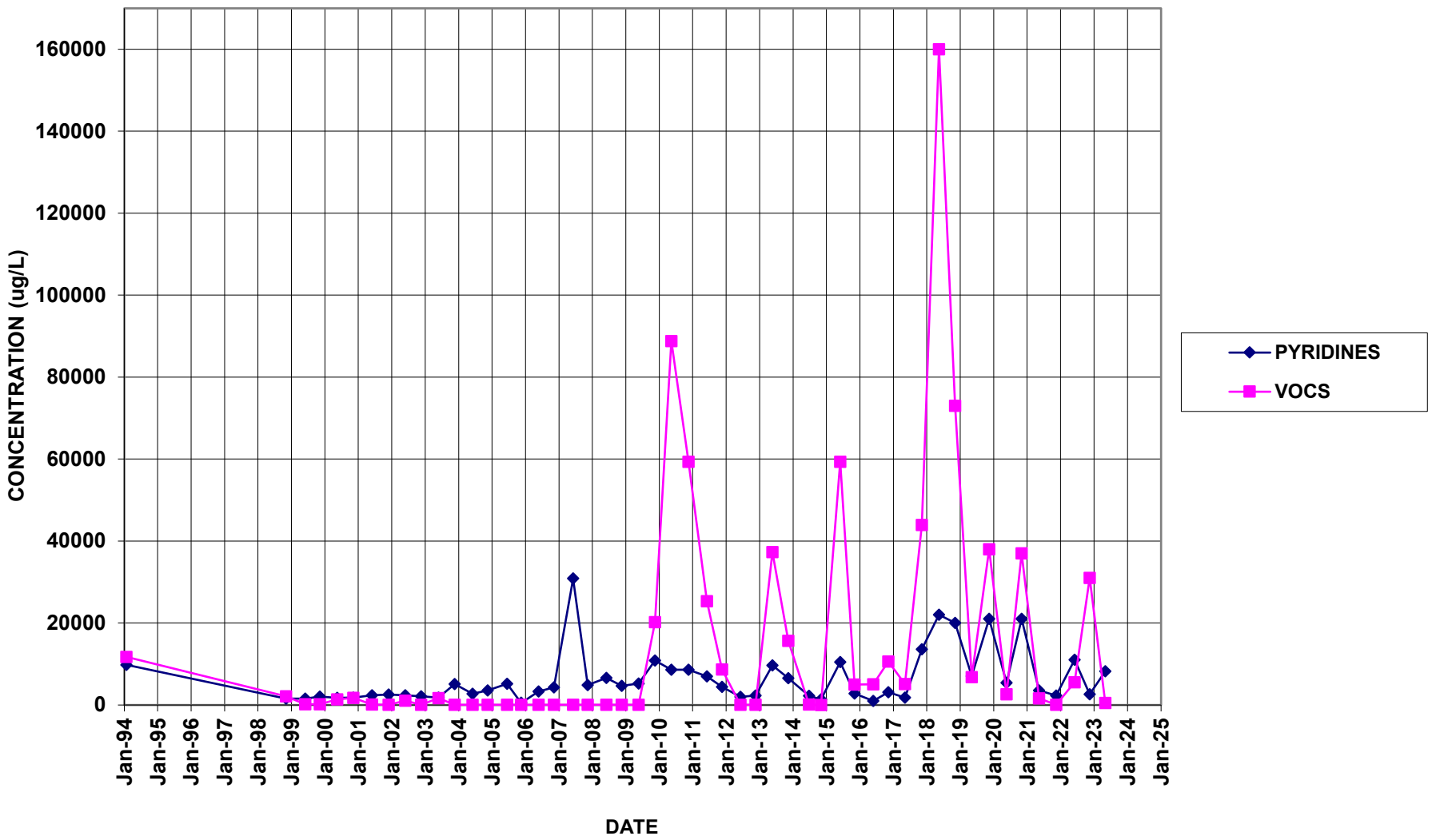
PZ-105

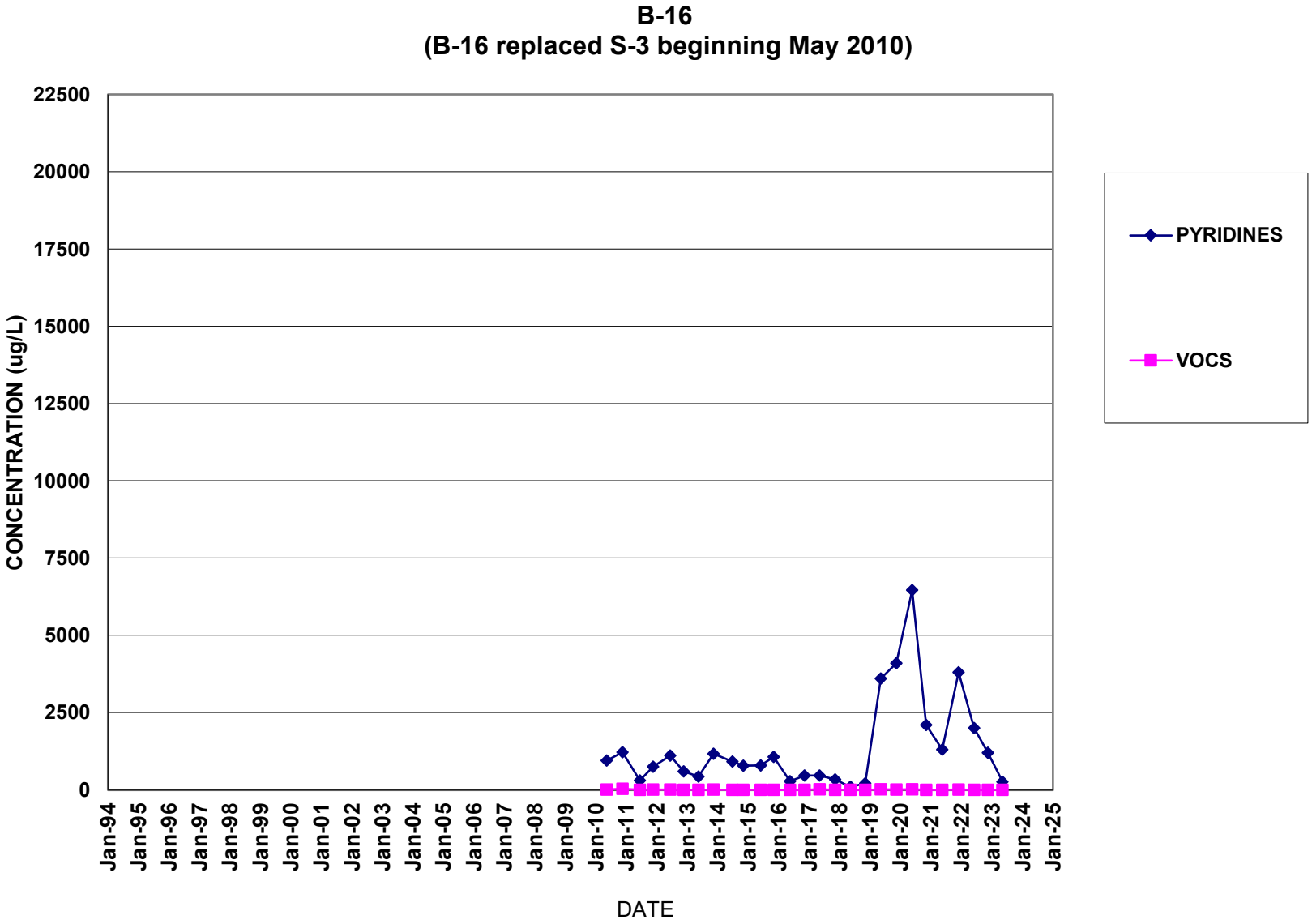

180000
160000
140000
120000
100000
80000
60000
40000
20000
0
CONCENTRATION (ug/L)
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Jan-24
Jan-25
DATE
PYRIDINES
VOCS

PZ-106

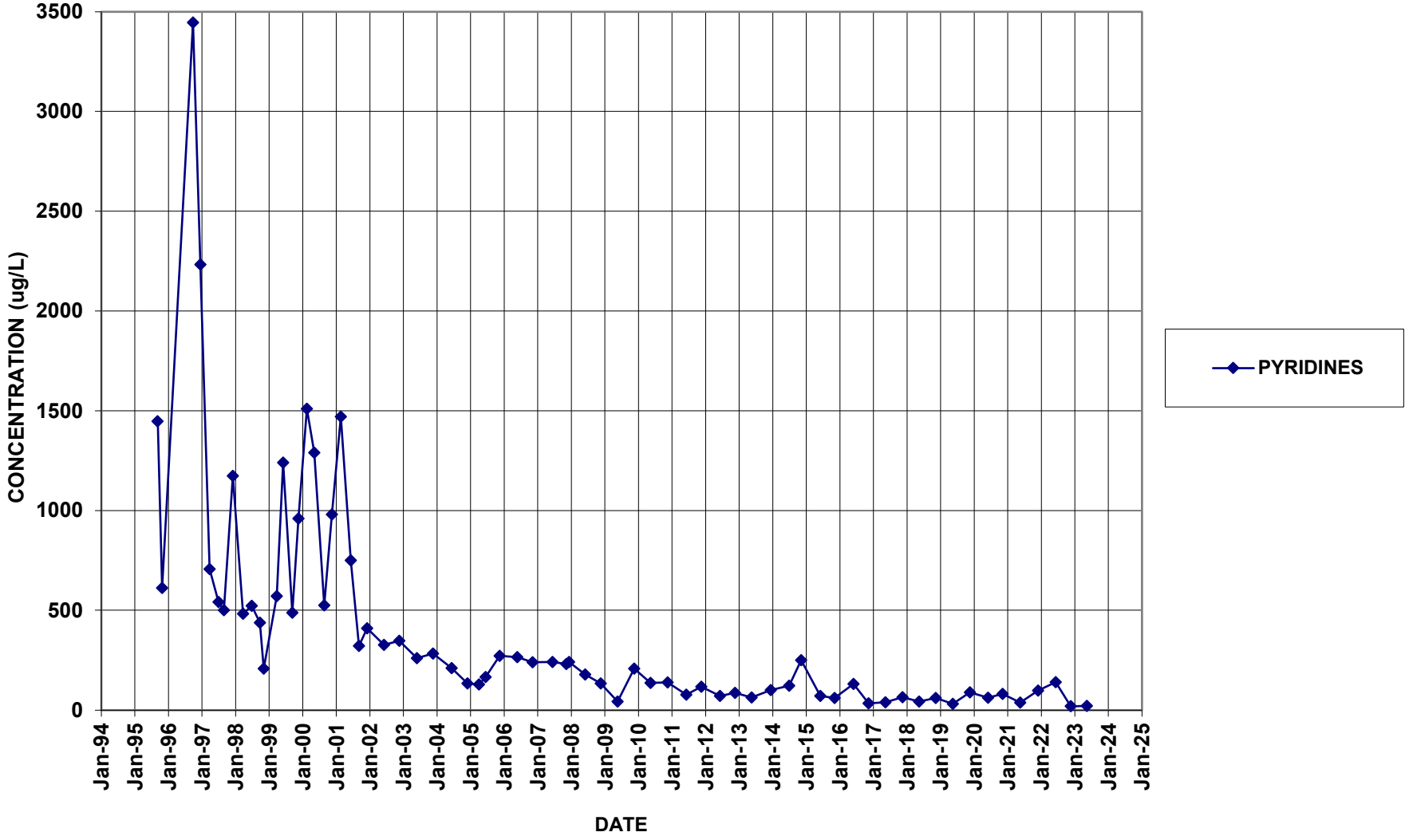

1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
CONCENTRATION (ug/L)
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Jan-24
Jan-25
DATE
PYRIDINES
VOCS

PZ-107


160000
140000
120000
100000
80000
60000
40000
20000
0
CONCENTRATION (ug/L)
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Jan-24
Jan-25
DATE
PYRIDINES
VOCS


B-16
(B-16 replaced S-3 beginning May 2010)
CONCENTRATION (ug/L)
22500
20000
17500
15000
12500
10000
7500
5000
2500
0
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Jan-24
Jan-25
DATE
PYRIDINES
VOCS

QS-4 (QUARRY SEEP)



QO-2 (QUARRY OUTFALL)