IBM Chief Sustainability Office
2300 Dulles Station West Blvd
Floors 1,2,4, & 5
Herndon, VA 20171-6133

May 29, 2025

Emily Barry
Assistant Geologist
Division of Environmental Remediation, Region 3
New York State Department of Environmental Conservation
21 South Putt Corners Road
New Paltz, New York 12561

Subject: 2024 Annual Corrective Action Status Report

Reference: Former IBM East Fishkill Corrective Measures Program
Hopewell Junction, New York
NYSDEC Part 373 Permit 3-1328-00535/0002 (formerly No. 3-1328-00025/00249)
EPA ID No. NYD000707901
New York State Site ID: 314054

Dear Ms. Barry,

In accordance with the provisions of the Module IX – General Ground Water Monitoring Conditions, Section H of the referenced permit, enclosed please find the following document for your review:

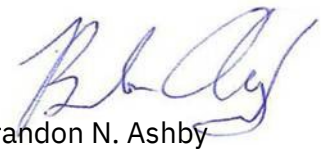
2024 Annual Corrective Action Status Report
Former IBM East Fishkill Remediation
Town of East Fishkill, Dutchess County, New York
NYSDEC Site No. 314054, EPA ID No. NYD000707901

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Please contact Linda Daubert at (720) 397-5670 if you have any questions or require further information.

Sincerely,

International Business Machines Corporation



Brandon N. Ashby
Manager, Environmental Engineering
IBM Chief Sustainability Office

Enclosure (hardcopy of report figures and plates)

ecc:	J. Kenney	NYSDOH (with enclosure)
	Steven McCague	NYSDEC Region 3 Regional Remediation Engineer
	Sarah Saucier	Director, NYSDEC Division of Environmental Remediation, Remedial Bureau C
	NYSDEC	Supervisor RCRA Permitting Section
	USEPA Region 2	Chief RCRA Programs Branch
	A. Rettmann	Semiconductor Components Industries, LLC
	P. Bell	Semiconductor Components Industries, LLC
	D. Patel	Rolling Frito-Lay Sales, LP
	C. Monheit	iPark East Fishkill LLC
	N. Brew	Walden Environmental Engineering
	E. Stoner	Groundwater Sciences
	D. Bergmann	Groundwater Sciences
	S. Murphy	Sanborn Head

2024 Annual Corrective Action Status Report

Former IBM East Fishkill Remediation
Town of East Fishkill, Dutchess County, New York
NYSDEC Site No. 314054, EPA ID No. NYD000707901

Prepared for:

IBM Chief Sustainability Office
2300 Dulles Station West Blvd.
Herndon, Virginia 20171

May 29, 2025

Prepared by:

Groundwater Sciences Corporation, a Verdantas Company
and Groundwater Sciences, P.C.
560 Route 52, Suite 202
Beacon, New York 12508

Professional Geologist Certification
2024 Annual Corrective Action Status Report

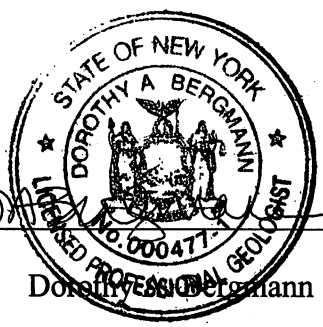
Former IBM East Fishkill Remediation
Town of East Fishkill, Dutchess County, New York
NYSDEC Site No. 314054, EPA ID No. NYD000707901

May 29, 2025

As the person with primary responsibility for the performance of the geological services and activities associated with the captioned report, I certify that I have reviewed the document titled *"2024 Annual Corrective Action Status Report, Former IBM East Fishkill Remediation, Town of East Fishkill, Dutchess County, New York, NYSDEC Site No. 314054, EPA ID No. NYD000707901"*. This report is dated May 29, 2025, and was prepared for IBM Corporation by Groundwater Sciences, P.C. (GSPC) and Groundwater Sciences Corporation (GSC), a Verdantas Company.

As a professional geologist licensed in the State of New York, I certify that the associated geological services and this report have been prepared under my direct supervision. To the best of my knowledge, all such information contained in this report is complete and accurate.

This report bears the seal of a professional geologist; no alterations may be made to the information contained in this report unless made in accordance with Title 8, Article 145, Section 7209 of New York State Education Law.



Signature: _____ Date: May 29, 2025

Name: Dorothy A. Bergmann

License No: 00477

State: New York

Table of Contents

1 INTRODUCTION 1
1.1 Purpose 1
1.2 Scope 1
2 BACKGROUND 3
2.1 Site Location and Description 3
2.2 Site Ownership and Operations History 3
2.3 Regional Hydrogeologic Setting 5
2.4 Corrective Action History 6
2.5 Final Corrective Measures 9
2.5.1 Interim Site Management Plan 10
2.5.1.1 Area A: B308, B309 & B310 Vicinity (OU5) 11
2.5.1.2 Core Area: Portions of B322 AOC (OU7) and B330 AOC (OU8) 12
2.5.1.3 Former Landfill: Area C (OU6) 13
2.5.1.4 Perimeter Area 14
2.5.2 Groundwater Monitoring Plan 15
2.5.3 Groundwater Collection and Treatment Systems 16
2.5.3.1 PW-1 GTF 17
2.5.3.2 PW-2 GTF 18
2.5.3.3 PW-25 GTF 19
2.5.3.4 B384 GTF 20
3 CORRECTIVE MEASURES IN 2024 22
3.1 Groundwater Collection Operations 22
3.2 Groundwater Treatment Facility Operations 23
3.2.1 Treatment System Sampling 24
3.2.2 Contaminant Removal 24
3.2.3 Operational Efficiency 25
3.2.4 Treatment Efficiency 26
3.2.5 System Maintenance 26
3.3 Groundwater Monitoring Program Activities 27
3.3.1 Groundwater Elevation Measurements 28
3.3.2 Monitoring Well Inspections 28
3.3.3 Groundwater Sampling 29
3.3.3.1 Reporting of Groundwater Chemistry Data 29
3.3.3.2 Quality Assurance/Quality Control Samples 30
3.4 Vapor Intrusion Assessment/Mitigation 31
3.5 Other Relevant Activities in 2024 and Plans for 2025 32
3.5.1 GW-634 Pilot Operations Test 32
3.5.2 B335 RFI/CMS 32

4 HYDROGEOLOGY 35
4.1 Soil Groundwater Elevations 35
4.1.1 Area A (OU5) 36
4.1.2 B/322 AOC (OU7) 37
4.1.3 Area C Landfill (OU6) 37
4.1.4 B/330 AOC (OU8) 38
4.1.5 Gradients and Groundwater Flow Velocities 38
4.2 Bedrock Groundwater Elevations 38
4.2.1 Potentiometric Head Distribution 39
4.2.2 Gradients and Structural Controls on Groundwater Flow 39
4.2.3 Hydraulic Containment 41
5 GROUNDWATER CHEMISTRY 43
5.1 Groundwater Chemistry – VOCs 43
5.1.1 VOC Plume Maps 43
5.1.1.1 VOC Plumes in Soil and Soil/Shallow Bedrock Groundwater 44
5.1.1.2 VOC Plumes in Bedrock Groundwater 45
5.1.2 VOC Concentration versus Time Graphs 47
5.1.2.1 Contaminant Reduction Monitoring Wells 48
5.1.2.2 Point-of-Compliance Wells 48
5.1.3 Changes in Water Quality at Corrective Action Monitoring Wells 49
5.2 Groundwater Chemistry – PFAS and 1,4-Dioxane 50
5.3 Groundwater Chemistry – Inorganics 50
6 EVALUATION OF EFFECTIVENESS AND PROGRESS 52

Tables

Table 3-1 2024 Pumping Volumes by Well/Remediation Area
Table 3-2 2024 Contaminant Mass Removal (lbs) By Well/Remediation Area
Table 3-3 Operational Efficiency of Groundwater Collection and Treatment Systems in 2024

Figures

Figure 2-1 Site Location Map
Figure 2-2 Surface Water Location Map
Figure 2-3 Areas of Concern Location Map
Figure 2-4 Groundwater Treatment Facility (GTF) Location Map
Figure 2-5 PW-1 Groundwater Treatment Facility Process Flow Diagram
Figure 2-6 PW-2 Groundwater Treatment Facility Process Flow Diagram
Figure 2-7 PW-25 Groundwater Treatment Facility Process Flow Diagram
Figure 2-8 B384 Groundwater Treatment Facility Process Flow Diagram

Figure 3-1 Pilot Extraction Well GW-634 Location Map
Figure 3-2 MLI-12 Location Map
Figure 5-1 Graph of VOC Concentration versus Time, Well GW-010
Figure 5-2 Graph of VOC Concentration versus Time, Well GW-016
Figure 5-3 Graph of VOC Concentration versus Time, Wells GW-032/032A/032B
Figure 5-4 Graph of VOC Concentration versus Time, Well GW-103
Figure 5-5 Graph of VOC Concentration versus Time, Well GW-104
Figure 5-6 Graph of VOC Concentration versus Time, Well GW-105
Figure 5-7 Graph of VOC Concentration versus Time, Well GW-612
Figure 5-8 Graph of VOC Concentration versus Time, Well GW-714
Figure 5-9 Graph of VOC Concentration versus Time, Well GW-716
Figure 5-10 Graph of VOC Concentration versus Time, Wells GW-863/628
Figure 5-11 Graph of VOC Concentration versus Time, Well GW-943
Figure 5-12 Graph of VOC Concentration versus Time, Well PW-1
Figure 5-13 Graph of VOC Concentration versus Time, Wells PW-2/PW-2R
Figure 5-14 Graph of VOC Concentration versus Time, Well PW-25
Figure 5-15 Graph of VOC Concentration versus Time, B384 Sump
Figure 5-16 Graph of VOC Concentration versus Time, Well GW-064
Figure 5-17 Graph of VOC Concentration versus Time, Well GW-065
Figure 5-18 Graph of VOC Concentration versus Time, Well GW-066
Figure 5-19 Graph of VOC Concentration versus Time, Well GW-067
Figure 5-20 Graph of VOC Concentration versus Time, Well GW-987
Figure 5-21 Graph of VOC Concentration versus Time, Well GW-990

Plates

Plate 2-1 GlobalFoundries Site Subdivision Map, 2017
Plate 2-2 Site Layout Map, Site Lots, Condominium & Condominium Units
Plate 2-3 Site Use Areas Location Map
Plate 2-4 Groundwater Monitoring Plan - Well Location Map
Plate 2-5 Well Location Map – All Existing Groundwater Monitoring Wells
Plate 4-1 Elevation Contour Map, Soil Groundwater Table (June 25-28, 2024)
Plate 4-2 Elevation Contour Map, Bedrock Potentiometric Surface (June 25-28, 2024)
Plate 5-1 Isoconcentration Contour Map, Soil PCE, April-June, 2024
Plate 5-2 Isoconcentration Contour Map, Soil TCE, April-June, 2024
Plate 5-3 Isoconcentration Contour Map, Soil cis-1,2-DCE, April-June, 2024
Plate 5-4 Isoconcentration Contour Map, Soil VC, April-June, 2024
Plate 5-5 Isoconcentration Contour Map, Soil Freon® TF, April-June, 2024
Plate 5-6 Isoconcentration Contour Map, Bedrock PCE, April-June, 2024

Plate 5-7 Isoconcentration Contour Map, Bedrock TCE, April-June, 2024
Plate 5-8 Isoconcentration Contour Map, Bedrock cis-1,2-DCE, April-June, 2024
Plate 5-9 Isoconcentration Contour Map, Bedrock VC, April-June, 2024
Plate 5-10 Isoconcentration Contour Map, Bedrock Freon® TF, April-June, 2024
Plate 5-11 Contaminant Reduction Monitoring (CRM) and Point of Compliance (POC) Well Location Map
Plate 5-12 Fourth Quarter 2024 PFAS and 1,4-Dioxane Sampling Locations

Appendices

Appendix A Limitations

Appendix B Groundwater Monitoring Plan - Well Specifications and Lists
Table B-1: Hydraulic Effectiveness Monitoring Wells
Table B-2: Well Specifications, Corrective Action Performance Monitoring Network
Table B-3: Sampling Schedule, Corrective Action Performance Monitoring Network

Appendix C Groundwater Collection and Mass Removal Data
Table C-1: Pumping Volumes for Groundwater Extraction Wells/Sumps, 2024
Table C-2: Mass Removal Data for Groundwater Extraction Wells/Sumps, 2024

Appendix D Quarterly Groundwater Elevation Data, 2024

Appendix E 2024 Sampling Field Log Database (on CD): SAMP24a.xlsx
2024 Field Parameters Database (on CD): FIELD24a.xlsx
Table of Meteorological Data (January – December 2024)

Appendix F Groundwater Analytical Data (Organics): January 1, 2024 to December 31, 2024
Supplemental Groundwater Analytical Data (Organics): January 1, 2024 to December 31, 2024
Groundwater Analytical Data (Inorganics): January 1, 2024 to December 31, 2024
Table F-1: Groundwater 1,4-Dioxane Data Summary, 2024
Table F-2: Groundwater PFAS Data Summary, 2024

Appendix G Extraction Well Analytical Data: January 1, 2024 to December 31, 2024
Table G-1: Groundwater Treatment Facility PFAS Data Summary, 2024

Appendix H Quality Assurance/Quality Control Analytical Data: January 1, 2024 to December 31, 2024
Table H-1: Quality Assurance/Quality Control PFAS Data Summary, 2024

Appendix I Groundwater Treatment Analytical Data (Organics): January 1, 2024 to December 31, 2024
Groundwater Treatment Analytical Data (Inorganics): January 1, 2024 to December 31, 2024

Appendix J Groundwater Statistics
Maximum Groundwater Concentrations in GMP Wells during 2024
Statistical Trends in Contaminant Reduction Monitoring Wells
Evaluations of Statistical Trends in Point-of-Compliance Wells
Statistical Evaluation of Changes in Water Quality at Corrective Action Monitoring Wells using the Mann-Whitney Test

Appendix K Vapor Intrusion Assessment and Mitigation 2024 Annual Report

1 INTRODUCTION

This 2024 Annual Corrective Action Status Report has been prepared by Groundwater Sciences Corporation, a Verdantas Company, and Groundwater Sciences, P.C. on behalf of the IBM Chief Sustainability Office (IBM) for the Former IBM East Fishkill Remediation site (Site) located in the Town of East Fishkill, Dutchess County, New York. Our work and this report are subject to the limitations in **Appendix A**.

1.1 Purpose

This 2024 Annual Corrective Action Status report summarizes Corrective Action activities performed at the Site in 2024 which were performed in accordance with the Site's 6NYCRR Part 373 Permit[1], administered by the New York State Department of Environmental Conservation (NYSDEC). The report includes a description of the groundwater corrective measures implemented in 2024, a review of data collected in 2024 in accordance with the Site's Groundwater Monitoring Plan (GMP), and a summary of other Corrective Action activities performed at the Site in 2024. This report is being submitted to NYSDEC to comply with the requirements of the Part 373 Permit for Areas of Concern (AOCs) and Solid Waste Management Units (SWMUs) where groundwater is being remediated and monitored.

1.2 Scope

This report addresses items specified in Module IX, Section H of the 2011 Part 373 Permit and in Section 3.2 of the 2015 GMP. Each Permit and GMP requirement is cited below and is cross-referenced to the report sections, appendices, plates, and/or figures where the requirement is addressed:

1. Summaries of the analytical laboratory results. (Sections 3 and 5; Appendices F, G, H, I)
2. Review of the Quality Assurance/Quality Control (QA/QC) results. (Section 3.3.3.2; Appendix H)
3. Summaries of the monitoring and meteorological data, including the sampling field data sheets. (Section 3.3.3.1; Appendix E)

[1] York State Department of Environmental Conservation, November 2, 2011, *6NYCRR Part 373 Hazardous Waste Management Permit, IBM Corporation East Fishkill Facility.*

4. Summaries of the quarterly groundwater elevation and survey data in tabular form, and potentiometric contour maps delineating the zone of capture and the rate and direction of groundwater flow. (Section 4; Appendix D; Plates 4-1 and 4-2)
5. Evaluation of contaminant migration, including maps for "Key Compounds" listed in Table 3-1 of the GMP. Isoconcentration maps shall be prepared annually showing the approximate limit of each plume. This limit is defined as the concentration equal to 5 micrograms per liter (µg/l) for four of the key compounds (tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, and Freon® TF) or 2 µg/l for the fifth key compound (vinyl chloride). Include a statement regarding future contaminant movement. (Section 5.1.1; Plates 5-1 through 5-10)
6. Trend line plots for the Contaminant Reduction Monitoring (CRM) wells. (Section 5.1.2.1; Figures 5-1 through 5-15; Statistical Trends Appendix J)
7. Determination of statistically significant increases in VOC concentrations at Point-of-Compliance (POC) wells. (Section 5.1.2.2; Figures 5-16 through 5-21; Appendix J)
8. Determination of statistically significant changes in water quality at Corrective Action Monitoring (CAM) wells. (Section 5.1.3; Appendix J)
9. Extraction or monitoring well maintenance activities planned or performed. (Sections 3.2.5 and 3.3)
10. Plans for installation of additional wells. (Section 3.5)
11. Summaries of well installation activities. (Section 3.5)
12. Pumping well rates and volumes. (Section 3.1; Table 3-1, Appendix C)
13. Contaminant recovery levels. (Section 3.2.2; Table 3-2, Appendix C)
14. Treatment efficiency data. (Section 3.2.4; Appendix I)
15. Any problems or other activities planned. (Section 3.5)
16. An evaluation of the progress of the corrective action monitoring program. (Section 6)

The above items are addressed in this report for the period from January 1, 2024 through December 31, 2024. The chemistry and water level data from the most comprehensive monitoring rounds completed in April through June were used to construct the maps in this report. Annual Poly- and Per-fluoroalkyl Substances (PFAS) and 1,4-dioxane sampling was completed in the fourth quarter of 2024.

2 BACKGROUND

This section provides an overview of pertinent Site background information, including: the Site location and description; the Site ownership and operations history; the Site's regional hydrogeologic setting; the Site's Corrective Action history; and a summary of the final Corrective Measures being implemented at the Site.

2.1 Site Location and Description

The Former IBM East Fishkill Remediation site (Site) (formerly referred to as the Former IBM East Fishkill Facility) is located in the Town of East Fishkill, Dutchess County, New York. The location of the Site relative to regional ground surface topography and drainage features is shown on the Site Location Map provided as **Figure 2-1**. The Site is bounded on the north by New York State Route 52, on the east by iPark Boulevard (also referred to as Lime Kiln Road or County Road 27), on the south by Interstate 84 (I-84) and the I-84 interchange at iPark Boulevard, and on the west by high voltage power lines owned by Consolidated Edison Company of New York and natural gas lines owned by Central Hudson Gas & Electric Corporation.

The Site is approximately 460 acres in area and is composed of 22 office, manufacturing, or warehousing buildings, with several associated support buildings, structures, and parking lots. The Site is currently zoned for industrial use with commercial use allowed in a designated area in the southeastern portion of the Site. Zoning of land surrounding the Site allows for residential or commercial development. Residential properties are located east of the Site, along Shenandoah Road, and north and northwest of the Site, off Route 52. Commercial properties are also located along Route 52 northwest of the Site.

2.2 Site Ownership and Operations History

Development of the Site by IBM began in 1963 with the construction of office and manufacturing buildings for research, development and manufacturing of semiconductors, semiconductor packaging, and electronic computing equipment. Beginning in 1993, portions of the Site were leased to independent industrial entities. In December 1998, there was a nominal title transfer of the Site from IBM to the Empire State Development Corporation. In December 2012, there was a nominal title transfer of the Site from the Empire State Development Corporation back to IBM. On July 1, 2015, the Site was acquired by GLOBALFOUNDRIES U.S. 2 LLC (GF). In 2017, GF subdivided

the Site into eight lots (designated as Lot numbers 1 through 8) consisting of a total of approximately 431.1 acres, as shown on **Plate 2-1.** In addition, there are approximately 27.5 acres of roadways within the Site boundary.

On September 1, 2017 i.Park East Fishkill LLC and i.Park East Fishkill I LLC (collectively referred to as iPark) purchased Lots 2, 3, 4, 6, 7, and 8. As of August 31, 2017, and as recorded with the Dutchess County Clerk on November 4, 2020, i.Park East Fishkill I LLC established a Plan of Condominium Ownership for Lots 2 and 3 with the name of The Hopewell Condominium I. The Plan for Hopewell Condominium I established eight units, each with an associated tax parcel number (not shown). Six Hopewell Condominium I units remain under iPark ownership and are shown in purple on **Plate 2-2.** One of the six units, Unit 7GL is a ground lease between Onsemi and i.Park East Fishkill I LLC. The remaining two Hopewell Condominium I units were purchased in December 2021 by Rolling Frito-Lay Sales, LP as discussed below.

As of March 29, 2018, and as recorded with the Dutchess County Clerk on November 18, 2020, i.Park East Fishkill LLC established a Plan of Condominium Ownership for Lot 7 with the name of The Hopewell Condominium II. The Plan for Hopewell Condominium II established nine units or subunits as shown in blue on **Plate 2-2**, each with an associated tax parcel number (not shown).

On November 16, 2021, the Town of East Fishkill Planning Board granted a subdivision of portions of Lots 2 and 3 to create a new ninth Lot consisting of approximately 28.4 acres of land as shown on **Plate 2-2**. The newly established Lot 9 was recorded with the Dutchess County Clerk on December 13, 2021. Rolling Frito-Lay Sales, LP purchased Lot 9 on December 17, 2021 as recorded by the Dutchess County Clerk on February 10, 2022. At the time of the establishment of Lot 9, the remainder of former Lots 2 and 3 were designated as Lot 2A and Lot 3A, respectively (See **Plate 2-2)**.

On January 1, 2023 Semiconductor Components Industries, LLC (Onsemi) acquired the GF East Fishkill Facility and became the owner of Lots 1 and 5.

iPark has leased portions of the Site to industrial and commercial entities. Onsemi, i.Park East Fishkill LLC, i.Park East Fishkill I LLC, and Rolling Frito-Lay Sales, LP are listed as facility owners under the current NYSDEC Part 373 Permit[2]. IBM is considered to be an operator under the current

[2] York State Department of Environmental Conservation, July 1, 2015, *Facility Permit Transfer IBM Corporation to GLOBALFOUNDRIES U.S. 2LLC, East Fishkill Facility.*

NYSDEC Part 373 Permit, responsible for operating, maintaining and monitoring elements of Groundwater Corrective Action, including groundwater extraction and treatment systems and certain vapor intrusion mitigation systems.

A Consent Order[3] was negotiated with NYSDEC and the Part 373 co-permittees (IBM, iPark, and at the time GF) to allow commercial use within a designated area of the parcels owned by iPark. The area designated for commercial use is shown on **Plate 2-3** as the "Designated Area". As part of the Consent Order, iPark is responsible for vapor intrusion (VI) assessments and mitigation in the iPark commercial spaces, including the installation of sub-slab depressurization systems for VI mitigation purposes in each commercial space as well as any iPark new construction on the Site regardless of building use and location.

2.3 Regional Hydrogeologic Setting

According to regional surficial geologic mapping for the lower Hudson River Valley[4], the Site is located in an area of northeast and north-northeast trending ridges of glacial till and/or bedrock which are drained by valleys underlain by coarse-grained proglacial (near ice) outwash or kame sand and gravel deposits, glaciolacustrine silt and clay, and post-glacial alluvium. Bedrock in the area of the Site is mapped as the Cambrian to Lower Ordovician carbonate platform rocks of the Wappinger Group[5].

As shown on the Surface Water Location Map provided as **Figure 2-2**, surface water features within the Site include wetland areas within the southeastern, southern and western portions of the Site that are drained by Gildersleeve Brook and an unnamed tributary to Gildersleeve Brook referred to as the Central Drainage. The Central Drainage originates east of the Site and flows west through the central portion of the Site before discharging into Gildersleeve Brook. As shown on **Figure 2-2**, a large segment of the Central Drainage is located within an underground storm sewer pipeline present beneath Building 334 (B334) and the parking lot east of B334. Gildersleeve Brook flows in a

[3] State of New York Department of Environmental Conservation (NYSDEC), *Order on Consent, Case No. CO 1-20181004 EPA ID No. NYD000707901*, executed by NYSDEC on May 1, 2020.

[4] Cadwell, D.H., ed., 1989, *Surficial Geologic Map of New York, Lower Hudson Sheet*, New York Geological Survey, Map and Chart Series #40.

[5] Fisher, D.W., Isachsen, Y.W., and Rickard, L.V., eds., 1970, *Bedrock Geologic Map of New York, Lower Hudson Sheet*, New York Geological Survey, Map and Chart Series #15.

northwest direction near the western Site boundary and continues to flow outside the limits of the Site in a north to northwest direction before discharging into Fishkill Creek.

2.4 Corrective Action History

A groundwater protection program was initiated by IBM at the Site in 1978. The initial activities included installation and sampling of groundwater monitoring wells. Upon the discovery of the presence of chemicals in groundwater at the Site, IBM commenced a voluntary investigation of the Site to identify potential locations of chemical releases (sources) and to determine the nature and extent of the chemicals in groundwater. IBM also took voluntary remedial actions to remove sources, extract and treat the contaminated groundwater, and monitor the groundwater within and outside the boundaries of the Site[6].

On January 23, 1981, NYSDEC placed the Site on the registry of Inactive Hazardous Waste Disposal Sites. Pursuant to Section 27-1313 of the Environmental Conservation Law, IBM signed an Order-on-Consent in April 1981 (1981 Order) with NYSDEC. The 1981 Order stipulated that IBM would:

- Contain, collect and treat contaminated groundwater;
- Implement remedial action programs; and
- Establish a groundwater monitoring program.

In June 1986, three provisions were added to the 1981 Order to supplement and clarify the obligations of IBM[7]. These provisions further stipulated that NYSDEC retains the right to obtain for the purpose of comparative analysis split samples, IBM would submit periodic monitoring reports, and IBM would notify NYSDEC if there was a significant change in water quality at the perimeter of the Site or in IBM's extraction wells within the Site.

Subsequent to the 1981 Order, IBM developed a program to monitor, evaluate and remediate contaminated groundwater. Beginning in early 1992, under the authority of the Resource Conservation and Recovery Act (RCRA) Corrective Action Program, NYSDEC reviewed documents submitted by IBM to fulfill RCRA Facility Investigation reporting requirements for contaminated

[6] New York State Department of Environmental Conservation, April 27, 1981, *IBM East Fishkill Order on Consent, Case #3-0556; Article 27 ECL.*

[7] New York State Department of Environmental Conservation, June 19, 1986, *IBM East Fishkill Order on Consent, Supplement and Clarification, Case #3-0556; Article 27 ECL.*

groundwater in five areas of the Property, designated as Area A, Area B, Area D, Deep Bedrock, and the Southeast Quadrant. In a letter dated March 10, 1993[8], NYSDEC approved the following four groundwater collection and treatment systems as RCRA Interim Corrective Measures:

- The Area A Groundwater Collection and Treatment System
- The Area B Groundwater Collection and Treatment System
- The Area D Groundwater Collection and Treatment System
- The Central Carbon System (treating groundwater withdrawals from deep bedrock extraction wells)

In September 1995, NYSDEC issued IBM a 6NYCRR Part 373 Hazardous Waste Management Permit[9], including Modules III and IX which addressed Corrective Action. The permit indicated that IBM's obligations under the 1981 Order (as amended) with NYSDEC were terminated and superseded by the 1995 Part 373 Permit.

In November 2011, the 6NYCRR Part 373 Permit[10] was renewed. The 2011 Part 373 Permit addresses: (1) the storage and management of hazardous waste in containers; (2) the operation and maintenance of the Interim Corrective Measures (ICMs) for contaminated groundwater; (3) the monitoring and maintenance of the groundwater monitoring well network used to assess the performance of the interim corrective measures; and (4) financial assurance for closure and corrective action.

A Final Statement of Basis (FSB), dated September 2013 with an effective date of April 16, 2014, was developed by NYSDEC in consultation with the New York State Department of Health (NYSDOH) under the authority of RCRA. The corrective action remedial program described in the FSB was incorporated into the 2011 Part 373 Permit (Modules II and IX). Module II was modified to incorporate the selected groundwater remedy. The FSB selected the final remedy for the Site as "No Further Action" with continued operation of the groundwater extraction and treatment systems that were installed as Interim Corrective Measures, the implementation of institutional controls (ICs) and engineering controls (ECs), and a Site Management Plan. The FSB also constitutes the "Record

[8] New York State Department of Environmental Conservation, March 10, 1993, Letter from S. Kaminski to W. Rudloff of IBM, *re: Groundwater Investigation/Treatment Documents*.

[9] New York State Department of Environmental Conservation, September 29, 1995, *6 NYCRR Part 373 Hazardous Waste Management Permit, IBM East Fishkill Facility.*

[10] New York State Department of Environmental Conservation, November 2, 2011, *6 NYCRR Part 373 Hazardous Waste Management Permit, IBM East Fishkill Facility.*

of Decision" required for these Areas of Concern or AOCs under New York State's Inactive Hazardous Waste Disposal Site program regulations (6NYCRR Part 375).

As described in the FSB, the Site includes eight AOCs based on known historic release areas that resulted in the presence of hazardous substances in soil, bedrock, and/or groundwater. Each of these AOCs have been designated as Operable Units (OUs) as listed below:

- Bedrock Remediation Area (OU2);
- Area B – Fire Brigade Training #1, Leachfield and Silica Slurry Lagoon (OU3);
- Area D – Fire Brigade Training #2 (OU4);
- Area A – Building 308, Building 309 and Building 310 Vicinity (OU5);
- Area C – Landfill (OU6);
- Building 322 AOC (OU7);
- Building 330 AOC (OU8); and
- Southeast Quadrant (SEQ) (OU9).

The general locations of OUs 3 through 9 are labeled on **Figure 2-3.** There is no OU1 and the Bedrock Remediation Area (OU2) corresponds to the portions of the bedrock beneath the above-listed OUs where hazardous substances exceed applicable Part 703 New York State Groundwater Quality Standards (NYSGQS). These areas primarily consist of bedrock beneath OUs 5, 6, 7, and 8. The OUs along with Site GMP monitoring wells are shown on **Plate 2-4**. All existing Site monitoring wells, including the Site GMP monitoring wells, are shown on **Plate 2-5**. In addition to the Site, IBM has maintained the right to use the groundwater monitoring wells on the former IBM West Complex property, located west of the Site, and the former IBM Recreation Center property, located east of the Site, and has continued monitoring and maintenance of these off-Site wells as part of the Site's GMP. There are no AOCs at the former IBM West Complex property or at the former IBM Recreation Center property.

On May 5, 2021, IBM submitted to NYSDEC a 6NYCRR Part 373 Corrective Action Permit Renewal Application. On January 4, 2022, NYSDEC responded to all parties with comments to the

Application[11]. On February 25, 2022, IBM requested a 60-day extension for IBM to respond to NYSDEC comments[12] specific to IBM, which was granted by NYSDEC on March 3, 2022[13]. NYSDEC subsequently extended the response period by an additional 60 days[14]. On June 8, 2022[15], IBM responded by providing a detailed breakdown of IBM's projected 30-year costs of IBM's projected Corrective Action activities and the basis used for developing each itemized cost projection.

In a letter dated April 5, 2024[16], NYSDEC requested that the Permit Renewal Application be updated to reflect the changes in Site ownership, corrective action activities, institutional and engineering controls, and financial assurance that have occurred since its original submittal on May 5, 2021. In a letter to NYSDEC dated April 24, 2024[17], IBM agreed to coordinate with the other applicants to update the Part 373 Permit Renewal Application to incorporate the changes requested by NYSDEC and submit a modified Part 373 Permit Renewal Application by July 15, 2024. On June 24, 2024[18] NYSDEC extended the response period up to 32 days. On August 16, 2024, IBM submitted to NYSDEC an updated 6NYCRR Part 373 Corrective Action Permit Renewal Application.

2.5 Final Corrective Measures

As mentioned previously, the FSB selected the final remedy for the Site as "No Further Action" with continued operation of the groundwater collection and treatment systems that were installed as Interim Corrective Measures, the implementation of institutional controls (ICs) and engineering

[11] New York State Department of Environmental Conservation, January 4, 2022, *Part 373 Permit Renewal Application and Request for Major Permit Modification, Former IBM East Fishkill Facility ("Facility").*

[12] IBM to New York State Department of Environmental Conservation, February 25, 2022, *Part 373 Permit Renewal Application and Request for Major Permit Modification, Former IBM East Fishkill Facility.*

[13] Lynn Winterberger, New York State Department of Environmental Conservation to Linda Daubert, IBM and others via e-mail, March 3, 2022, *IBM East Fishkill iPark Mod*.

[14] Lynn Winterberger, New York State Department of Environmental Conservation to Linda Daubert, IBM via e-mail, April 29, 2022, *IBM East Fishkill iPark Mod*.

[15] IBM to New York State Department of Environmental Conservation, June 8, 2022, *RCRA Financial Assurance Cost Estimate Breakdown, Former IBM East Fishkill Facility*.

[16] New York State Department of Environmental Conservation to I.Park East Fishkill LLC and I.Park East Fishkill I LLC, IBM, Semiconductor Components Industries LLC, and Rolling Frito-Lay Sales, LP, *6 NYCRR Part 373 Permit Renewal Application, Technical Notice of Incomplete Application, Former IBM East Fishkill Facility, EPA ID No. NYD000707901 / DER Site No. 315054, DEC Permit No.: 3-1328-00535/00002*.

[17] Linda Daubert, IBM to Lynn Winterberger, New York State Department of Environmental Conservation, April 4, 2024, *6 NYCRR Part 373 Permit, May 5, 2021, Permit Renewal Application*.

[18] Lynn Winterberger, New York State Department of Environmental Conservation to Linda Daubert, IBM, *6 NYCRR Part 373 Permit.*

controls (ECs), and a Site Management Plan. A description of the ICs and ECs and the means of implementing those controls are provided in the Interim Site Management Plan[19] (ISMP) developed for the Site in 2017. The ISMP was revised in 2021[20] to update ownership and property boundaries and to include new remedial system installations and operators. The ISMP revised in 2021 is referenced in the remainder of this document.

The NYSDEC 6 NYCRR Part 373 permit (Modules II and IX) provides detailed descriptions of the groundwater monitoring program requirements applicable to this corrective measures program. The goal of the groundwater collection and treatment program is to restore the groundwater at the Site to NYSGQS. The treatment units will continue to operate until the monitoring data support a modification to the corrective measures or cessation of activities. A summary of the ISMP, a description of the Site-wide groundwater monitoring plan, and a description of the groundwater collection and treatment systems that collectively serve as the final corrective measures for the Site are provided in the following subsections.

2.5.1 Interim Site Management Plan

The ISMP was developed at the request of NYSDEC and was a condition of the FSB for the Site. The revised 2021 ISMP was prepared by Groundwater Sciences Corporation and Sanborn Head Engineering P.C. (SHPC), on behalf of IBM; and Walden Environmental Engineering, PLLC on behalf of iPark East Fishkill, LLC, iPark East Fishkill I, LLC; iPark East Fishkill III, LLC, iPark East Fishkill 84 LLC iPark East Fishkill B338 LLC, in accordance with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated May 2010, and the guidelines provided by NYSDEC.

The ISMP requires adherence to intrusive activity requirements in applicable areas of the Site, continued implementation of the pumping and treating of groundwater and the operation and maintenance of any remedial measures implemented after the approval of the ISMP. Elements of the ISMP include: an institutional and engineering control plan, a monitoring and sampling plan, an

[19] Interim Site Management Plan, August 2017, Hudson Valley Research Park (Former IBM East Fishkill Facility), Town of East Fishkill, Dutchess County, New York, NYSDEC Site Number: 314054, EPA Site Identification Number: NYD000707901.

[20] Interim Site Management Plan, May 2021, Former IBM East Fishkill Facility, Town of East Fishkill, Dutchess County, New York, NYSDEC Site Number: 314054, EPA Site Identification Number: NYD000707901.

operation and maintenance plan, requirements for periodic assessments/evaluations, requirements for reporting, and an intrusive activities work plan. The ISMP was prepared to manage remaining contamination at the Site until such time that additional remedial investigations required by the Part 373 Permit are completed and the final comprehensive Site Management Plan has been prepared. The requirements of the ISMP or final comprehensive SMP will remain in effect until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36.

Concentrations of constituents in unsaturated (i.e., vadose zone) soils in certain areas of the Site are known to exceed the applicable NYSDEC Part 375 soil cleanup objectives (SCOs) for industrial use. Concentrations of constituents above SCOs for industrial use have not been identified in unsaturated soils outside of these areas. The Declaration of Restrictions, Easements and Covenants (*Declaration*)[21], presented in Appendix E of the revised 2021 ISMP divides the Site into four Use Areas on which the structure of the ISMP is based: Area A, the Core Area, the Former Landfill Area with the remainder of the property inside the Site boundary as the Perimeter Area. The four Use Areas are depicted on **Plate 2-3.** Brief listings of the ICs and ECs implemented in each of the four Site Use Areas are provided in the following subsections.

2.5.1.1 Area A: B308, B309 & B310 Vicinity (OU5)

Institutional Controls

1. Consistent with Section 6.a.v (Obligations and Prohibitions) of the *Declaration*, Area A may only be used for industrial use provided that the applicable provisions of the ISMP are employed.
2. The pumping or extraction of groundwater underlying the Site other than in connection with the Remedial Action is prohibited. Under no circumstances is the use of groundwater for potable purposes allowed.
3. Compliance with the Environmental Easement and the ISMP by the Site Owner and the Site Owner's successors and assigns.
4. All Engineering Controls must be operated, maintained and inspected at a frequency and in a manner specified in the ISMP.

21 Declaration of Restrictions, Easements and Covenants, June 17, 2015 by INTERNATIONAL BUSINESS MACHINES CORPORATION for Section 6.356, Block 4, Lot 980140 (Dutchess County Tax Grid #6356-04-980140) and Section 4.456, Block 3, Lot 116374 (Dutchess County Tax Grid #05-6456-03-116374-000), Recorded by the Dutchess County Clerk on July 9, 2015 as Document # 02 2015 4059.

5. Performance of groundwater, soil vapor and other environmental or public health monitoring as defined in the ISMP.
6. Implementation and documentation of the soil/fill management procedures provided in the Intrusive Activities Work Plan (IAWP) in the ISMP.
7. Provisions for characterizing soils that may be exposed by activities on the Site that will disturb remaining contaminated material must be conducted in accordance with the IAWP.
8. As specified in the *Declaration*, any and all new buildings within Area A must be constructed with vapor intrusion (VI) mitigation system(s).
9. Reporting of the data and information pertinent to Site Management of Area A at the frequency and in a manner defined in the ISMP.

Engineering Controls

1. Soil Cover system comprised of a minimum of 36 inches of soil that meets the Part 375 SCO for industrial use, asphalt pavement, concrete-covered sidewalks, and concrete building slabs.
2. Groundwater Extraction and Treatment including:
    a. Components of the Bedrock Remediation System (Production Well 2R and the PW-2 Groundwater Treatment Facility (GTF)).
    b. Area A Groundwater Extraction and Treatment System (B384 Sump) (also called the B384 GTF).
3. Sub-slab Vapor Extraction Systems (B310 and B310/B308 Linkway).
4. Soil Vapor Extraction System (seasonal operation in warm weather months).

2.5.1.2 Core Area: Portions of B322 AOC (OU7) and B330 AOC (OU8)

Institutional Controls

1. Consistent with Section 6.a.v (Obligations and Prohibitions) of the *Declaration*, the Core Area of the Site may only be used for industrial use provided that the applicable provisions of the ISMP are employed. The *Designated Area* of the Site has been approved for commercial use by NYSDEC. The *Designated Area* includes select buildings (or portion of a building) and associated parking areas. IBM has amended the *Declaration* accordingly.
2. The pumping or extraction of groundwater underlying the Site other than in connection with the Remedial Action is prohibited. Under no circumstances is the use of groundwater for potable purposes allowed.
3. Compliance with the Environmental Easement and the ISMP by the Site Owner and the Site Owner's successors and assigns.

4. All Engineering Controls must be operated, maintained and inspected at a frequency and in a manner specified in the ISMP.
5. Performance of groundwater, soil vapor and other environmental or public health monitoring as defined in the ISMP.
6. Implementation and documentation of the soil/fill management procedures provided in the Intrusive Activities Work Plan (IAWP) in the ISMP.
7. Provisions for characterizing soils that may be exposed by activities on the Site that will disturb remaining contaminated material must be conducted in accordance with the IAWP.
8. As specified in the *Declaration*, any and all new buildings within the Core Area must be constructed with vapor intrusion (VI) mitigation system(s).
9. Reporting of the data and information pertinent to Site Management of the Core Area at the frequency and in a manner defined in the ISMP.

Engineering Controls

1. Soil Cover system comprised of a minimum of 36 inches of soil that meets the Part 375 SCO for industrial use, asphalt pavement, concrete-covered sidewalks, and concrete building slabs.
2. Groundwater Extraction and Treatment - Components of the Bedrock Remediation System (Production Well 25 and the PW-25 GTF).
3. Sub-slab Vapor Extraction Systems (B330D, B330C, B338, and B339).

2.5.1.3 Former Landfill: Area C (OU6)

Institutional Controls

1. The Former Landfill may only be used for industrial use provided that the applicable provisions of the long-term Engineering and Institutional Controls included in the ISMP are employed.
2. The pumping or extraction of groundwater underlying the Site other than in connection with the Remedial Action is prohibited. Under no circumstances is the use of groundwater for potable purposes allowed.
3. Compliance with the Environmental Easement and the ISMP by the Site Owner and the Site Owner's successors and assigns.
4. All Engineering Controls must be operated, maintained and inspected at a frequency and in a manner specified in the ISMP.
5. Performance of groundwater, soil vapor and other environmental or public health monitoring as defined in the ISMP.

6. Owners, operators or users must not disturb, penetrate or excavate soils within the former Landfill.
7. Reporting of the data and information pertinent to Site Management of the former Landfill at the frequency and in a manner defined in the ISMP.

Engineering Controls

1. Soil Cover System associated with the former Landfill (OU6).
2. The groundwater monitoring network.

2.5.1.4 Perimeter Area

Institutional Controls

1. The Perimeter Area of the Site may only be used for industrial use provided that the applicable provisions of the ISMP are employed. Commercial use is allowed subject to approval by NYSDEC.
2. The pumping or extraction of groundwater underlying the Site other than in connection with the Remedial Action is prohibited. Under no circumstances is the use of groundwater for potable purposes allowed.
3. Compliance with the Environmental Easement and the ISMP by the Site Owner and the Site Owner's successors and assigns.
4. All Engineering Controls must be operated, maintained and inspected at a frequency and in a manner specified in the ISMP.
5. Performance of groundwater, soil vapor and other environmental or public health monitoring as defined in the ISMP.
6. Implementation and documentation of the soil/fill management procedures provided in the Intrusive Activities Work Plan (IAWP) in the ISMP.
7. Provisions for characterizing soils that may be exposed by activities on the Site that will disturb remaining contaminated material must be conducted in accordance with the IAWP.
8. As specified in the *Declaration*, any and all new buildings within the Perimeter Area must be constructed with vapor intrusion (VI) mitigation system(s).
9. Reporting of the data and information pertinent to Site Management of the Perimeter Area at the frequency and in a manner defined in the ISMP.

Engineering Controls

1. Soil Cover System comprised of a minimum of 36 inches of soil that meets the Part 375 SCO for industrial use, asphalt pavement, concrete-covered sidewalks, and concrete building slabs.
2. Groundwater Extraction and Treatment - Components of the Bedrock Remediation System consisting of three active Production Wells (PW-1, PW-2R, and PW-25) and three GTFs (the PW-1 GTF, the PW-2 GTF, and the PW-25 GTF).

2.5.2 Groundwater Monitoring Plan

The Site's initial groundwater monitoring activities were implemented in 1979 to provide the data necessary to assess water quality conditions and manage the Site's production water supply. Groundwater monitoring and remediation activities have undergone a succession of incremental modifications since the late 1970s. A GMP was implemented during the first quarter of 1996 and subsequently was approved by NYSDEC in accordance with Modules III and IX of the Site's original 6 NYCRR Part 373 Permit. When IBM's Part 373 Permit was renewed in 2011, the GMP remained in effect per Modules II and IX of the Permit.

On September 18, 2015, IBM submitted a modified GMP requesting changes in sampling frequency of volatile organic compounds (VOCs) and type and frequency of inorganic sampling parameters[22]. NYSDEC approved the request on September 30, 2015[23] and the new GMP was implemented in the fourth quarter of 2015.

In 2018, NYSDEC approved IBM's proposed shutdown of extraction wells located in Area B (OU3), Area D (OU4), the B/322 AOC (OU7), and the SEQ (OU9). During this timeframe, NYSDEC also approved IBM's proposed changes in sampling frequency and sampling locations within these operable units.

The current GMP designates 380 wells as Hydraulic Effectiveness Monitoring (HEM) wells. These HEM wells are shown on **Plate 2-4** and are listed in **Table B-1** of **Appendix B**. The Corrective Action Performance Monitoring Network (CAP) consists of 145 locations including groundwater

[22] IBM to New York State Department of Environmental Conservation via e-mail, Groundwater Sciences Corporation, September 17, 2015, *Groundwater Monitoring Plan, Former IBM East Fishkill Facility*.

[23] York State Department of Environmental Conservation to IBM Corporate Environmental Affairs, September 30, 2015, *Request for Groundwater Monitoring Plan Modifications*.

monitoring wells, active and inactive groundwater extraction wells, and the B384 Groundwater Collection Sump (B384 Sump) in Area A. With the exception of the five inactive bedrock extraction well locations (PW-4, PW-5/5A, PW-6, PW-7, and PW-9), CAP locations are sampled for chemical parameters routinely. The CAP monitoring wells and their physical specifications are listed in **Table B-2** of **Appendix B**. As indicated in the legend for **Plate 2-4**, the HEM wells ("for groundwater elevations only") and CAP wells ("for groundwater sampling and elevations") are distinguished on the well location map based on well symbols and colors. The current GMP sampling schedule is shown on **Table B-3** of **Appendix B**.

2.5.3 Groundwater Collection and Treatment Systems

The Corrective Measures program includes the operation of groundwater collection and treatment systems. The collection and treatment systems operate to remediate the Bedrock Remediation Area (OU2) and shallow groundwater from the Area A AOC (OU5). In 2024, groundwater collection operations consisted of the operation of three bedrock extraction wells, designated PW-1, PW-2R, and PW-25, and operation of a shallow overburden groundwater collection sump located in B384 within the Area A AOC (OU5). A fourth bedrock extraction well, designated as PW-2, that serves as a backup to well PW-2R did not operate in 2024. Groundwater withdrawals from the three active bedrock extraction wells and the B384 Sump occurred throughout the year. Additionally, IBM continued to operate shallow overburden groundwater extraction well GW-634 as part of a voluntary pilot operations test in the Area A AOC (OU5).

The groundwater withdrawals from the three bedrock extraction wells active in 2024 were treated by standalone groundwater treatment facilities maintained and operated by Groundwater Sciences on behalf of IBM. Extraction well PW-1 withdrawals were treated in the PW-1 Groundwater Treatment Facility (GTF), extraction well PW-2R withdrawals were treated in the PW-2 GTF, and extraction well PW-25 withdrawals were treated in the PW-25 GTF. Shallow overburden groundwater extracted from the B384 Sump and well GW-634 in the Area A AOC (OU5) was treated in the B384 GTF.

The treatment technology used in the PW-1 GTF and PW-25 GTF consists of aqueous-phase granular activated carbon (GAC). The treatment technologies used in the PW-2 GTF consist of UV/Oxidation with hydrogen peroxide and a UV light reactor followed by catalytic carbon for removal of residual hydrogen peroxide, and aqueous-phase GAC for removal of VOCs not removed in the UV/Oxidation step of the treatment process. The treatment technologies used in the B384 GTF consist of air

stripping to remove VOCs, followed by aqueous-phase GAC to remove PFAS. The air stream from the air stripper is subsequently treated with vapor-phase GAC. During 2024, treated effluent from the PW-1, PW-2, and PW-25 GTFs was conveyed to B316 to provide water for Onsemi's manufacturing operations, and treated effluent from the B384 GTF was conveyed to Onsemi's B312 industrial waste treatment (IWT) facility. A map showing the locations of active bedrock extraction wells PW-1, PW-2R, and PW-25, inactive backup bedrock extraction well PW-2, the B384 Groundwater Collection Sump, pilot extraction well GW-634, the four GTFs, Onsemi's B316 and Onsemi's B312 IWT facility is provided as **Figure 2-4**. Descriptions of each of the GTFs are provided in the following subsections.

2.5.3.1 PW-1 GTF

As shown on **Figure 2-4**, the PW-1 GTF is located west of West Drive, between Building 321 (B321) and B325. The PW-1 GTF treats groundwater pumped from bedrock extraction well PW-1, typically at flow rates of approximately 70 to 80 gallons per minute (gpm). The primary constituents of concern (COCs) are tetrachloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethylene (cis-1,2-DCE), and 1,1,2-trichloro-1,2,2-trifluoroethane (Freon® TF). A process flow diagram for the PW-1 GTF treatment system is provided as **Figure 2-5**. Inside the GTF, the extracted groundwater flows through dual-stage eight-foot diameter GAC vessels arranged in series with a capacity of 10,000 pounds of GAC per vessel. The dual-stage GAC system has a hydraulic capacity of 500 gpm. Following GAC treatment, the groundwater flows to the Treated Water Tank T-300 and is pumped via the Discharge Pump P-300 to Onsemi's B316 for their use as process water. The GTF is constructed to allow discharge of treated groundwater to a future State Pollution Discharge Elimination System (SPDES) permitted outfall location (Outfall 42A).

As shown on **Figure 2-5**, the treatment system also includes a Backwash/Grit Pump P-400 and Bag Filters F-401/402 to capture sediment entrained in the groundwater. The GAC vessels are periodically backwashed using treated water from Tank T-300, with the backwash water collected in the Grit Tank T-400. Backwash water collected in T-400 is then pumped through the Bag Filters to Stage 1 of the GAC system. Individual sample ports, pressure gauges, flow meters and flow control valves are provided for operation and monitoring of treatment system performance.

2.5.3.2 PW-2 GTF

The PW-2 GTF is located south of Building 310 (B310) in a parking lot south of Facility Drive (**Figure 2-4**). The PW-2 GTF treats groundwater pumped from bedrock extraction well PW-2R, or it's backup PW-2, typically at flow rates of approximately 60 to 125 gpm. The primary COCs are PCE, TCE, cis-1,2-DCE, vinyl chloride (VC), and Freon® TF. A process flow diagram for the PW-2 GTF treatment system is provided as **Figure 2-6.** Due to the elevated concentrations of certain VOCs in the groundwater withdrawn from wells PW-2 and PW-2R, the treatment includes an advanced oxidation system utilizing 30% aqueous hydrogen peroxide solution injected into the influent groundwater stream followed by photo-oxidation using ultraviolet (UV) light inside a series of three 30-kilowatt (kW) reactor vessels. This system was manufactured by Calgon Carbon Corporation (Calgon) with the trade name Rayox® and is the first step in the groundwater treatment process (R-900). The Rayox® system is designed to handle a maximum hydraulic flow of 215 gpm.

The 30% aqueous hydrogen peroxide solution is injected into the influent groundwater stream at a concentration of approximately 50 parts per million (ppm) and the estimated effluent hydrogen peroxide concentration from the Rayox® system is 36 ppm. To reduce the concentration of hydrogen peroxide that is not consumed in the oxidation reaction within the Rayox® system, the effluent from the Rayox® system flows to a transfer tank (T-700) and then is pumped to a catalytic GAC treatment vessel containing PeroxCarb® media (PV-600) supplied by Calgon. The PeroxCarb® media is a catalytic GAC that reduces residual hydrogen peroxide concentrations to less than 1 ppm.

Because the Rayox® system does not achieve 100% reduction of all VOCs and the technology is ineffective in removing Freon® TF, the PeroxCarb® effluent is subsequently treated by dual-stage aqueous-phase GAC vessels operated in series. The catalytic GAC and the dual-stage GAC systems have hydraulic capacities of 500 gpm and can treat COCs to non-detectable levels. The overall treatment system hydraulic capacity is limited to the 215 gpm hydraulic capacity of the Rayox® system.

As shown on **Figure 2-6**, groundwater from extraction wells PW-2 or PW-2R is pumped through bag filters F-901/902 to capture sediment entrained in the groundwater, injected with hydrogen peroxide, and pumped through the Rayox® treatment system into Transfer Tank T-700. Transfer Pumps P-701/702 pump groundwater from Transfer Tank T-700 through the 10,000-pound catalytic GAC vessel and then through the dual-stage GAC system composed of two vessels, each with 10,000

pounds of aqueous-phase GAC. Following GAC treatment, the groundwater flows to a Treated Water Tank T-300 and then is directed through conveyance piping by Discharge Pump P-300 to B316 for use as process water by Onsemi. The GTF is constructed to allow discharge of treated groundwater to a future SPDES permitted outfall (Outfall 04A). The treatment system includes a Backwash/Grit Pump P-400 and Bag Filters F-401/402 to capture sediment entrained in the groundwater. The GAC vessels are periodically backwashed by pumping treated water from Tank T-300 to Grit Tank T-400. Backwash water collected in T-400 is then pumped through Bag Filters 401/402 to Transfer Tank T-700. Individual sample ports, pressure gauges, flow meters and flow control valves are provided for operation and monitoring of treatment system performance.

2.5.3.3 PW-25 GTF

The PW-25 GTF is located near the northwest corner of Building 334 (B334) (**Figure 2-4**). The PW-25 GTF treats groundwater pumped from extraction well PW-25, typically at flow rates of approximately 200 to 235 gpm. The primary COCs are PCE, TCE, cis-1,2-DCE, and Freon® TF. A process flow diagram for the PW-25 GTF treatment system is provided as **Figure 2-7**. Aqueous-phase GAC is the method of treatment. Dual-stage, ten-foot diameter GAC vessels with a capacity of 20,000 pounds of GAC per vessel are operated in series. The dual stage GAC system has a hydraulic capacity of 710 gpm and can treat the COCs to non-detectable levels.

As shown on **Figure 2-7**, groundwater from extraction well PW-25 is pumped through GAC to Treated Water Tank T-300. The treated water is directed through conveyance piping by Discharge Pump P-300 to B316 for use as process water by Onsemi. The GTF is constructed to allow discharge of treated groundwater to a future SPDES permitted outfall (Outfall 28A). The treatment system includes Backwash/Grit Pump P-400 and Bag Filters F-401/402 to capture sediment entrained in the groundwater. The GAC vessels are periodically backwashed by pumping treated water from Tank T-300 to Grit Tank T-400. Backwash water collected in Grit Tank T-400 is then pumped through the Bag Filters 401/402 to Stage 1 of the GAC system. Individual sample ports, pressure gauges, flow meters and flow control valves are provided for operation and monitoring of treatment system performance.

2.5.3.4 B384 GTF

The B384 GTF is located between B310 and B308 (**Figure 2-4**). The B384 GTF treats shallow overburden groundwater pumped from the B384 Collection Sump located within B384. This system also occasionally treats groundwater collected from groundwater monitoring wells during sampling (purge water), condensate water collected from an exterior soil vapor extraction (SVE) system that operates seasonally (typically during the months of May through October) in Area A, and condensate water collected from various sub-slab depressurization (SSD) systems that operate on a year-round basis within certain Site buildings. The primary constituents of concern include VOCs (PCE, TCE, cis-1,2-DCE) and PFAS. The B384 GTF treats water pumped at a maximum anticipated flow rate of 10 gpm. The treatment technology is air stripping followed by aqueous-phase GAC.

A process flow diagram for the B384 GTF treatment system is provided as **Figure 2-8**. As shown on the diagram, a venturi pumping system extracts groundwater from the B384 Sump (labeled as "395 GROUNDWATER COLLECTION SUMP" on **Figure 2-8**) within B384 and from overburden well GW-634 located outside of B384. Pump P-700 circulates water from Tank T-700 through eductors connected to extraction points installed in the sump. The groundwater drawn from the extraction points enters Tank T-700 and excess groundwater overflows from Tank T-700 to Tank T-200. Pump P-200 pumps groundwater from Tank T-200 to Influent Storage Tank T-100. Water in Tank T-100 is transferred via transfer Pumps P-101/102 to a QED EZ-Tray® Model 6.6 air stripper (S-300) that uses six (6) treatment trays and an air flow rate of 340 cfm to strip VOCs from the water. The air-stripper effluent is pumped by transfer pump P-300 through Bag Filters F-401/402, and then through a dual-stage, aqueous-phase GAC system to remove PFAS. The air stripper has a hydraulic capacity of 65 gpm and can treat VOCs to non-detectable levels. The aqueous-phase GAC system consists of two vessels in series, each containing 1,000 pounds of GAC. The aqueous-phase GAC system has a hydraulic capacity of 80 gpm and can treat PFAS to non-detectable levels. The overall treatment system capacity is limited by the 65 gpm capacity of the air stripper. Following aqueous-phase GAC treatment, the treatment system effluent is discharged to Onsemi's B312 IWT facility. The GTF is also constructed to allow discharge to a future SPDES permitted outfall (Outfall 04B).

A water treatment chemical (Redux® 390) that serves as a sequestering agent and dispersant is added to the air stripper influent via a chemical feed system to reduce development of mineral deposits (scale) on treatment system components, including the air stripper trays. The system feeds the treatment chemical to circulation Tank T-700 of the groundwater extraction system. Groundwater

pre-treated with the Redux® 390 is then pumped to Transfer Tank T-100 for treatment in the air stripper, S-300, and the aqueous-phase GAC vessels, PV-501/502.

As shown on **Figure 2-8**, the treatment system includes dual-stage, vapor-phase GAC Vessels V-601/602 for treatment of the Air Stripper (S-300) off-gas air stream. Duct Heater DH-1 pre-heats the air stream prior to the vapor-phase GAC to reduce the relative humidity and prevent condensation in the vessels; and Duct Heater DH-2 preheats the outside air stream prior to the air stripper sump to prevent ice formation during cold weather months. Blower B-100 is connected to the vent piping of Tank T-100 and redirects vapors collected in the tank for treatment by the vapor-phase GAC. Purge water from groundwater monitoring wells and condensate water from the SVE and SSD systems are added manually to the Tank T-100 Influent Storage Tank for treatment by the B384 treatment system. Individual sample ports, pressure gauges, flow meters and flow control valves are provided for operation and monitoring of treatment system performance.

3 CORRECTIVE MEASURES IN 2024

Corrective Measures implemented at the Site in 2024 include:

- Groundwater collection operations to maintain hydraulic control of bedrock groundwater containing VOCs and other constituents of potential concern;
- Groundwater collection operations to reduce the magnitude and the lateral and vertical extent of overburden and bedrock VOC plume areas, including a pilot extraction operations test of overburden well GW-634 located in Area A;
- Groundwater treatment operations to remove contaminants from the overburden and bedrock groundwater withdrawals;
- Groundwater monitoring to support assessment of the effectiveness and progress of the groundwater corrective measures;
- Seasonal soil vapor extraction operations in an exterior portion of Area A to reduce the presence of VOCs in vadose zone soil;
- Operation of sub-slab depressurization (SSD) systems and assessment of HVAC controls to mitigate vapor intrusion potential in certain Site buildings; and
- Monitoring of the SSD systems and indoor air as needed to confirm the effectiveness of the vapor intrusion mitigation measures.

3.1 Groundwater Collection Operations

During 2024, bedrock extraction wells PW-1, PW-2R, and PW-25 were operated as groundwater collection wells for the Site's corrective measures program. The purpose of the bedrock extraction well system is to control and contain the bedrock groundwater VOC plumes (referred to as the Bedrock Remediation Area or OU2) while also reducing the magnitude and extent of the VOC plumes. In 2024, groundwater collection operations also included extraction of shallow groundwater in the Area A AOC (OU5). The Area A shallow groundwater withdrawals were collected from the B384 collection sump located in B384 and from pilot extraction well GW-634. A summary of groundwater collection volumes by well and by month in 2024 is provided as **Table C-1** in **Appendix C**. As noted on **Table C-1**, the monthly collection volumes for the B384 sump include groundwater collected from pilot extraction well GW-634. Total volumes of groundwater collected in 2024 for each of the bedrock extraction wells and the shallow groundwater extraction operations in Area A AOC (combined withdrawals from the B384 Sump and GW-634) are presented below in **Table 3-1**.

Table 3-1. 2024 Pumping Volumes by Well/Remediation Area		
Well or AOC	**Gallons Pumped**	**Average 2024 Flow Rate (GPM)**
PW-1	31,203,019	59
PW-2R	33,666,044	64
PW-25	119,467,908	227
*Area A AOC	1,228,532	2.3
***Total**	***185,565,503***	***352***

* Consists of the combined flow from the B384 Sump and well GW-634.
**Total average flow from January 1, 2024 to December 31, 2024.

The total volume of groundwater collected in 2024 was nearly unchanged at the Site compared to 2023, decreasing from 186.8 million gallons (MG) in 2023 to 185.6 MG in 2024. The total volume of groundwater collected in 2024 is equivalent to about 0.51 MG per day. The decrease in groundwater withdrawals between 2023 and 2024 was due to periods of lower operational efficiency for bedrock extraction well PW-1. As reported to NYSDEC on March 3, 2024[24], bedrock extraction well PW-1 was offline between January 25 and February 27, 2025 due to pump and motor failures following an area-wide power outage. On August 21, 2024[25] IBM reported to NYSDEC that PW-1 was offline between July 12, and August 9, 2024 due to a motor failure. As reported to NYSDEC on January 23, 2025,[26] PW-1 was offline between December 21, 2024 and January 15, 2025 due to failures of the pump, motor, and power supply for the fiber optic control. The PW-2R flow rate decreased in 2025 due to biofouling of the transfer piping and subsequent fouling of the influent bag filters with bacterial colonies. The 2024 average withdrawal rate for bedrock extraction well PW-25 increased in 2024 due to higher operational efficiency. The combined average Area A AOC (OU5) overburden withdrawal rate for the B384 Sump and well GW-634 was relatively unchanged from 2023.

3.2 Groundwater Treatment Facility Operations

Bedrock groundwater withdrawals from each of the three active bedrock extraction wells were conveyed to three standalone groundwater treatment facilities, designated as the PW-1 GTF, the PW-2 GTF, and the PW-25 GTF as described in Section 2.5.3 of this report. Collection and treatment

[24] Linda Daubert, IBM to Jessica LaClair, York State Department of Environmental Conservation, March 3, 2024, *Shutdown and Restart Notification for Extraction Well PW-1.*

[25] Linda Daubert, IBM to Emily Barry, York State Department of Environmental Conservation, March 3, 2024, *Shutdown and Restart Notification for Extraction Well PW-1*

[26] Linda Daubert, IBM to Emily Barry, New York Department of Environmental Conservation, January 23, 2025, Shutdown and Restart Notification for Extraction Well PW-1.

of shallow overburden groundwater withdrawals from the B384 Sump and pilot extraction well GW-634 in the Area A AOC were treated in the B384 GTF. In addition to overburden groundwater withdrawals, the B384 GTF treated purge water generated during sampling of groundwater monitoring wells and condensate collected from the exterior SVE system in Area A and B330D Subslab Depressurization System (SSD). Throughout 2024, the treated effluent from the PW-1 GTF, PW-2 GTF, and PW-25 GTF was conveyed to Onsemi's B316 and the treated effluent from the B384 GTF was conveyed to Onsemi's B312 IWT facility.

3.2.1 Treatment System Sampling

Monthly treatment system sampling within the GTFs included collection and analysis of samples of treatment system influent, mid-point samples between aqueous-phase carbon vessels, and samples of treatment system effluent. The influent, mid-point, and effluent samples were analyzed for VOCs by SW-846 Method 8260D.

Chemistry data for the three bedrock extraction wells, the B384 Sump, and pilot extraction well GW-634 are presented in **Appendix G**, and chemistry data for the four groundwater treatment facilities are presented in **Appendix I**.

3.2.2 Contaminant Removal

Contaminant mass removal was estimated for 2024 using monthly concentration data, together with monthly pumping volumes for the three active bedrock extraction wells and the Area A AOC groundwater extraction points (Combined withdrawals for the B384 Sump and extraction well GW-634). Contaminant recovery by month is provided as **Table C-2** in **Appendix C**. **Table 3-2** summarizes the contaminant recovery values in pounds (mass removals) for the bedrock extraction wells and shallow overburden extraction points in the Area A AOC.

Table 3-2. 2024 Contaminant Mass Removal (lbs) - By Well/Remediation Area

Well or AOC	PCE	TCE	cis-1,2-DCE	VC	Freon® TF	Freon® 123a	Other VOCs	Totals
PW-1	3.3	1.2	0.3	0.0	0.5	0.0	0.0	5.3
PW-2R	3,076	234	355	62	43	3.3	0.2	3,774
PW-25	494	64	21	0.0	12	0.2	0.1	591
***Area A AOC**	192	3.8	0.3	0.0	0.4	0.0	0.3	197
Total by Compound	3,765	303	377	62	56	3.5	0.6	4,567

* Consists of the combined mass removal from the B384 Sump and well GW-634.

Nearly 4,600 pounds or 2.3 tons of VOCs were recovered during 2024 from approximately 185.6 MG of groundwater withdrawals. As shown in **Table 3-2**, the majority (83 percent) of the VOC contaminant mass was recovered from well PW-2R. A significant fraction of the remaining VOC mass (13 percent) was recovered from well PW-25. Extraction from Area A AOC overburden (B384 Sump and well GW-634) resulted in the greatest mass removal efficiency with about one pound of VOCs removed per every 6,000 gallons extracted. The mass removal efficiency was also relatively high for extraction well PW-2R with about one pound of VOCs removed per every 9,000 gallons extracted. Operation of bedrock extraction well PW-1 accounted for the lowest mass removal efficiency. Since 1979, approximately 201 tons of VOCs have been removed from approximately 15.2 billion gallons of Site groundwater withdrawals.

3.2.3 Operational Efficiency

The operational efficiency of the groundwater collection and treatment systems at the Site in 2024 was estimated by reviewing the number of days that each well or sump pumping system was operating and comparing this number to the number of possible days of operation. Groundwater collection systems were considered active when at least 10 gallons per day were extracted. **Table 3-3** summarizes the days of activity for each well or sump and shows the up-time percentage relative to the number of days in the year.

Table 3-3. Operational Efficiency of Groundwater Collection and Treatment Systems in 2024

Well or Sump	Actual Days of Operation out of Possible Days of Operation	Percent Time in Operation*
PW-1	307/366	83.9%
PW-2R	360/366	98.4%
PW-25	359/366	98.1%
Area A AOC	358/366	97.8%
*Percent time in operation is based on full days when at least 10 gallons were withdrawn.		

As shown in **Table 3-3**, the operational efficiency in 2024 for the groundwater collection and treatment systems was 83.9 percent or greater. The bedrock groundwater extraction wells and the Area A AOC extraction points were typically offline for short time periods due to carbon changeouts and other maintenance activities. The notable exceptions were the PW-1 shutdowns for troubleshooting of the VFD, pump and motor.

3.2.4 Treatment Efficiency

In 2024, groundwater withdrawals from the three active bedrock extraction wells were treated in the PW-1, PW-2, and PW-25 GTFs. VOC concentration data for treatment system influent and effluent were used to calculate the treatment efficiency of these three GTFs. Data for sampling points in the PW-1, PW-2, and PW-25 GTFs are presented in **Appendix I**, and data for the three bedrock extraction wells are presented in **Appendix G**.

Groundwater withdrawals from bedrock extraction well PW-1 were treated in the PW-1 GTF. The 2024 treatment efficiency for the PW-1 GTF was determined from monthly influent (location 210A) and effluent (location 210F) samples. Based on the ratio of influent to effluent concentrations, the VOC treatment efficiency for the PW-1 GTF was greater than 99.9 percent in 2024.

Groundwater withdrawals from bedrock extraction well PW-2R were treated in the PW-2 GTF. The 2024 treatment efficiency for the PW-2 GTF was determined from monthly influent (location 220RA) and effluent (location 220RJ) samples. Based on the ratio of influent to effluent concentrations, the VOC treatment efficiency for the PW-2 GTF was greater than 99.9 percent in 2024.

Groundwater withdrawals from bedrock extraction well PW-25 were treated in the PW-25 GTF. The 2024 treatment efficiency for the PW-25 GTF was determined from monthly influent (location 325A) and effluent (location 325F) samples. Based on the ratio of influent to effluent concentrations, the VOC treatment efficiency for the PW-25 GTF was greater than 99.9 percent in 2024.

The 2024 treatment efficiency in the B384 GTF within Area A was estimated based on VOC and PFAS analyses of monthly samples collected from the system influent and the aqueous-phase GAC unit effluent (location 384L). Results for these sampling points are presented in **Appendix I.** The ratios of influent to effluent concentrations indicate a VOC removal efficiency of greater than 99.9 percent and a PFAS removal efficiency of greater than 99.1 percent.

3.2.5 System Maintenance

Groundwater collection and treatment system maintenance activities performed in 2024 included:

- GTF and active extraction well pump house inspections;
- Former extraction well pump house inspections;
- Cleaning, inspection, and calibration of flow meters;

- Inspection of backflow preventers;
- Exchange of bag filters in the PW-2 GTF;
- Exchange of bag filters in the B384 GTF;
- Exchange of UV light bulbs in the Rayox® treatment unit in the PW-2 GTF;
- Handling and use of hydrogen peroxide as a water treatment chemical in the PW-2 GTF;
- Handling and use of Redux® 390 as a water treatment chemical in the B384 GTF;
- Exchange of aqueous-phase GAC (PW-1 GTF, PW-25 GTF, and B384 GTF);
- Exchange of vapor-phase GAC in the B384 GTF; and
- Routine maintenance and minor repairs to treatment system components.

Approximately 15,000 pounds (7.5 tons) of hydrogen peroxide were used as a water treatment chemical in 2024 as part of the UV oxidation treatment process in the PW-2 GTF. Approximately 2,600 pounds of Redux® 390 was used as a water treatment chemical in the B384 GTF.

Aqueous-phase GAC exchange events performed in 2024 consisted of the following:

- PW-1 GTF - GAC in the lead vessel was changed on June 11, 2024.
- PW-25 GTF - GAC in the lead vessel was changed on April 23, 2024 and October 22, 2024.
- B384 GTF – GAC in the lead and lag vessels were changed on February 1, 2024.

Vapor-phase GAC exchange events performed in 2024 consisted of the following:

- B384 GTF – GAC in the lead and lag vessels were changed on August 6, 2024.

As a result of the PW-25 GTF carbon change events, 73,060 pounds (approximately 36.5 tons) of spent carbon were shipped off-Site as hazardous waste for thermal reactivation. An additional 44,030 pounds (approximately 22 tons) of spent carbon from the PW-1 and B384 GTFs was sent off-Site as non-hazardous waste for thermal reactivation.

3.3 Groundwater Monitoring Program Activities

In accordance with the GMP, groundwater monitoring activities performed during 2024 included measurement of groundwater elevations, inspection and maintenance of monitoring wells, and

collection of groundwater samples for chemical analysis. Each of these groundwater monitoring activities are described in the following subsections.

3.3.1 Groundwater Elevation Measurements

Groundwater elevations were calculated by subtracting the measured depth to water from the surveyed elevation of the measurement point listed in **Appendix D**. For most wells, the designated measurement point is the top of the inner well casing (the "TOC Elevation"). This measurement reference point is typically notched into the top of the well casing. In 2024, a total of 1,508 water levels were measured manually using portable electronic water level meters.

In 2024, the four quarterly water level measurement events occurred principally on: January 22nd through 25th, June 25th through 28th, September 16th through 18th, and October 7th through 10th. During each event, water levels were recorded at the designated Hydraulic Effectiveness Monitoring (HEM) well locations listed in **Table B-1** of **Appendix B**. The water level data have been converted to groundwater elevations and are tabulated in **Appendix D.**

3.3.2 Monitoring Well Inspections

All wells have been surveyed for planar coordinates (northing and easting on the state coordinate grid), and measurement point elevation (typically top of casing). The table of Well Specifications, **Table B-2** of **Appendix B**, presents well measuring point elevation, depth to bottom, diameter, screen length, and completion date.

The annual monitoring well inspections were performed principally in the first and second quarters of 2024, supplemented by additional inspections of the Hydraulic Effectiveness Monitoring wells (**Appendix B, Table B-1**) and the wells in the Corrective Action Performance Monitoring Network (**Appendix B, Table B-2**) during quarterly groundwater monitoring events. Activities performed as part of the inspections include: (1) measurement of the depth to bottom and comparison of this depth to the well's reference depth to determine the need for redevelopment due to buildup of silt; (2) assessment of the legibility of the well tag, visibility of the survey mark, and need for painting or maintenance of the standpipe or manhole; (3) assessment of the condition of the well seal; (4) assessment of the general downhole condition of the well, including the presence of bends or obstructions; and (5) documentation of dedicated equipment. Follow-up work such as repair of

protective casings, well covers, and replacement of locks and plugs was performed based on the findings of the inspections.

3.3.3 Groundwater Sampling

Quarterly groundwater sampling events occurred in January, April/May/June, July, and October/November/December 2024. The groundwater sampling was conducted at locations and frequencies specified in **Table B-3**. As previously mentioned, annual collection of groundwater samples for PFAS and 1,4-dioxane were collected in the fourth quarter of 2024. Eurofins Lancaster Laboratories Environmental, LLC of Lancaster, Pennsylvania (ELL) served as the primary laboratory for groundwater sample analysis. ELL is certified through the New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP), Certificate No. 10670. Pace Analytical Services, LLC. of Newburgh, New York (NYSDOH ELAP Certification No. 10142) served as a secondary laboratory for subsets of the groundwater sample analyses.

3.3.3.1 Reporting of Groundwater Chemistry Data

A sampling record for each well location (SAMP24a.xlsx) is provided on a compact diskette (CD) in **Appendix E**. This CD contains purging and sampling data for 2024, as specified in **Table 7-1** of the GMP, "IBM East Fishkill Well Record and Data Format." SAMP24a.xlxs contains the following information sorted by well/location number and sampling date:

1. Well or sample location number
2. Date of sample
3. Sample identification number
4. Equipment used
5. Depth to water prior to purge
6. Purge rate
7. Purge volume
8. Sampler's initials
9. Number of containers for each type of analysis
10. PID reading (if applicable)
11. Whether the well was evacuated
12. Relevant comments

Also included in **Appendix E** is the database file FIELD24a.xlsx. This file contains field parameter data for pH, temperature, specific conductance, and turbidity. These parameters were measured in the field at the time of sample collection.

Appendix E also contains a daily summary of meteorological data obtained from the National Climatic Data Center for the Dutchess County Airport, to provide regional weather conditions at the time of the sampling. Meteorological data for a given sample can be obtained by cross-referencing the date of the sample with the corresponding date in this table.

3.3.3.2 Quality Assurance/Quality Control Samples

The GMP samples were collected in 2024 according to the procedures described in Section 2 of the GMP. The samples were analyzed by NYSDOH-certified laboratories using EPA methods for VOCs and inorganics. The 2024 field QA/QC chemistry data includes duplicate samples, trip blanks and equipment rinse blanks. The duplicate sample data are presented with the groundwater data in **Appendix F**. The trip and equipment rinse blank data are presented in **Appendix H**.

Laboratory precision was tested by filling multiple sampling containers from the same sampling device during each sampling round; these samples were then analyzed for the parameters of interest. Duplicate samples were generally collected once per 20 environmental samples from the groundwater monitoring wells. These duplicate sample results are indicated by the sample description "REPLICATE" in the analytical data table in **Appendix F**. The duplicate sample results are listed next to the corresponding primary sample results. In general, duplicate sample results were in good agreement. Gross variations in duplicate analysis results that would indicate serious analytical problems were not identified.

In addition to duplicate samples, trip blanks were prepared by the laboratory using analyte-free deionized (DI) water for each cooler containing VOC samples for each sampling round. The purpose of the trip blanks is to assess for the potential of VOC contamination during sample transportation and storage. These trip blanks were placed into each cooler by the laboratory and accompanied the empty sample containers from the laboratory to the field, and the filled sample containers from the field back to the laboratory. Environmental samples associated with each trip blank generally can be determined by the date of the trip blank (refer to "Sample Date" heading in **Appendix H**). Sixty-nine

(69) trip blanks were collected in 2024. The common laboratory contaminant acetone was detected in one trip blank at a concentration of 6.5 µg/l.

Equipment rinse blanks were collected to confirm the efficiency of decontamination procedures for each sampling round by rinsing non-dedicated equipment such as water level indicators with laboratory-supplied analyte-free DI water. Fifty-four (54) equipment rinse blanks were collected in 2024 from water level indicators or non-dedicated submersible pumps and analyzed for VOCs. These results are also presented in **Appendix H**. The common laboratory contaminant acetone was detected in five equipment blank samples at estimated concentrations less than 5.0 µg/l. Overall, the equipment rinse blank results do not suggest an analytical bias or the potential for cross-contamination due to field decontamination procedures.

3.4 Vapor Intrusion Assessment/Mitigation

Site-wide vapor intrusion (VI) assessment/mitigation is being conducted at the request of NYSDEC and NYSDOH. Over the past 15 years, IBM's work to assess/mitigate the potential VI pathways has been performed in accordance with a final work plan approved in July 2009[27] by the Agencies. IBM's VI RFI Work Plan for VI assessment focused on 13 buildings. IBM maintains responsibility for execution of the VI RFI Work Plan in building spaces that continue to be occupied for industrial use. As part of the Consent Order between NYSDEC and the three co-permittees, iPark is responsible for VI-related issues in the building spaces occupied for commercial use, including the installation, operation, and maintenance of the SSD systems in those spaces.

IBM is working cooperatively with Onsemi and iPark to verify that the appropriate HVAC operating conditions necessary for VI mitigation in routinely occupied portions of the buildings are maintained. It is Onsemi's and iPark's responsibility to communicate to IBM planned changes to occupancy or HVAC conditions in industrial spaces of these buildings so that IBM can assess whether additional indoor air quality testing is warranted. IBM maintains responsibility for operation and maintenance (O&M) of the SSD and SVE systems for VI mitigation and VOC source reduction in the industrial spaces.

[27] York State Department of Environmental Conservation to IBM Environmental Engineering, July 10, 2009, *Approval of RFI Work Plan, VOC Source Assessment.*

VI assessment and mitigation-related work conducted by IBM at the Site in 2024 included:

- Continued operation of six full-time SSD systems; and
- Operation of one seasonal exterior SVE system in the Area A AOC.

The Vapor Intrusion Assessment and Mitigation 2024 Annual Report that summarizes these and other activities is provided in **Appendix K**.

3.5 Other Relevant Activities in 2024 and Plans for 2025

Additional activities completed in 2024 related to the Corrective Measures program and plans for 2025 are discussed in the following sections.

3.5.1 GW-634 Pilot Operations Test

IBM completed a pilot extraction operations test of well GW-634 in the Area A AOC (OU5). The location of pilot extraction well GW-634 relative to the B384 GTF and the B384 Sump is shown on **Figure 3-1**. GW-634 was generally online in 2024 when the B384 sump was in operation as noted in Section 3.2.3 of this report. The B384 venturi pumping system extracted groundwater from GW-634, and the discharge was conveyed to the adjacent B384 GTF where it was treated with groundwater extracted from the B384 Sump as discussed in Section 2.5.3 of this report. Groundwater chemistry data collected from GW-634 is presented in **Appendix G**.

Groundwater extraction from well GW-634 appears to increase hydraulic capture and removal of VOC mass in overburden groundwater in the Area A (OU5) portion of the Site. IBM plans to continue extracting groundwater from well GW-634 in 2025 as a voluntary interim measure.

3.5.2 B335 RFI/CMS

Preparation for implementation of the NYSDEC-approved Interim Corrective Measure for B335 in the B330 AOC (OU8) continued through 2024 and into 2025, including regular communications among IBM, iPark, and NYSDEC. The following paragraphs summarize background information leading up to the Interim Corrective Measure approval.

On April 23, 2019, IBM submitted a vapor intrusion summary report[28] for B335 in the B/330 AOC (OU8). Based on the data in that report, NYSDEC indicated in a letter dated June 7, 2019[29] that there was a newly discovered release, and requested an RFI Work Plan in accordance with Module II, Condition D of the Part 373 permit. IBM submitted an RFI Work Plan on September 5, 2019[30], which was conditionally approved by NYSDEC on October 17, 2019[31]. In a letter dated November 4, 2019[32], IBM amended the RFI Work Plan to address the items listed in the conditional approval. The objective of the RFI was to identify the nature and extent of VOC presence in the subsurface beneath and proximate to B335. The investigation began in the fourth quarter of 2019 and extended into the first quarter of 2020. A final RFI report was submitted to NYSDEC on September 10, 2020[33]. NYSDEC found the RFI report acceptable and requested routine sampling of groundwater monitoring well MLI-12[34]. The location of MLI-12 is shown on **Figure 3-2**, and 2024 sampling results are presented in the Supplemental Groundwater Organics section of **Appendix F**.

On February 10, 2022 NYSDEC requested IBM complete a Corrective Measures Study (CMS) or a Focused CMS for B335[35]. IBM submitted a soil sampling work plan in support of a Focused CMS on October 10, 2022[36]. After NYSDEC conditionally approved the work plan[37], the soil sampling

[28] Dean Chartrand, IBM, April 23, 2019, Letter to Jessica LaClair, *Building 335 Data Summary Report, Vapor Intrusion Assessment*, Former IBM Facility, East Fishkill, New York, NYSDEC Site No. 314054.

[29] Jessica LaClair, York State Department of Environmental Conservation, June 7, 2019, Letter to Dean Chartrand, IBM, Joe Cotter, iPart 84, Gary Marone, Global Foundries, *Re: Building 335 Data Summary Report, Vapor Intrusion Assessment*, Former IBM Facility, East Fishkill, New York, NYSDEC Site No. 314054.

[30] Dean Chartrand, IBM, September 5, 2019, to Jessica LaClair, *B335 Area RCRA Facility Investigation Work Plan*, Former IBM East Fishkill Facility, Hopewell Junction, New York, NYSDEC Site No. 314054.

[31] Jessica LaClair, York State Department of Environmental Conservation, October 17, 2019, Letter to Dean Chartrand, IBM, *RE: B335 Area RCRA Facility Investigation Work Plan*, Former IBM Facility, East Fishkill, New York, NYSDEC Site No. 314054.

[32] Dean Chartrand, IBM, November 4, 2019, to Jessica LaClair, *B335 Area RCRA Facility Investigation Work Plan*, *IBM Response to Conditional Approval*, Former IBM East Fishkill Facility, Hopewell Junction, New York, NYSDEC Site No. 314054.

[33] Sanborn Head Engineering, September 10, 2020, *B335 RCRA Facility Investigation Summary Report*.

[34] York State Department of Environmental Conservation to IBM Environmental Engineering, January 5, 2021, *B335 Area RCRA Facility Investigation Summary Report*.

[35] Jessica LaClair, York State Department of Environmental Conservation, February 10, 2022, *Building 335 Concrete Coating Assessment Summary Report*, Former IBM Facility, East Fishkill, New York, NYSDEC Site No. 314054.

[36] Sanborn Head Engineering, October 10, 2022, *Building 335 Area Soil Sampling Work Plan, Former IBM East Fishkill Facility, Hopewell Junction*, New York.

[37] Jessica LaClair, York State Department of Environmental Conservation, October 25, 2022, *Building 335 Area Soil Sampling Work Plan,* Former IBM East Fishkill Facility, Hopewell Junction, NY, NYSDEC Site No. 314054.

was completed in the fourth quarter of 2022, and a final Focused CMS report was submitted on March 31, 2023[38]. The presumptive remedy outlined in the Focused CMS report includes demolition of B335 with the exception of the floor slab, foundation, and three supporting walls. The Focused CMS report proposes sealing and/or coating of the remaining concrete floor slab and supporting walls with the former B335 slab converted to a parking lot. On July 31, 2023 NYSDEC approved the Focused CMS report for the B335 Area as an Interim Corrective Measure, with the intent of public noticing the proposed final remedy during the Part 373 Permit renewal[39].

[38] Sanborn Head Engineering, March 31, 2023, *Focused Corrective Measures Study – Building 335 Area,* Former IBM East Fishkill Facility, Hopewell Junction, New York, NYSDEC Site No. 314054.

[39] Jessica LaClair, York State Department of Environmental Conservation, July 31, 2023, *Focused Corrective Measures Study for the Building 335 Area*, Former IBM East Fishkill Facility, Hopewell Junction, New York, NYSDEC Site #314054.

4 HYDROGEOLOGY

Groundwater at the Site occurs in saturated zones within both the overburden (soil) and bedrock stratigraphic units. In general, recharge to the bedrock passes through the overlying soil units, which include a complex downward stratigraphic sequence of: soil fill; alluvial sandy silt, silty sand, and sand and gravel; an extensive but discontinuous layer of glaciolacustrine silt and clay (silt/clay), ice-contact sand and gravel, and dense, glacial till. The thickness of these soil stratigraphic units across the Site is variable ranging from a few feet to greater than 120 feet. Vertical downward flow of groundwater from soil to bedrock is induced by groundwater withdrawals from the three active on-Site corrective action extraction wells completed in the bedrock.

This section presents the results of quarterly water level monitoring for 2024 in both the soil and bedrock saturated zones and discusses the effects of corrective action groundwater extraction on groundwater flow in these units. The most extensive groundwater sampling round was completed in the second quarter of 2024; therefore, second quarter 2024 groundwater elevations are the focus of the following discussions.

4.1 Soil Groundwater Elevations

Plate 4-1 shows the groundwater elevations for portions of the soil water table during the second quarter of 2024 (June 25th through 28th) under dynamic conditions of long-term corrective action groundwater withdrawals from the bedrock. The gray cross-hatched areas on **Plate 4-1** indicate areas where soils are inferred to be unsaturated ("dry" areas), as a result of dewatering by corrective action bedrock groundwater extraction or where soils lie on top of buried bedrock ridges or other areas of relatively high bedrock surface elevation.

Groundwater exists in the soils beneath the Site under generally unconfined (water table) conditions. Groundwater flow within these soils is controlled by various factors including: (1) the upper surface topography of the soil units; (2) the hydraulic characteristics of the soils; (3) the location of groundwater recharge and discharge zones; (4) horizontal and vertical gradients; and (5) the vertical hydraulic conductivity across stratigraphic units within the soils, and across the interface between the soils and bedrock.

In the northern parts of the Site, the soil water table generally reflects the surface topography of the extensive but discontinuous glaciolacustrine silt/clay which, together with several areas of dense

glacial till, is the primary control on vertical downward groundwater flow from soil to bedrock. Areas where the glaciolacustrine silt/clay is present are shaded tan on **Plate 4-1**. The silt/clay generally inhibits vertical migration of soil groundwater into the lower soil units and the dense till generally inhibits vertical migration of soil groundwater into bedrock. These soil strata also limit the potential for downward vertical contaminant transport. In areas where the silt/clay is absent and/or where the till is less dense or absent, the volumetric flux of soil groundwater is much greater as it flows through deeper soil units and into the bedrock.

Areas where VOCs are present in the soil groundwater table within alluvial soils above the glaciolacustrine silt/clay include the Area A AOC (OU5) and the B/322 AOC (OU7), discussed in Section 4.1.1 and Section 4.1.2 of this report. Areas where VOCs are present in soil groundwater within glacial till soil include the Area C AOC Landfill (OU6) and the nearby B/330 AOC (OU8). This is further discussed in Section 4.1.3 and Section 4.1.4 of this report.

4.1.1 Area A (OU5)

North of B309 and B310, the stratigraphic sequence consists of soil fill and silty sand overlying dense lodgment till with bouldery till. The saturated portion of the soil in this portion of the Site includes VOC plumes associated with historical solvent storage and handling operations. As shown on **Plate 4-1**, the glaciolacustrine silt/clay is absent north of B309 and B310 and east of B309. The stratigraphic sequence from north to south gradually changes from till (north of B309 and B310) to include soil fill, sand, and sand-and-gravel lenses deposited on top of the silty sand that overlies the glaciolacustrine silt/clay.

Soil groundwater within the alluvial sand above the silt/clay in Area A is inferred to flow from the northeastern edge of B310 to the north and northeast. The soil groundwater flow in the northern part of Area A is inferred to converge towards an area north of the linkway between B309 and B310 (refer to the “245 feet” contour near the B309-B310 linkway on **Plate 4-1**) where the silt/clay is generally absent. The soil groundwater table north of B309 and the northeast corner of B310 is located primarily in the till, where soil groundwater is inferred to flow downward into the bedrock in the vicinity of wells GW-010, GW-748, and GW-763. The area in the vicinity of these wells is saturated and is labeled as the “B309 sink” on **Plate 4-1** since it appears to serve as a pathway for downward vertical soil groundwater flow towards bedrock.

The remainder of the inferred soil groundwater flow from beneath B310 in the northern part of Area A is toward the northwest corner of B308 where the silt/clay and dense till are absent (**Plate 4-1**). This area is labeled as the "B308 sink" (refer to the "247 feet" contour in the area of B308 on **Plate 4-1**, since soil groundwater flow in this portion of Area A is inferred to be primarily lateral toward the edge of the silt/clay and generally vertically downward beyond the edge of the silt/clay towards the bedrock. The apparent soil groundwater flow divide between the "B308 sink" and "B309 sink" is shown as an orange dashed line on **Plate 4-1**.

Soil groundwater near the southeast corner of B310 is inferred to flow to the south and southeast (**Plate 4-1**). An apparent groundwater flow divide in the alluvial unit above the silt/clay is located between B386 and B308. This divide separates shallow groundwater flow to the east and to the north toward the "B308 sink", from shallow groundwater flow to the south across the edge of the silt/clay and then downward into deeper soils (primarily till) and bedrock in the vicinity of the southeast corner of B316.

4.1.2 B/322 AOC (OU7)

As shown on **Plate 4-1**, soil groundwater in the alluvial unit above the silt/clay in the B/322 AOC (OU7) is inferred to flow from an area of relatively higher top-of-silt/clay elevations in the vicinity of wells GW-735 and GW-627 to the south-southwest across the former footprint of B322 and toward areas of relatively lower top-of-silt/clay elevations near B323. As depicted by the apparent groundwater flow divide shown on **Plate 4-1**, there is also a westerly component of groundwater flow in the B/322 AOC toward former groundwater collection wells GW-612 and GW-617. The saturated alluvium in this portion of the Site contains an isolated soil VOC plume associated with historical solvent storage operations in the area west of well GW-627.

4.1.3 Area C Landfill (OU6)

Soil groundwater in glacial till is present in the area of the former landfill, designated as Area C (OU6). As shown on **Plate 4-1**, unsaturated zones border the former landfill area to the east, north, and west. The direction of groundwater flow in the glacial till soils in this area of the Site is inferred to be to the south before infiltrating into shallow bedrock. The saturated till in this portion of the Site contains an isolated soil VOC plume associated with the former landfill.

4.1.4 B/330 AOC (OU8)

In the B/330 AOC (OU8), the silt/clay is mostly absent except for a few small areas shaded tan on **Plate 4-1**. Although some of the shallow groundwater table is above the silt/clay, the soil groundwater elevations shown on **Plate 4-1** in the B/330 AOC (OU8) are primarily within the glacial till overlying the bedrock. The saturated glacial till contains soil VOC plumes associated with historical solvent storage, handling, and/or usage operations.

Soil groundwater elevations in the B/330 AOC (OU8) are highest in the area between B330D and B335 at wells GW-602 and GW-180 (**Plate 4-1**); part of this area is not capped by a building slab or asphalt parking lot, allowing for direct infiltration of precipitation. Elsewhere beneath B330D and areas to the north and west, the soil unit is believed to be unsaturated due to the presence of: (1) buildings and parking lots that limit infiltration of precipitation; (2) natural soils that are too thin and too permeable to allow perching of groundwater; and (3) groundwater withdrawals from bedrock extraction well PW-25, which has dewatered some of the soil beneath the B/330 AOC (OU8).

4.1.5 Gradients and Groundwater Flow Velocities

Based on results of previous RCRA Facility Investigations (RFIs), the calculated linear velocity of horizontal groundwater flow within the majority of the alluvium above the glaciolacustrine silt/clay, ranges over two orders of magnitude, from about 0.04 to 4.5 feet per day (ft/day), with a median of about 0.4 ft/day. These flow velocities in the alluvial sand were calculated based on: (1) hydraulic conductivities determined from evaluation of slug tests from previous RFIs; (2) hydraulic gradients measured in 2024 ranging from 0.0023 to 0.095 foot per foot (ft/ft), with a representative median gradient of 0.016 ft/ft and (3) an average porosity of 35%, as determined from past laboratory tests on samples of the alluvium.

4.2 Bedrock Groundwater Elevations

Prior to Site development in the 1960s, groundwater in the bedrock water-bearing zone generally existed under confined or semi-confined conditions. Groundwater flow in the bedrock unit under these conditions was controlled by vertical recharge from the overlying saturated soil, by direct infiltration in areas where the bedrock flow system was semi-confined, and by the hydraulic conductivity, connectivity, and geometry of fractures and solution features in the bedrock.

4.2.1 Potentiometric Head Distribution

Under natural (non-pumping) conditions, bedrock groundwater flow would follow topography in a generalized way, flowing from topographically high areas of natural recharge to discharge zones associated with streams such as Gildersleeve Brook and its tributaries. However, the generalized natural flow configuration has been altered by bedrock groundwater withdrawals initiated at the Site in the 1960s and by barriers to direct infiltration, such as buildings and parking lots, constructed as the Site was developed.

Plate 4-2 shows the potentiometric head distribution in the bedrock groundwater system during the period of June 25th through 28th, 2024 under dynamic conditions of long-term corrective action pumping at bedrock extraction wells PW-1, PW-2R, and PW-25. The data used in contouring **Plate 4-2** are generally from the deepest of the bedrock wells in a well cluster and corresponds to a screened or open-hole interval elevation between approximately 50 and 120 feet above Mean Sea Level (amsl). This elevation interval is inferred to correlate with the principal water-bearing zones in the on-Site bedrock extraction wells. Only groundwater elevation data from wells used in contouring are shown on **Plate 4-2**. The June 2024 bedrock potentiometric elevations posted on **Plate 4-2** correspond to the approximate timing of the most comprehensive round of quarterly water quality sampling.

As shown on **Plate 4-2**, groundwater flow directions are inward towards the northwestern, north-central, and south-central portions of the Site, with steep horizontal gradients in the vicinity of the three active bedrock extraction wells. Bedrock groundwater elevations range from more than 270 feet amsl at wells GW-529, and GW-900 in the Southeast Quadrant (OU9), to less than 205 feet amsl over a narrow north-south region in the south-central portion of the Site that encompasses on-Site bedrock extraction well PW-25 (**Plate 4-2**). The lowest measured bedrock groundwater elevation shown on **Plate 4-2** was 202.89 feet amsl at well GW-143 on the west side of B330D, in the area southwest of bedrock extraction well PW-25.

4.2.2 Gradients and Structural Controls on Groundwater Flow

The nearly continuous withdrawal of bedrock groundwater for Site water supply, beginning in the 1960s, and corrective action, beginning in the 1970s, has altered the flow dynamics on-Site and the hydrogeologic conditions within the soil and bedrock water-bearing zones relative to the natural conditions that existed before the start of bedrock groundwater withdrawals. In response to these

groundwater withdrawals, the lowering of the potentiometric levels within the bedrock on-Site has resulted in dewatering formerly saturated soils with a bedrock potentiometric surface that is below the top-of-bedrock surface in some areas. Where this situation has occurred, the saturated bedrock has been converted locally from a confined or semi-confined condition to a water table or unconfined condition, resulting in some unsaturated zones in the upper bedrock.

The geometry of the bedrock groundwater potentiometric surface under the influence of long-term corrective action groundwater withdrawals suggests that the hydraulic characteristics of the fractured bedrock groundwater system are influenced by the bedrock's structural fabric, which generally trends north-south. This structural fabric has been created by complex folding, fracturing, and faulting. In this regard, the bedrock groundwater potentiometric surface map (**Plate 4-2**) shows various anomalies in contour spacing and patterns of directional hydraulic conductivity that are related to the degree of fracture connectivity between wells and to the variations in directional hydraulic conductivity across the Site. Based on predominant fracture orientations, areas of competent rock with limited fracturing are expected to exhibit a greater magnitude of vertical hydraulic gradient, reflecting limited fracture connectivity and associated transmissivity. By comparison, areas of highly weathered and fractured bedrock are expected to exhibit lower vertical gradients, be more conducive to vertical recharge of groundwater from soil, have highly variable directional hydraulic conductivity (conductivity that is much greater parallel to the predominant north-south fracture orientation), and have greater transmissivity.

As depicted on **Plate 4-2**, extraction wells PW-2R and PW-25 are located within an area of a prominent zone of weathered/fractured bedrock that extends in a north-south direction through the central portion of the Site, whereas extraction well PW-1 is in an area of competent bedrock proximate to separate areas of weathered/fractured bedrock. Consistent with the positions of these three active extraction wells with these inferred greater transmissivity weathered/fractured bedrock zones, hydraulic responses to extraction well pumping indicate wells PW-2R and PW-25 have greater interconnectivity as compared with well PW-1. In addition, the combined withdrawals of PW-2R and PW-25 have a greater influence in bedrock potentiometric levels and hydraulic control in the central and southeastern portion of the Site, while withdrawals from PW-1 have a greater influence in bedrock potentiometric levels and hydraulic control in the northwestern portion of the Site and off-Site areas to the north and west.

The primary controls on the directional variability of bedrock hydraulic conductivity consist of zones of high fracture connectivity such as fracture zones. Groundwater flow paths are not necessarily perpendicular to the potentiometric surface contours shown on **Plate 4-2** because the orientation of the greatest principal hydraulic conductivity (*K*) of the hydraulic conductivity tensor is not necessarily parallel to the apparent hydraulic gradient. This situation is typical of a fractured bedrock aquifer, where zones of high fracture connectivity facilitate groundwater flow in directions other than those that would be determined by the apparent potentiometric head distribution as shown on the potentiometric surface contour map. Therefore, the groundwater flow arrows shown on **Plate 4-2** represent only generalized flow directions and not particle flow paths.

Groundwater flow velocities in the bedrock aquifer are controlled by fracture geometry, orientation, density, aperture, and smoothness. These controlling parameters are difficult to specifically characterize at this Site because of the complex structural geology.

4.2.3 Hydraulic Containment

The apparent limits of hydraulic containment of bedrock groundwater encompasses the Site, the former IBM Recreation Center property, and a portion of the former IBM West Complex property. Based on the June 25th through 28th (**Plate 4-2**) potentiometric contours, the Site can be divided into three areas of apparent hydraulic capture/containment.

The apparent area of capture generated by extraction well PW-1 covers the western third of the Site and the eastern portion of the former IBM West Complex property. This area of capture encompasses the bedrock beneath Area D (OU4) and most of the B/322 AOC (OU7). It extends to the southwest beyond Gildersleeve Brook and a portion of the area beneath the former IBM West Complex, to the northwest beyond the intersection of West Drive and Route 52, to the east in the area of B322 and the area between B321 and B320B, and to the south beneath B323 and near inactive bedrock extraction wells PW-5 and PW-5A. The northeastern and eastern limits of the groundwater capture area are defined by localized areas of higher potentiometric head greater than 230 feet amsl in the vicinity of wells GW-122 and GW-130. The mound in the potentiometric surface at well GW-130 corresponds to a topographic high in the bedrock surface near the southeast corner of B322 and, based on previous investigations, is inferred to be an area of low bedrock transmissivity with recharge at the limit of the silt/clay unit. The bedrock in this area is competent with nearly horizontal (flat-lying) bedding.

A second extensive area of apparent hydraulic capture in the bedrock is located in the northeastern quadrant of the Site due to groundwater withdrawals from bedrock extraction well PW-2R. This area of capture is bounded to the west by a groundwater flow divide separating it from the area of capture for well PW-1. As discussed above, this flow divide is defined by localized areas of high potentiometric head in the vicinity of a buried ridge of competent bedrock. On the southern boundary, a groundwater flow divide separates flow toward well PW-2R from flow toward bedrock extraction well PW-25. The area of capture includes the bedrock beneath Area A (OU5) and Area B (OU3) and extends to the north at least to Route 52 and to the east as far as iPark Boulevard (Lime Kiln Road) and possibly Shenandoah Road. In the eastern portion of the SEQ (OU9), the direction of groundwater flow is generally to the northwest in the area between iPark Boulevard (Lime Kiln Road) and Shenandoah Road. Groundwater in the bedrock then flows westward back onto the Site where it is captured by extraction well PW-2R.

The operation of extraction well PW-25 creates a third area of apparent hydraulic capture in the bedrock. The western boundary of the capture zone extends from the southeastern corner of the former IBM West Complex property to the potentiometric high at well GW-130. Some groundwater to the east of former bedrock production wells PW-5 and PW-5A, in the vicinity of B323 and B323A, is also captured by well PW-25. The northern boundary of this hydraulic capture zone is defined by a groundwater flow divide that has developed due to bedrock groundwater withdrawals from extraction wells PW-2R and PW-25. The capture area to the east extends to the bedrock ridge in the Southeast Quadrant (OU9) and includes the Area C Landfill (OU6). The area of capture may extend south as far as Interstate 84 and encompasses the bedrock beneath B330D, B335, B338, B330C, and B334.

5 GROUNDWATER CHEMISTRY

This section provides results of analytical laboratory testing of Site groundwater samples collected in 2024. The samples collected were analyzed for the presence of VOCs, PFAS, 1,4-dioxane, and four inorganic parameters (fluoride, arsenic, nickel, and chromium).

5.1 Groundwater Chemistry – VOCs

VOC groundwater chemistry data for samples collected during the four quarters of 2024 (excluding the extraction wells and treatment systems) are presented in **Appendix F**. The presentation of the data in **Appendix F** is consistent with the requirements of the GMP.

The concentrations of the required monitoring parameters are presented in a table in numerical ascending order by sample location and then chronologically for each sample location for the period of January 1 through December 31, 2024. The results for duplicate samples (split samples) collected for intra-laboratory precision information during 2024 are also presented in **Appendix F** and are discussed in Section 3.3.3.2 of this report. Extraction well analytical data (**Appendix G**), Quality Assurance/Quality Control analytical data (**Appendix H**), and groundwater treatment analytical data (**Appendix I**) are presented in a similar format as **Appendix F**.

Appendix J lists maximum concentrations and locations of the samples with the maximum concentration detections during 2024 for GMP monitoring wells (not including extraction wells and groundwater treatment locations) for each of the chemical constituents/monitoring parameters listed in Table II-3 of the Part 373 Permit. These parameters are included in the sampling program based on their detection histories and historical concentrations relative to the Part 703 New York State Groundwater Quality Standards (NYSGQS).

5.1.1 VOC Plume Maps

There are at least three separate areas of VOC presence above applicable NYSGQS in the soil unit and at least four separate areas of VOC presence above applicable NYSGQS in the bedrock. Some of the areas of VOC presence consist of multiple plumes. The principal constituents of the VOC plumes are PCE and its degradation products TCE, cis-1,2-DCE, and vinyl chloride (VC), and Freon® TF. PCE, TCE, cis-1,2-DCE, and VC are discussed as a group and are collectively referred to as "PCE-series" compounds. In general, the PCE plumes are the most laterally extensive and PCE

concentrations are generally higher at a given well than the other principal VOC constituents. Isoconcentration contour maps for the five principal VOCs in soil and bedrock groundwater are provided as **Plates 5-1 through 5-10**. The isoconcentration contour maps were prepared using groundwater chemistry data collected in April through June 2024. As required by the Part 373 Permit, these maps show the approximate limit of each plume as defined by a concentration equal to the applicable NYSGQS of 5 µg/l for PCE, TCE, cis-1,2-DCE, and Freon® TF and 2 µg/l for VC.

In general, these isoconcentration contour maps show that contaminant transport is controlled primarily by the inferred direction of groundwater flow in the soil and bedrock. Site groundwater at concentrations exceeding the NYSGQS is hydraulically contained to the Site by corrective action groundwater withdrawals from the three active on-Site bedrock extraction wells.

5.1.1.1 VOC Plumes in Soil and Soil/Shallow Bedrock Groundwater

The soil and soil/shallow bedrock groundwater plumes are identified by AOC, beginning with Area A (OU5). The Area A soil groundwater plumes have multiple apparent source areas and are composed primarily of PCE (**Plate 5-1**). North of the linkway between B309 and B310 the PCE plume is in the glacial till and appears to be sourced near the northwest corner of B309 with the highest concentrations detected in samples collected from well GW-714. Smaller plumes of TCE (**Plate 5-2**), cis-1,2-DCE (**Plate 5-3**), and Freon® TF (**Plate 5-5**) are also present in this area. Near the B310 and B308 linkway, the PCE plume lies in the alluvial sand and gravel above the glaciolacustrine silt/clay and appears to be sourced in the area of the linkway between B310 and B308 where PCE concentrations are greater than 1,000 µg/l. Two GMP monitoring wells (GW-015 and GW-706) and the B384 Sump (shown on **Plate 5-1**) monitor the central portion of the plume in this area. Based on historical data from monitoring wells that are not routinely sampled, this plume segment appears to extend to the east and northeast, in the direction of groundwater flow toward the northwestern corner of B308 where the silt/clay and dense till are absent (the "B308 sink" described in Section 4.1.1 of this report). The PCE plume also appears to extend to the southeast beneath B386. PCE concentrations less than 15 µg/l are detected in groundwater samples collected south of B386 and Facility Drive. Isolated plumes of TCE (**Plate 5-2**), cis-1,2-DCE (**Plate 5-3**), VC (**Plate 5-4**), Freon® TF (**Plate 5-5**) that are less prominent in lateral extent and generally have lower concentrations than the PCE plume, are located in the same general area near the linkway between B310 and B308.

The B/330 AOC (OU8) soil VOC plumes (**Plates 5-1 through 5-5**) have multiple apparent source areas and consist primarily of PCE, with lower concentration and less laterally extensive TCE, cis-1,2-DCE, VC, and Freon® TF plumes. The soil groundwater plumes overlie more laterally extensive plumes in the underlying bedrock (**Plates 5-6 through 5-10**). One of the source areas for the B/330 AOC soil groundwater plumes is located beneath the south-central portion of B330D, near well GW-572 (160,000 µg/l of PCE, **Plate 5-1**). Separate-phase PCE was recovered during sampling of well GW-572 between 1994 and 2001. A second apparent soil groundwater source area is located on the northeast side of B330C, near well GW-956. The PCE-series parameter plumes in this area of the Site appear to be associated with a localized source in the vicinity of soil monitoring well GW-576. The B335 RFI report identified two apparent sources areas in the B335 vicinity, one beneath B335 and the second near well GW-181. The soil groundwater VOC plume in the area between B330D and B335 is of limited horizontal extent, with PCE, TCE, cis-1,2-DCE, and VC concentrations less than 25 µg/l in groundwater sampled from near-source well GW-181. PCE-series and Freon® TF concentrations have been detected at higher concentrations in groundwater samples collected from monitoring wells near B335 and well GW-181 that are not routinely sampled as part of the GMP.

The B/322 AOC (OU7) contains soil groundwater plumes in the alluvial sand and gravel unit consisting primarily of PCE-series compounds PCE (**Plate 5-1**), TCE (**Plate 5-2**), and cis-1,2-DCE (**Plate 5-3**) together with a Freon® TF plume (**Plate 5-5**) with an apparent plume origin in the area of historical solvent storage operations near the former linkway between the former B322 footprint and B320B. The soil groundwater plumes have a southerly component extending from the area northeast of B322 (wells GW-627 and GW-735) toward wells GW-767 and GW-793, and a westerly component extending from the northeast corner of the former B322 footprint toward wells GW-740, GW-768, GW-769, and GW-771. Concentrations of PCE, TCE, cis-1,2-DCE, and Freon® TF do not exceed applicable NYSGQS' west of West Drive.

5.1.1.2 VOC Plumes in Bedrock Groundwater

The deeper bedrock contains several plumes of PCE-series compounds and Freon® TF. Four general areas of VOC presence in bedrock groundwater that currently comprise the Bedrock Remediation Area (OU2) have been identified at the Site as described below:

Northern Portion of the Site Beneath Area A - As shown on **Plates 5-6 through 5-10**, bedrock groundwater plumes located beneath Area A are captured by bedrock extraction well PW-2R. The

Area A bedrock groundwater plumes consist primarily of PCE (**Plate 5-6**) with lower concentration and laterally less extensive plumes of TCE (**Plate 5-7**), cis-1,2-DCE (**Plate 5-8**), and Freon® TF (**Plate 5-10**). VC is detected in extraction well PW-2R samples, but not in samples collected from Area A GMP bedrock monitoring wells. Based on supplemental sampling of GW-012, located south of the B310-B309 linkway, the VC bedrock groundwater plume is inferred to extend from the area south of B309 to well PW-2R, as depicted in **Plate 5-9**. The Area A groundwater plumes originate from at least three apparent source areas, described as follows:

1. *In the shallow soil near the northwest corner of B309 (the "B309 sink").* As discussed in Section 4.1.1 of this report, the silt/clay layer is generally absent in this area, and groundwater impacted by VOCs migrates downward through the till and into the bedrock. This apparent source is highlighted by a PCE concentration of 220 µg/l detected in a sample from bedrock well GW-716 (**Plate 5-6**) on the north side of B310.
2. *In the soils at the northern edge of B308 (the "B308 sink").* As discussed in Section 4.1.1 of this report, groundwater impacted by VOCs in the overlying sand and gravel unit flows beyond the edge of the silt/clay at the northeast and northwest corners of B308 and migrates downward through permeable soils and into the bedrock (**Plate 4-1**).
3. *In the bedrock as indicated by relatively elevated PCE concentrations detected in samples from well GW-118 (including 150,000 µg/l in the second quarter of 2024, **Plate 5-6**).* These concentrations suggest the presence of residual dense non-aqueous phase liquid (DNAPL) in the bedrock beneath Area A.

A Freon® TF plume with a maximum concentration of 1,400 µg/l (well GW-118) exists in the bedrock beneath Area A (**Plate 5-10**) and is captured by extraction well PW-2R. Freon® TF was also detected in a sample collected from well GW-716 (31 µg/l). The apparent origin of the Freon® TF presence is inferred to be the "B309 sink".

Southern Portion of the Site Beneath the B/330 AOC and Area C (Landfill) - The bedrock groundwater plumes of dissolved PCE (**Plate 5-6**), TCE (**Plate 5-7**), cis-1,2-DCE (**Plate 5-8**), VC (**Plate 5-9**), and Freon® TF (**Plate 5-10**) associated with the B/330 AOC have principal sources in the soil and soil/shallow bedrock beneath and proximate to B330C and B330D. An additional bedrock groundwater plume originates in the soil and soil/shallow bedrock associated with the former Area C landfill, where residual mass remains in glacial till and shallow bedrock after excavation of the landfill in the early 1980s. The bedrock groundwater plumes beneath B330C and B330D are captured by bedrock extraction well PW-25.

Northwestern Portion of the Site Beneath the former B322–B320B Linkway - PCE (**Plate 5-6**), and Freon® TF (**Plate 5-10**) are present at low levels, less than 15 µg/l, in wells GW-737, GW-739, GW-742, and PW-1 near B322. The origin of these low concentrations of PCE-series compounds and Freon® TF appears to be the former B320B-B322 linkway area south of B320B. The VOCs in bedrock groundwater in this portion of the Site are captured by bedrock extraction well PW-1.

B/300 Area - A fourth bedrock VOC plume area originates on the northern side of B300 in the area of bedrock wells GW-959 and GW-960. As depicted on **Plates 5-6 through 5-9**, these VOC constituent plumes attenuate beneath B300 a short distance from their apparent origin. Groundwater in this area of the Site is within the apparent limits of hydraulic capture by extraction well PW-25.

5.1.2 VOC Concentration versus Time Graphs

The 2024 VOC concentration data for Contaminant Reduction Monitoring (CRM) and Point of Compliance (POC) wells listed on **Table B-3** in **Appendix B** were reviewed by graphing concentration versus time for PCE-series, and the five principal constituents of the VOC plumes (PCE, TCE, cis-1,2-DCE, VC, and Freon® TF). The PCE-series data normalizes the groundwater concentrations of the transformation products of PCE so as to account for the degradation of PCE by dehalogenation, which occurs at different rates and by different processes across the Site. The PCE-series concentrations were calculated by multiplying the concentrations of TCE, cis-1,2-DCE, and VC by the ratio of the molecular weight of PCE to the molecular weight of each degradation product, and then summing the PCE concentration with the normalized concentrations of these degradation products. In this way, a more useful picture of total contaminant levels can be developed than might otherwise be the case if each of these four compounds were to be examined separately. Semilogarithmic graphs of concentration versus time using data available from 1990 through the end of 2024 are provided as **Figures 5-1 through 5-21,** with the concentrations depicted on a log-scale. The location of the CRM and POC wells are highlighted on **Plate 5-11**. Where multiple or duplicate samples were collected during a single day, the concentration was calculated by averaging the data from samples collected on that day.

Some of these graphs exhibit downward concentration trends that are apparent by inspection. Other graphs suggest seasonal variations in the chemical concentrations. The data have been statistically

evaluated for trend using *USEPA ProUCL*[40]. The non-parametric Mann-Kendall Test for trend was used to analyze the concentration versus time data for the CRM wells. Non-parametric tests do not require that the data be normally distributed, and are valid even when data are missing, tied, or censored (e.g., ND@0.5 µg/l). Statistically significant trends, where they occur, are defined at a significance level of $\alpha = 0.10$ or less, which corresponds to a confidence limit of 90% or higher.

5.1.2.1 Contaminant Reduction Monitoring Wells

The results of the Mann-Kendall Test for trend are shown in **Appendix J** for each CRM well. The statistical outcomes shown in **Appendix J** are summarized below. Several statistically significant trends in concentration are noted for the 10-year period of 2015 to 2024 in the extraction and groundwater monitoring wells:

1. An increasing trend was observed in PCE-series concentrations in Area A (OU5) monitoring well GW-104 (soil) and Freon® TF concentrations in Area A (OU5) monitoring well GW-010 (soil).
2. An increasing trend was observed in PCE-series concentrations in former Area D (OU4) extraction well GW-032B (soil).
3. A decreasing trend was observed in PCE-series and Freon® TF concentrations in Area A (OU5) monitoring well GW-716 (bedrock).
4. A decreasing trend was observed in PCE-series concentrations in former Area B (OU3) shallow extraction well GW-628 (bedrock).
5. An increasing Freon® TF trend was observed in Area C/Bedrock (OU6/OU2) well GW-943.
6. A decreasing trend was observed in PCE-series and Freon® TF concentrations detected in extraction wells PW-1, PW-2/2R, and PW-25.

5.1.2.2 Point-of-Compliance Wells

As required by the Part 373 Permit, the results of the Mann-Kendall Test for trend are shown in **Appendix J** for each POC well. VOC concentration data for samples collected from Area B (OU3) well GW-064 and SEQ (OU9) well GW-990 exhibit statistically significant decreasing PCE-series trends. An increasing trend was observed in PCE-series for Area D (OU4) well GW-067, however it should be noted that all detections of PCE-series parameters in well GW-067 were less than 1.0 µg/l in 2024. The VOC concentration data for the remaining POC wells do not exhibit statistically

[40] USEPA, October 2015, Version 5.1.002.

significant trends. The lack of a trend for many of the POC wells reflects non-detect or stable low-level VOC concentrations that have become asymptotic and are consistently below applicable NYSGQS'.

5.1.3 Changes in Water Quality at Corrective Action Monitoring Wells

As required by the Part 373 Permit, statistically significant changes in water quality at the designated Corrective Action Monitoring (CAM) wells (**Appendix B, Table B-2**) were determined using the Mann-Whitney Test for changes in median concentrations of key compounds (PCE-series and Freon® TF) over time. A statistically significant change was defined at a significance level of $\alpha = 0.10$ or less, which corresponds to a confidence limit of 90 percent or higher. This statistical evaluation was performed by grouping the PCE-series and Freon® TF data (where sufficient detections exist) such that the median concentration of the most recent samples from each well was compared to the median of the older samples collected since 2015. For wells sampled semiannually, this means that the data for 2023-2024 were compared to the data for 2015-2022. For wells sampled quarterly or monthly, this means that the data for 2024 were compared to the data for 2015-2023. In this way, the median concentration of at least four recent samples was compared to the median concentration of the older samples collected over the previous eight to nine years. A summary of CAM wells with statistically significant changes in water quality as determined by the Mann-Whitney test is presented in **Appendix J**.

There were approximately the same number of increasing and decreasing trends where a statistically significant trend in PCE-series or Freon® TF was present. Increasing PCE-series trends are present in wells with stable, low-level VOC concentrations typically below applicable NYSGQS' (see **Appendix F**), including wells GW-032B, GW-048, GW-067, GW-109, GW-757, and GW-999. A similar observation can be made for statistically significant increasing Freon® TF concentrations in wells GW-734, GW-768, GW-769, GW-932 and GW-943 where detections were less than 5 µg/l over the 2015 to 2024 trend period. Minor fluctuations in chemistry related to precipitation may influence trending of these wells. Increasing PCE-series trends in bedrock wells near active extraction wells in central portions of the Site, including wells GW-607, GW-923, GW-929, GW-931, GW-954, GW-959, and GW-960 are likely to be related to shifts in groundwater flow directions associated with overall reductions in the locations and rates of on-Site extraction well withdrawals over the past 15 years. Increasing trends in PCE-series and Freon® TF concentrations in B/322 AOC (OU7) area wells

GW-766, GW-767, GW-768, GW-769 and GW-793 appear to be associated with minor water level fluctuations related to the partial demolition of B322. It should be noted that PCE-series parameters and Freon® TF were not detected in downgradient former B322 extraction well GW-612 in 2024.

5.2 Groundwater Chemistry – PFAS and 1,4-Dioxane

Collection of groundwater samples for PFAS and 1,4-dioxane analyses was completed in 2024 at the locations identified in a Work Plan dated September 13, 2019[41] and approved by NYSDEC and the New York State Department of Health (NYSDOH) in a letter dated November 7, 2019[42]. The sampling locations are shown on **Plate 5-12**. The results of the 1,4-dioxane analyses of the samples collected from groundwater monitoring wells are presented in **Appendix F**, **Table F-1.** The results of the PFAS analyses of the samples collected from groundwater monitoring wells are presented in **Table F-2** of **Appendix F**, and the results of the PFAS analyses of the samples collected from extraction wells and GTF sampling points are found in **Appendix G**, **Table G-1**. PFAS quality assurance, quality control data are presented in **Appendix H**, **Table H-1**. The 1,4-dioxane analytical laboratory results for the samples collected in 2024 are similar to previous sampling and analysis results in 2023. Groundwater samples collected in 2024 were analyzed for PFAS using USEPA Method 1633. Previous groundwater samples were analyzed for PFAS by USEPA Method 537 Revision 1.1 Modified. With the change in analytical method, nineteen (19) additional analytes were reported. Of the nineteen additional parameters, only Perfluoropentanesulfonic acid (PFPeS) was detected in groundwater. The maximum observed concentration of PFPeS in groundwater was 5.1 nanograms per liter (ng/l) in well GW-065. The 2024 groundwater analytical results for the 21 PFAS parameters historically reported are consistent with analytical results from 2023 and earlier.

5.3 Groundwater Chemistry – Inorganics

Inorganic groundwater chemistry data (fluoride, arsenic, nickel, and chromium) for 2024 are presented in **Appendix F**. The presentation of the data in **Appendix F** is consistent with the requirements of the GMP. The results for duplicate samples (split samples) collected for intra-

[41] Dean Chartrand, IBM, September 13, 2019, Letter to Jessica LaClair, *Proposed PFAS and 1,4-Dioxane Monitoring Locations*, IBM East Fishkill Corrective Measures Program, IBM East Fishkill Facility, Hopewell Junction, New York, NYSDEC Part 373 Permit 3-1323-0025-00249-0, EPA ID No. NYD000707901.

[42] Jessica LaClair, York State Department of Environmental Conservation, November 7, 2019, Letter to Dean Chartrand, IBM, Re: *Proposed PFAS and 1,4-Dioxane Monitoring Locations*, Former IBM East Fishkill Facility, East Fishkill, New York, NYSDEC Site No. 314054, EPA ID NYD000707901.

laboratory precision information during 2024 are also presented in **Appendix F** and are discussed in Section 3.3.3.2 of this report. Analytical data for GTF sampling points are presented in **Appendix I**.

Inorganic groundwater quality data for 2024 are consistent with previous sampling overall. Chromium and arsenic were below applicable NYSGQS' in the filtered groundwater samples collected in 2024. Filtered nickel concentrations were highest in GW-769 west of the demolished section of B322 in the B/322 AOC (OU7). Unfiltered nickel concentrations were highest in GW-768, also located west of the demolished section of B322. Total fluoride exceeded the NYSGQS in samples collected from six groundwater monitoring wells in the B/322 AOC (OU7), one monitoring well in Area A (OU5), and the B384 Sump in Area A. Total fluoride concentrations have generally declined and/or become asymptotic.

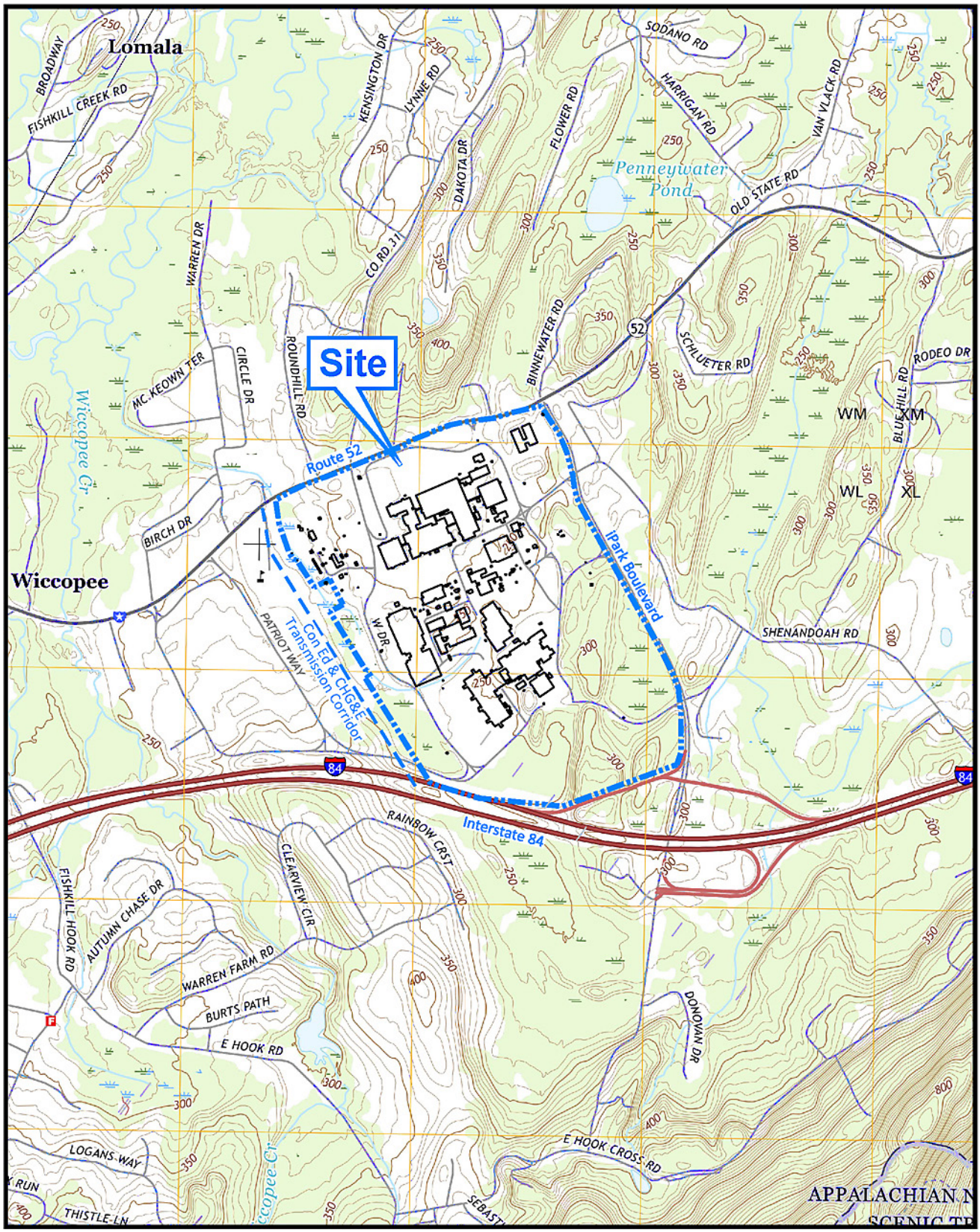
6 EVALUATION OF EFFECTIVENESS AND PROGRESS

Corrective measures implemented at the Site in 2024 include: groundwater collection operations to maintain hydraulic control of groundwater containing VOCs and/or other constituents of potential concern and to reduce the magnitude and extent of overburden and bedrock VOC plume areas; groundwater treatment operations to remove contaminants from the groundwater withdrawals; groundwater monitoring to support assessment of the effectiveness and progress of the groundwater corrective measures; seasonal soil vapor extraction operations in an exterior portion of the Area A AOC to reduce the presence of VOCs in vadose zone soil; assessment of HVAC controls and operation of sub-slab depressurization (SSD) systems to mitigate vapor intrusion potential in certain Site buildings; and monitoring of the indoor air and SSD systems to confirm the effectiveness of the vapor intrusion mitigation measures.

Specific findings regarding the effectiveness and progress achieved to date based on 2024 monitoring are listed below.

- As depicted on **Plate 4-2**, on-Site bedrock extraction well groundwater withdrawals are effective in maintaining hydraulic control of Site bedrock groundwater by maintaining inward lateral hydraulic gradients that extend beyond the perimeter of the Site.
- As depicted on **Plates 5-6 through 5-10**, on-Site bedrock extraction well groundwater withdrawals are effective at maintaining capture of bedrock VOC plume areas and areas where PFAS and/or 1,4-dioxane are present in bedrock groundwater. The collective groundwater withdrawals prevent the migration of groundwater exceeding applicable NYSGQS' beyond the boundaries of the Site.
- On-Site bedrock extraction well withdrawals are effective at reducing VOC plume areas in bedrock groundwater, based on: 1) removal of approximately 4,570 lbs of VOCs in 2024; 2) historical reductions in the lateral extent and magnitude of bedrock VOC plume areas; and 3) continuation of stable or declining concentration trends based on 2024 sampling of individual bedrock monitoring wells.
- As depicted in **Plates 4-1 and 4-2** & **Plates 5-1 through 5-5**, the on-Site bedrock groundwater withdrawals also result in steep vertical downward hydraulic gradients between soil (overburden) and bedrock, resulting in hydraulic control of VOC plume areas in overburden groundwater.
- Operation of the overburden groundwater collection sump in B384 is effective at capturing a portion of the VOC plume area in the overburden near B384 in the Area A AOC.

- As discussed in the Vapor Intrusion Assessment and Mitigation 2024 Annual Report provided in Appendix K, operation of the Area A SVE system is effective in removing VOC mass from the vadose zone in the area of the linkway between B310 and B308. The Area A SVE system removed approximately 25 lbs of PCE in 2024.
- The groundwater monitoring well network and GMP are sufficient to delineate overburden and bedrock groundwater potentiometric levels and flow directions in VOC plume areas and/or areas of other constituents of potential concern.
- The groundwater monitoring network and GMP are sufficient to assess trends in groundwater water quality in apparent source areas, groundwater plume areas, and/or near the perimeter of the Site.
- The groundwater collection and treatment technologies employed at the Site are effective with greater than 83.9% operational efficiency and greater than 99.9% VOC treatment efficiency.
- The potential for vapor intrusion into buildings is mitigated through the implementation of: 1) operation of SSD systems; and 2) changes to HVAC operations. The effectiveness of the vapor intrusion mitigation measures to remove mass from the vadose zone is confirmed through monitoring of the indoor air and SSD systems, which were effective at removing approximately 328 lbs of PCE in 2024.



Portion of the Hopewell Junction, NY
7.5-minute USGS Quadrangle
(2016)

Approximate

Scale
0 1000' 2000'

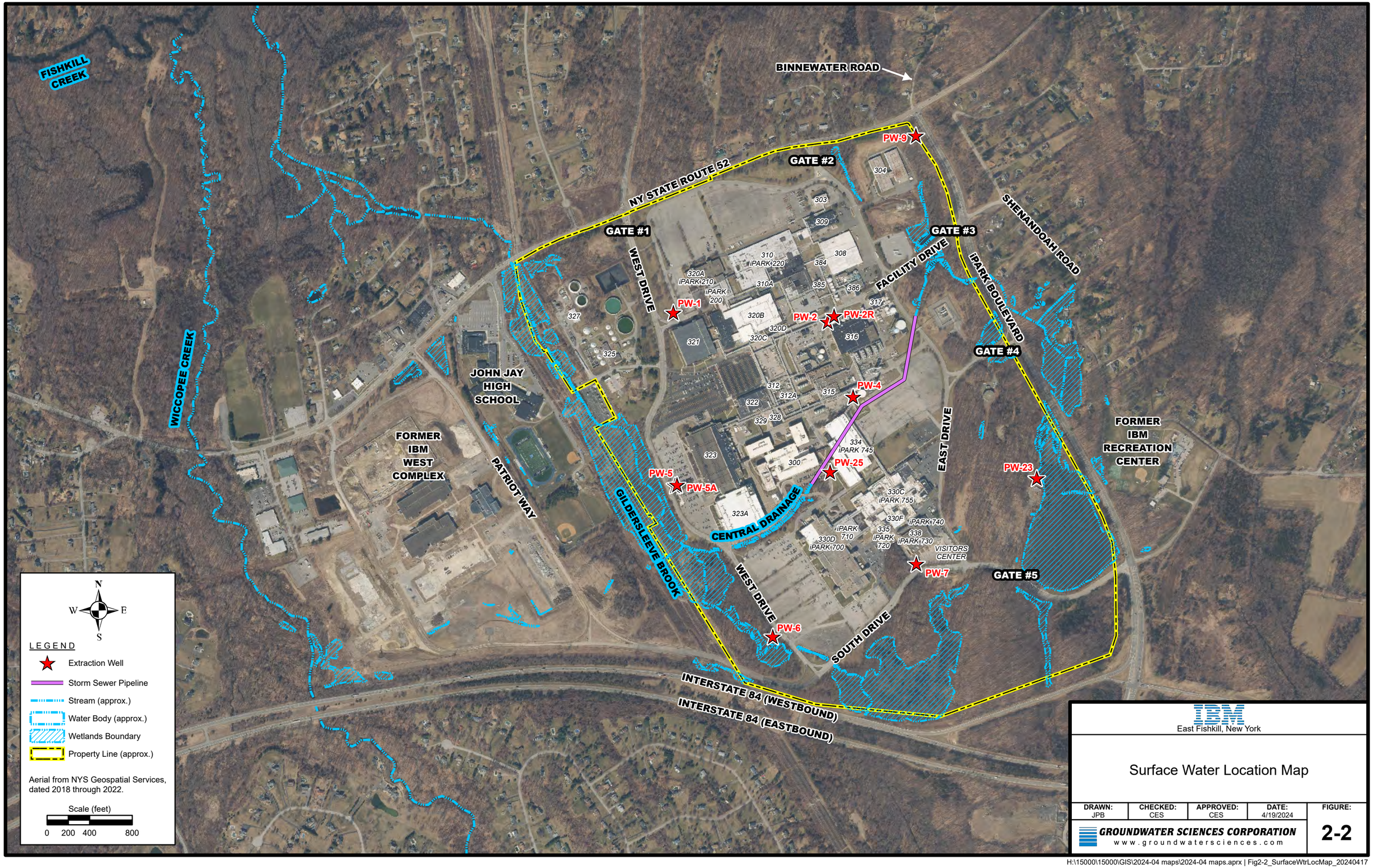
Figure 2-1

Former IBM East Fishkill Remediation

Site Location Map

GROUNDWATER SCIENCES CORPORATION

15000-034-B1 / 4-11-2025



H:\15000\15000\GIS\2024-04 maps\2024-04 maps.aprx | Fig2-2_SurfaceWtrLocMap_20240417

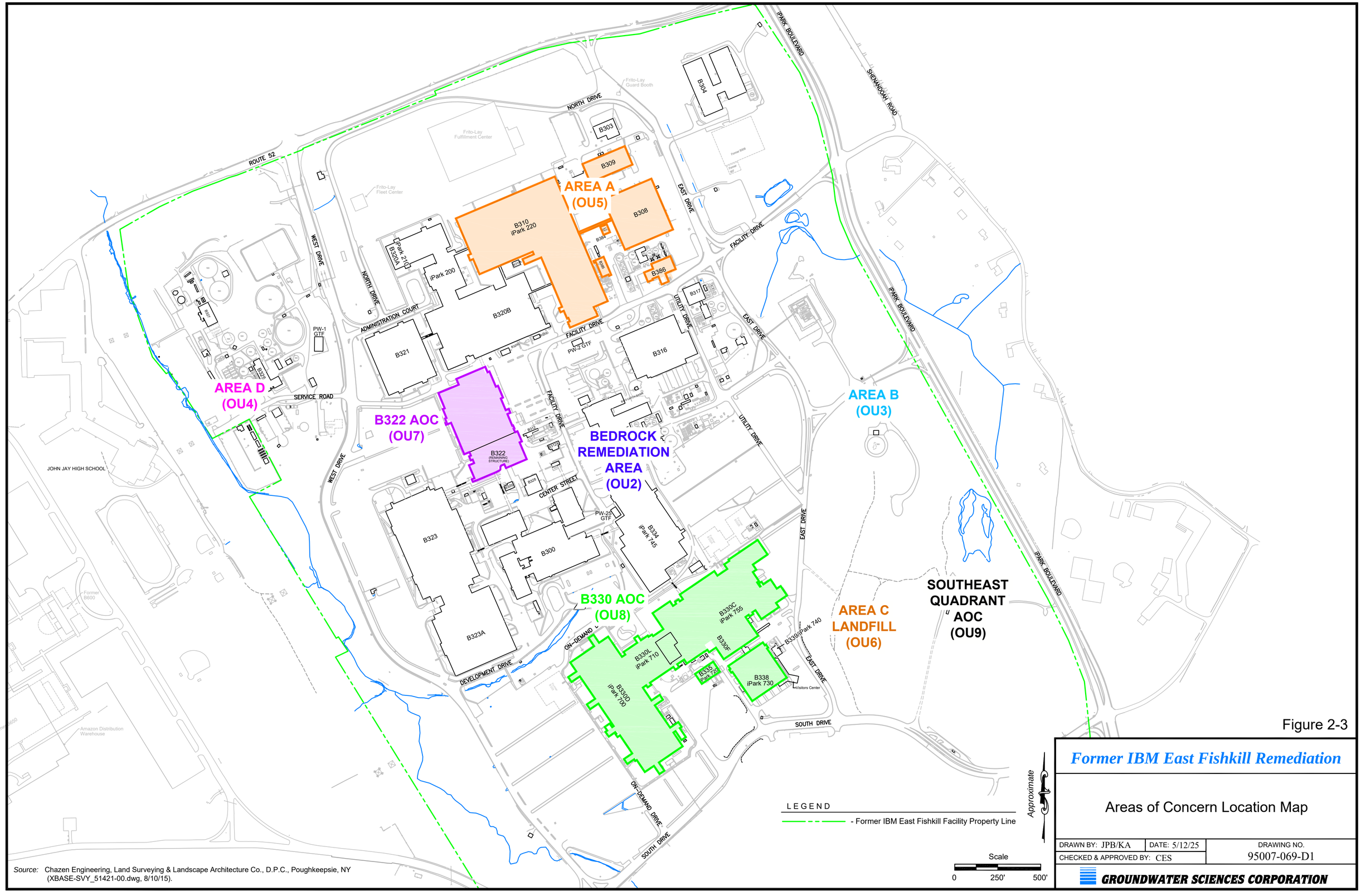


Figure 2-3

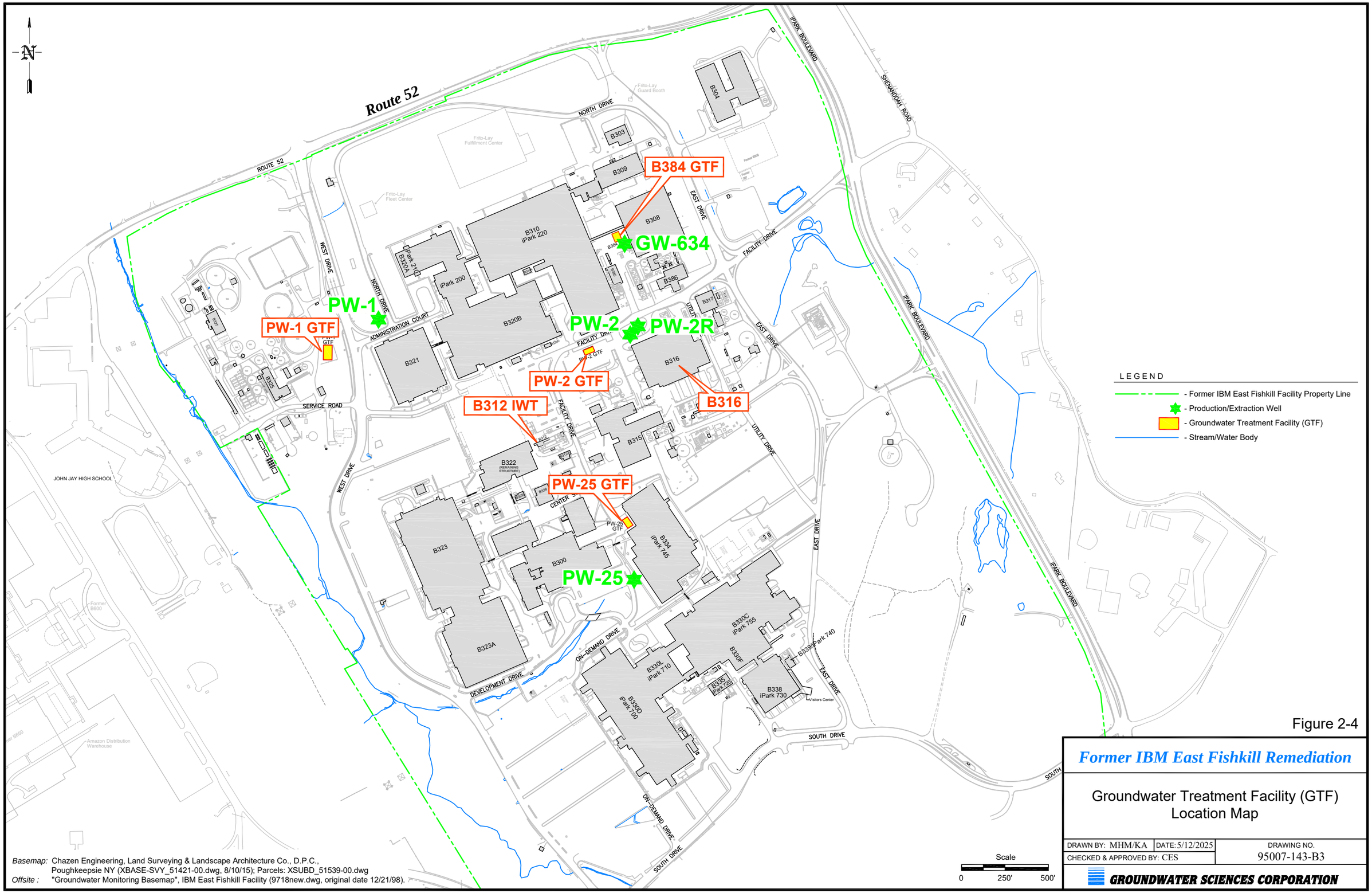
Source: Chazen Engineering, Land Surveying & Landscape Architecture Co., D.P.C., Poughkeepsie, NY (XBASE-SVY_51421-00.dwg, 8/10/15).

Former IBM East Fishkill Remediation

Areas of Concern Location Map

DRAWN BY: JPB/KA	DATE: 5/12/25	DRAWING NO. 95007-069-D1
CHECKED & APPROVED BY: CES		

GROUNDWATER SCIENCES CORPORATION



Basemap: Chazen Engineering, Land Surveying & Landscape Architecture Co., D.P.C., Poughkeepsie NY (XBASE-SVY_51421-00.dwg, 8/10/15); Parcels: XSUBD_51539-00.dwg

Offsite : "Groundwater Monitoring Basemap", IBM East Fishkill Facility (9718new.dwg, original date 12/21/98).

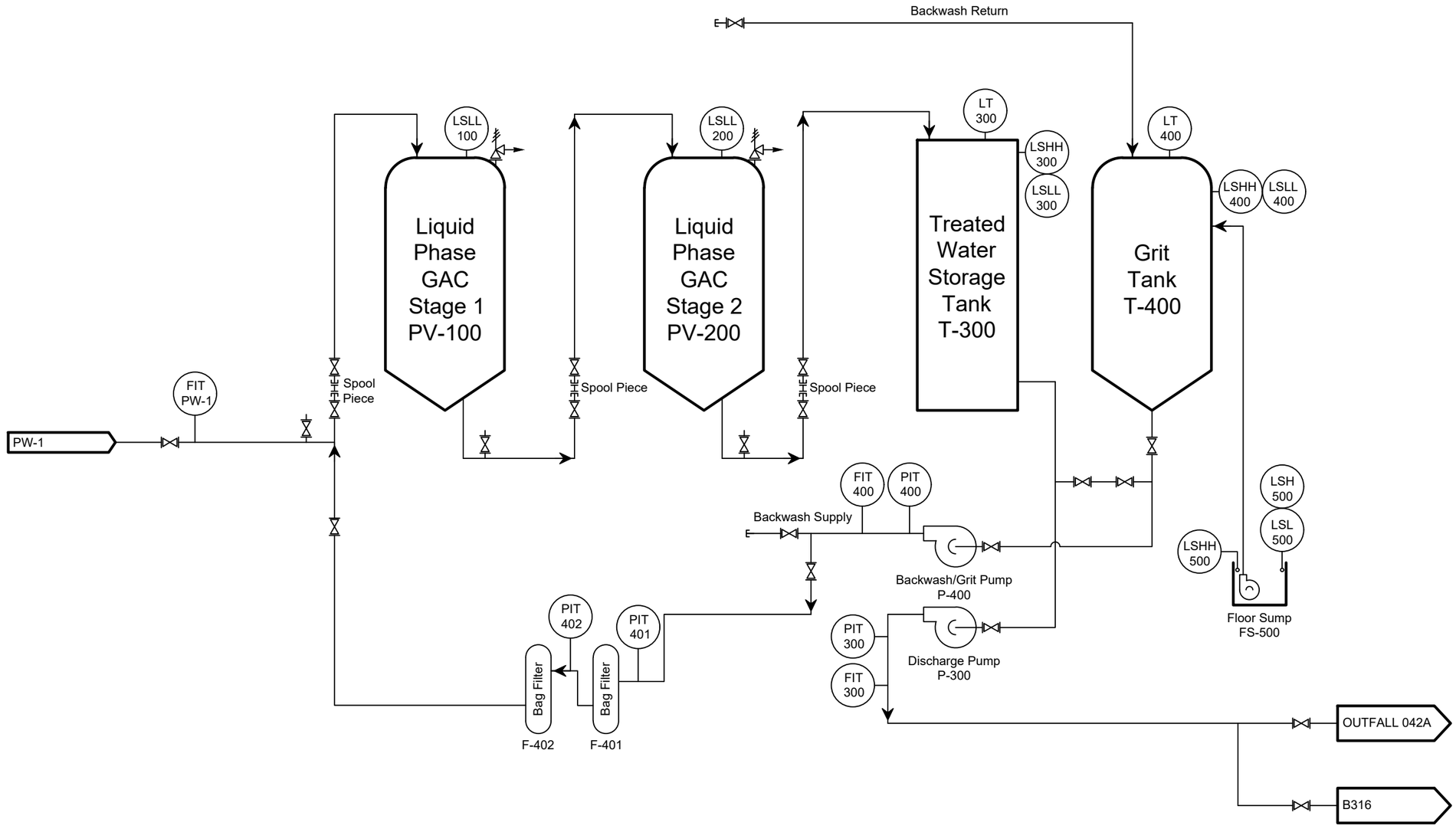
Figure 2-4

Former IBM East Fishkill Remediation

Groundwater Treatment Facility (GTF) Location Map

DRAWN BY: MHM/KA	DATE: 5/12/2025	DRAWING NO. 95007-143-B3
CHECKED & APPROVED BY: CES		

GROUNDWATER SCIENCES CORPORATION



LEGEND:

- Sample Port
- Valve
- Cross Over
- Direction of Flow
- Anti-Siphon Valve
- Air Release Valve
- Instrument (XXX / XXX)
- Pump

Not to Scale

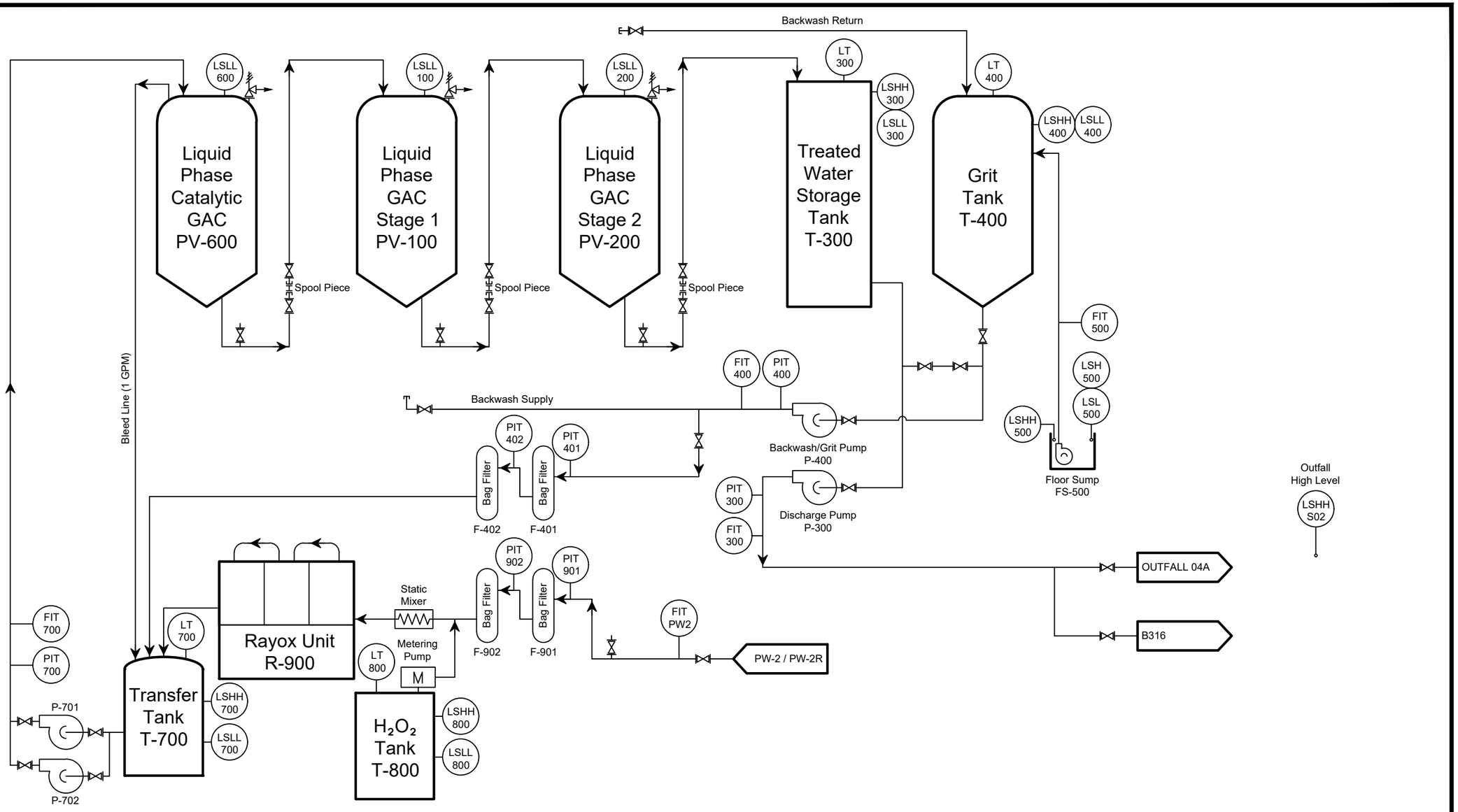
Former IBM East Fishkill Remediation

PW-1 Groundwater Treatment Facility Process Flow Diagram

DRAWN:	CHECKED:	APPROVED:	DATE:	FIGURE:
JPB	MTL/CES	MTL/CES	4/10/2025	2-5

GROUNDWATER SCIENCES, P.C.
www.groundwatersciences.com

\\hburgfs05\Data\15000\15000\Project Next\CAD\15000C005.dwg / B2_PW-1



LEGEND:

- Sample Port
- Valve
- Cross Over
- Direction of Flow
- Anti-Siphon Valve
- Air Release Valve
- Instrument (xxxx / xxx)
- Pump

Not to Scale

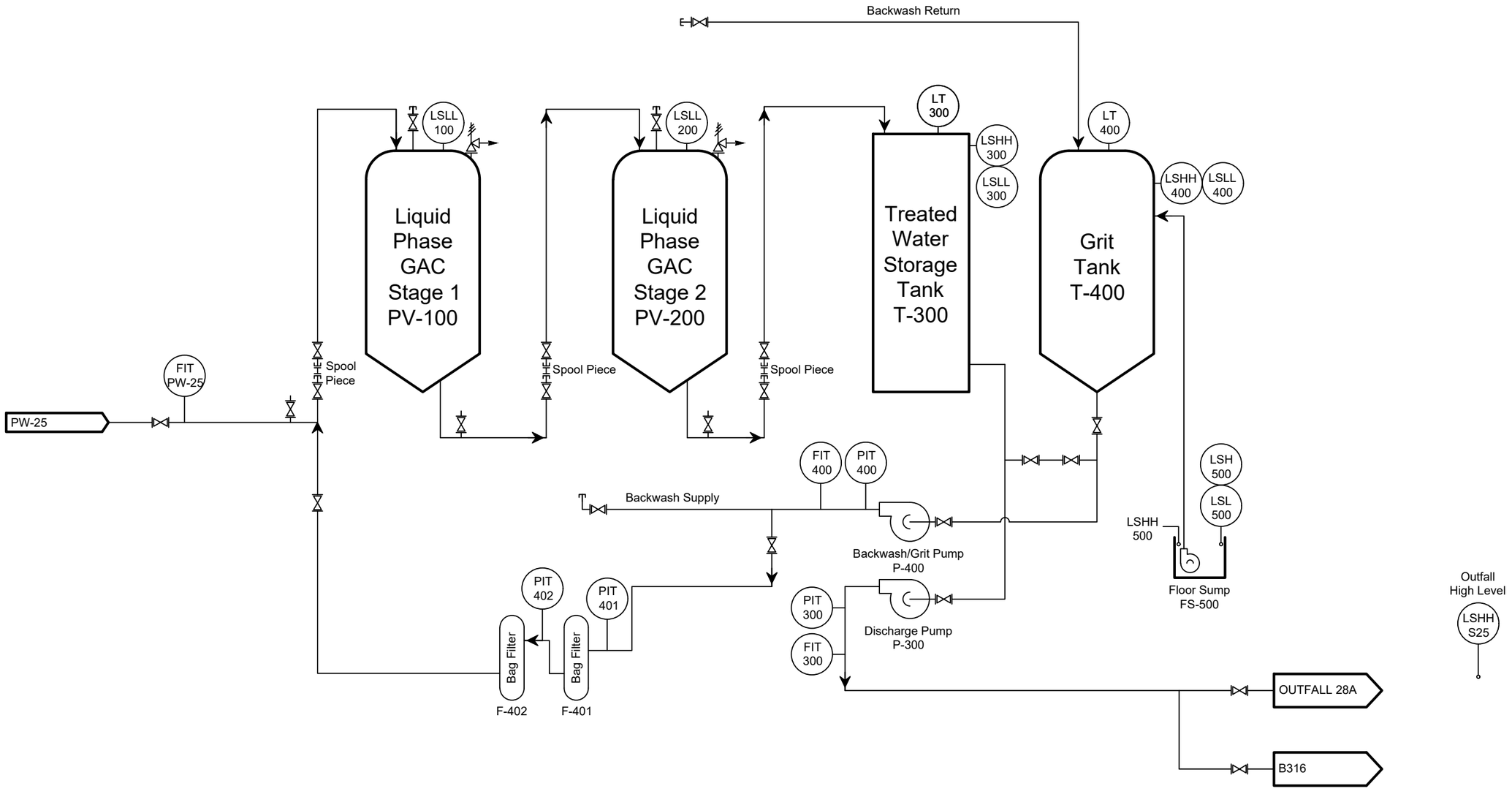
Former IBM East Fishkill Remediation

PW-2 Groundwater Treatment Facility Process Flow Diagram

DRAWN:	CHECKED:	APPROVED:	DATE:	FIGURE:
JPB	MTL/CES	MTL/CES	4/10/2025	2-6

GROUNDWATER SCIENCES, P.C.
www.groundwatersciences.com

\\hburgfs05\Data\15000\15000\Project Next\CAD\15000C005.dwg / B3_PW-2



LEGEND:

- Sample Port
- Valve
- Cross Over
- Direction of Flow
- Anti-Siphon Valve
- Air Release Valve
- Instrument (XXXX / XXX)
- Pump

Not to Scale

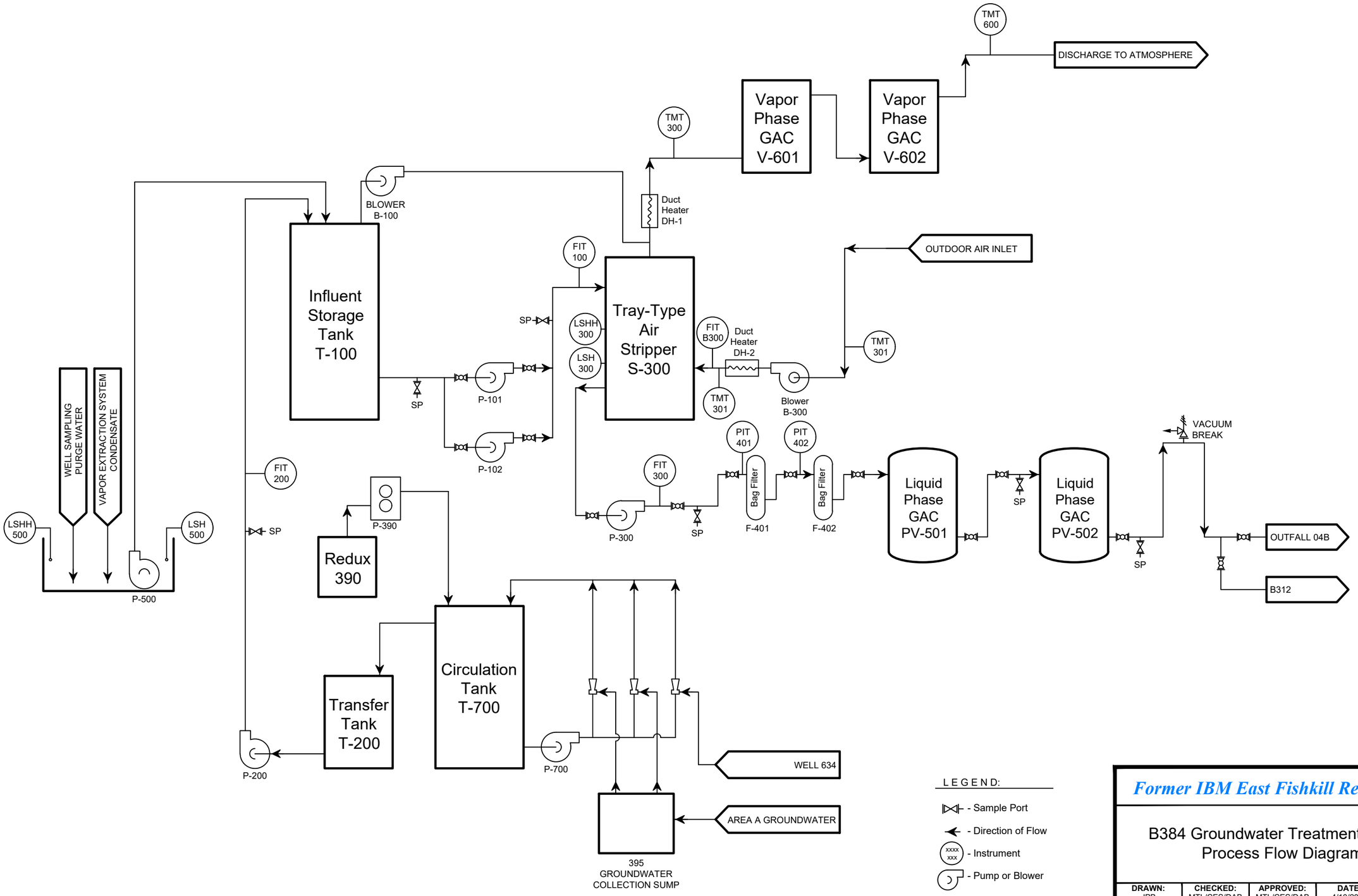
Former IBM East Fishkill Remediation

PW-25 Groundwater Treatment Facility Process Flow Diagram

DRAWN:	CHECKED:	APPROVED:	DATE:	FIGURE:
JPB	MTL/CES	MTL/CES	4/10/2025	2-7

GROUNDWATER SCIENCES, P.C.
www.groundwatersciences.com

\\hburgfs05\Data\15000\15000\Project Next\CAD\15000C005.dwg / B4_PW-25



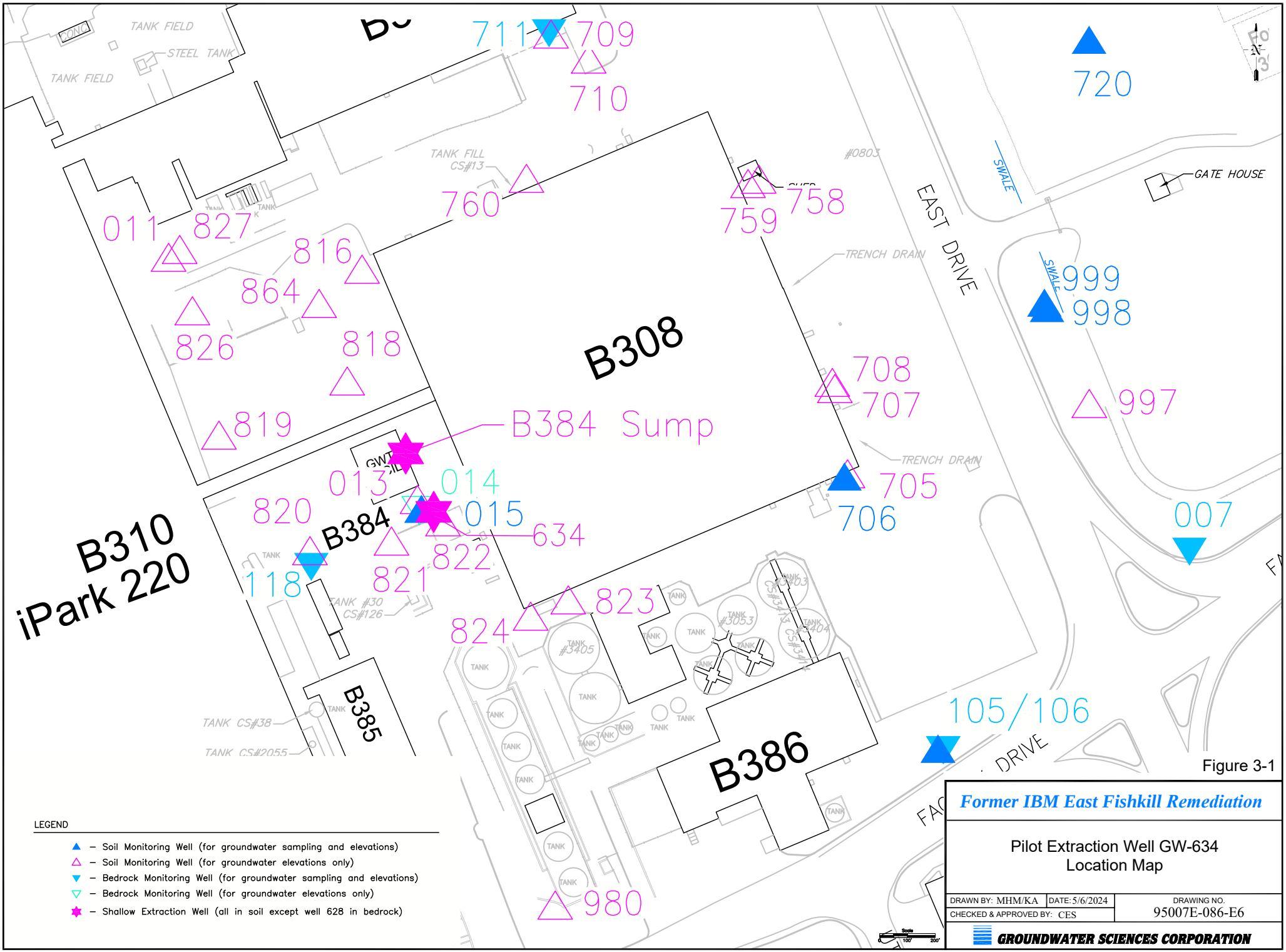
Former IBM East Fishkill Remediation

B384 Groundwater Treatment Facility Process Flow Diagram

DRAWN:	CHECKED:	APPROVED:	DATE:	FIGURE:
JPB	MTL/CES/DAB	MTL/CES/DAB	4/10/2025	2-8

GROUNDWATER SCIENCES, P.C.
www.groundwatersciences.com

\\hburgfs05\Data\15000\15000\Project Next\CAD\15000C005.dwg / B1_B384



LEGEND

- ▲ – Soil Monitoring Well (for groundwater sampling and elevations)
- △ – Soil Monitoring Well (for groundwater elevations only)
- ▼ – Bedrock Monitoring Well (for groundwater sampling and elevations)
- ▽ – Bedrock Monitoring Well (for groundwater elevations only)
- ✸ – Shallow Extraction Well (all in soil except well 628 in bedrock)

Figure 3-1

Former IBM East Fishkill Remediation

Pilot Extraction Well GW-634
Location Map

DRAWN BY: MHM/KA	DATE: 5/6/2024	DRAWING NO. 95007E-086-E6
CHECKED & APPROVED BY: CES		

GROUNDWATER SCIENCES CORPORATION

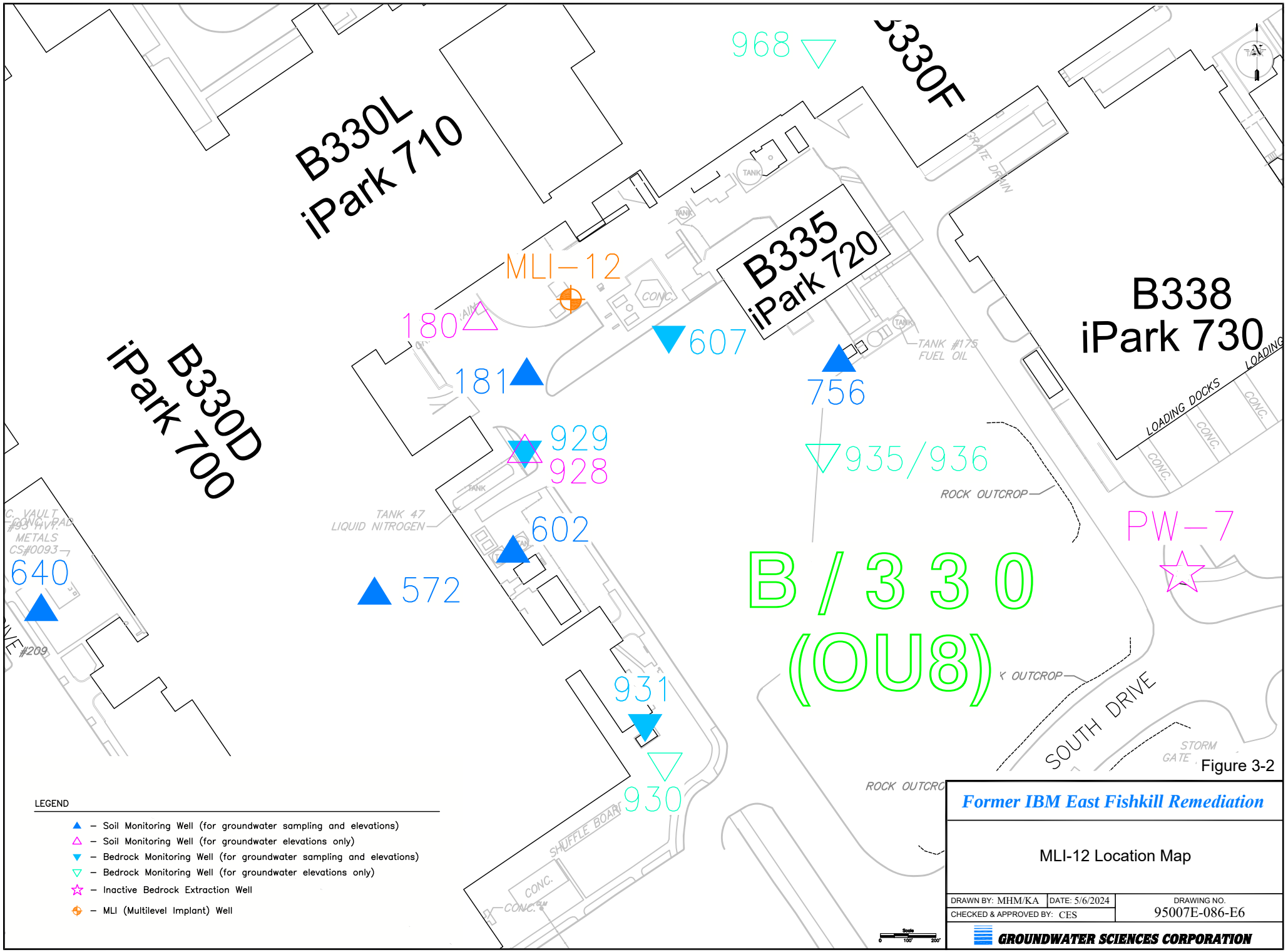


Figure 3-2

Former IBM East Fishkill Remediation

MLI-12 Location Map

DRAWN BY: MHM/KA	DATE: 5/6/2024	DRAWING NO. 95007E-086-E6
CHECKED & APPROVED BY: CES		

GROUNDWATER SCIENCES CORPORATION

Former IBM East Fishkill Remediation
GW-010 (Soil)

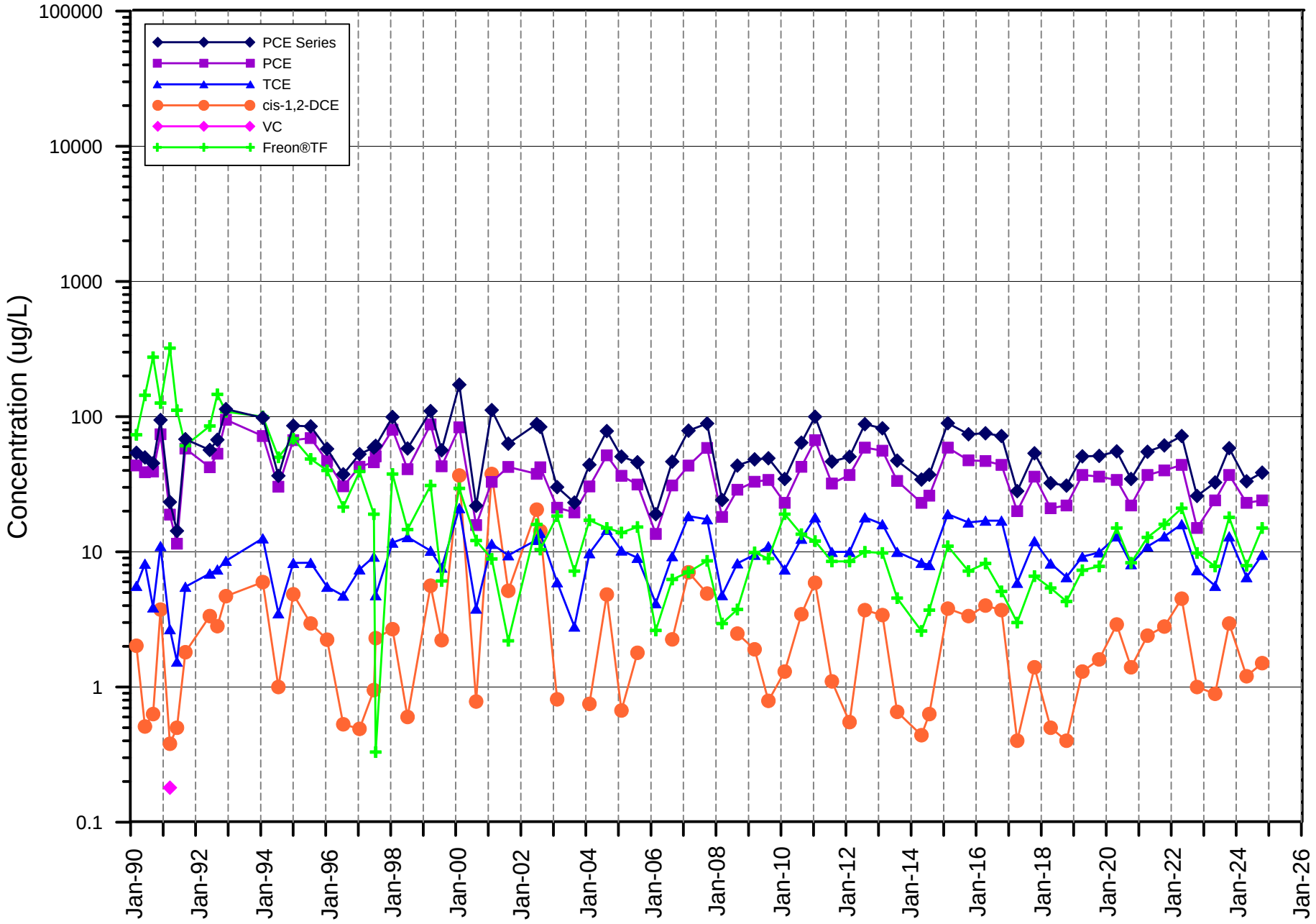


Figure 5-1

Former IBM East Fishkill Remediation
GW-016 (Soil)

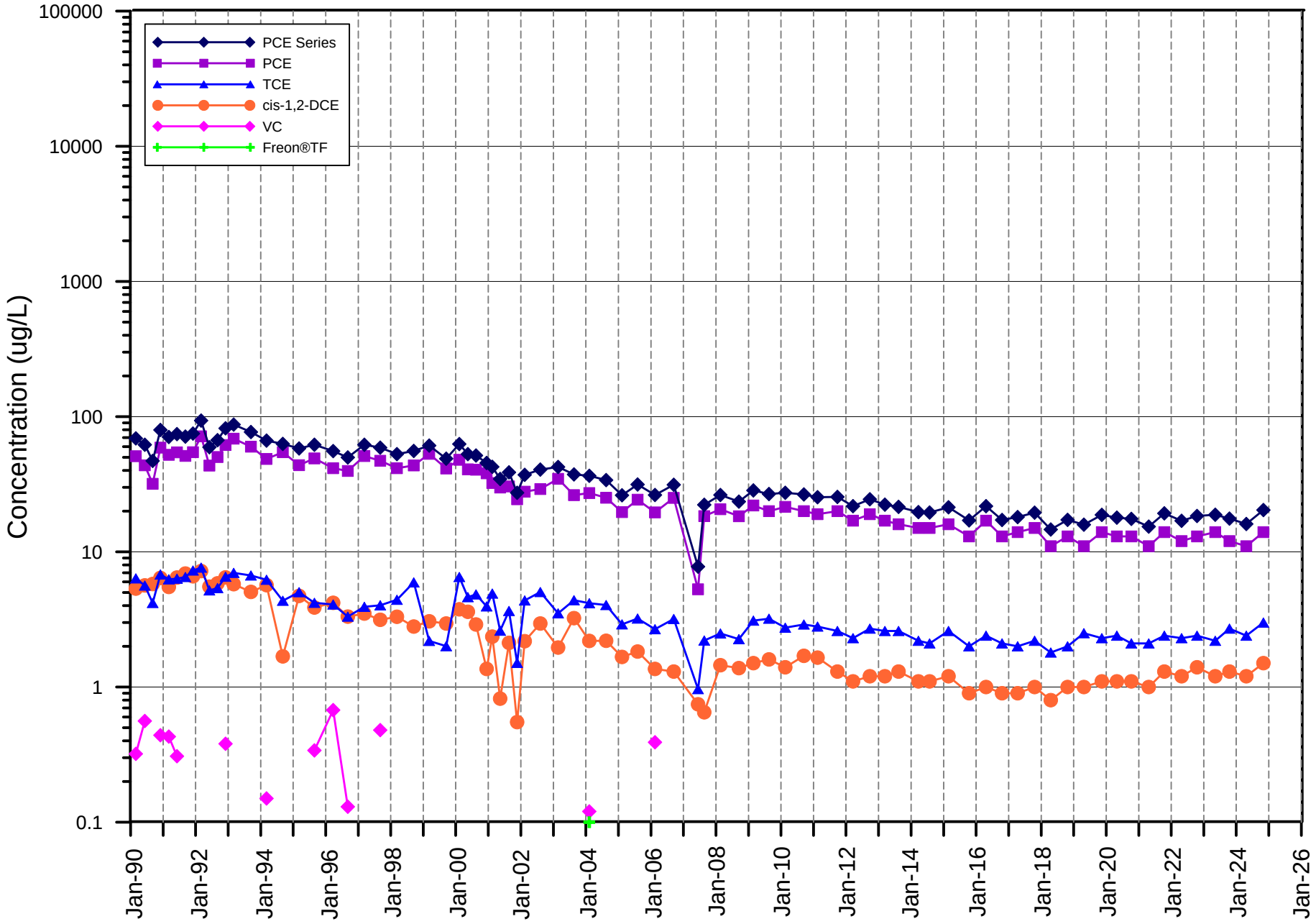


Figure 5-2

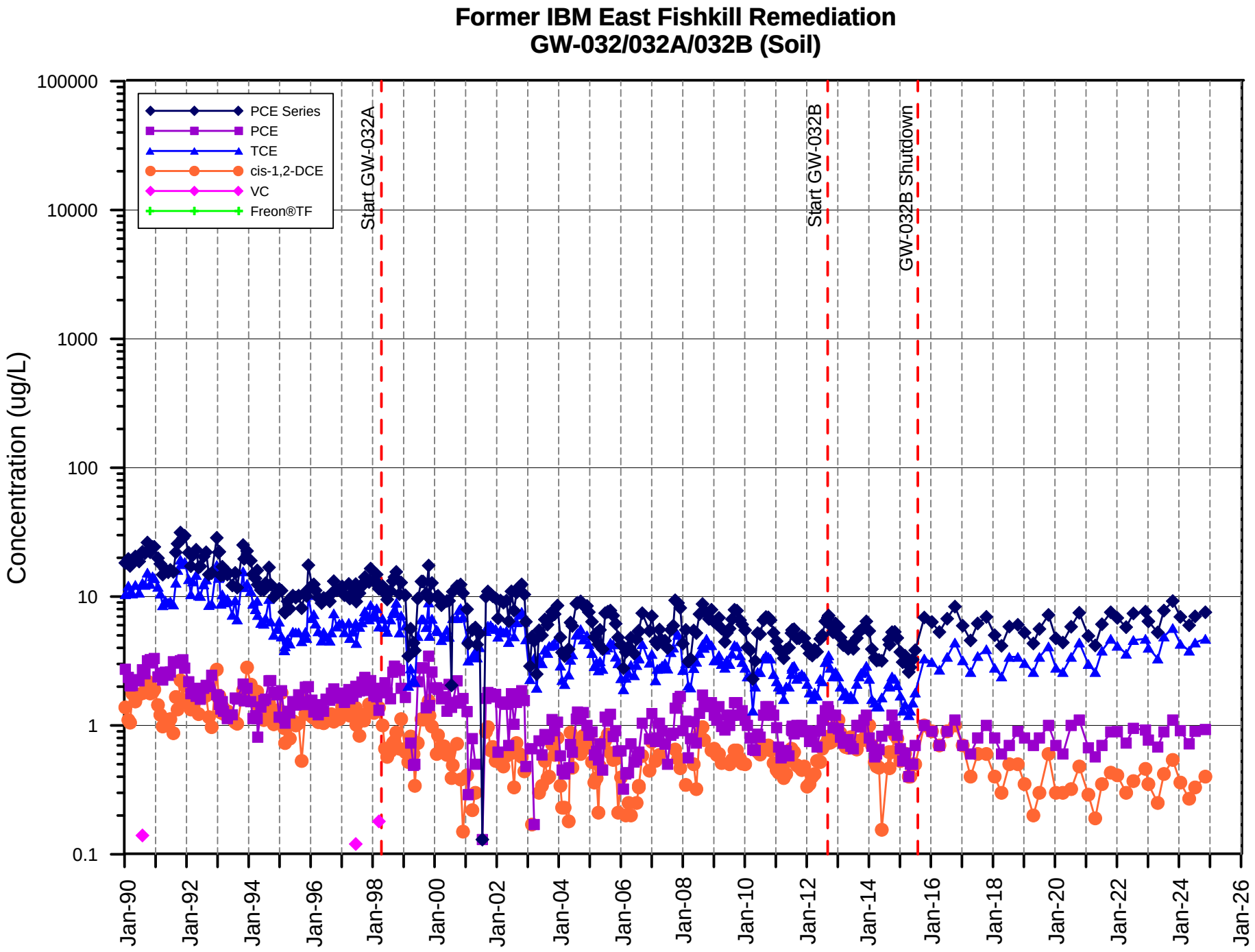

Former IBM East Fishkill Remediation
GW-032/032A/032B (Soil)
PCE Series
PCE
TCE
cis-1,2-DCE
VC
Freon®TF
Start GW-032A
Start GW-032B
GW-032B Shutdown
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-90
Jan-92
Jan-94
Jan-96
Jan-98
Jan-00
Jan-02
Jan-04
Jan-06
Jan-08
Jan-10
Jan-12
Jan-14
Jan-16
Jan-18
Jan-20
Jan-22
Jan-24
Jan-26

Figure 5-3

Former IBM East Fishkill Remediation
GW-103 (Soil)

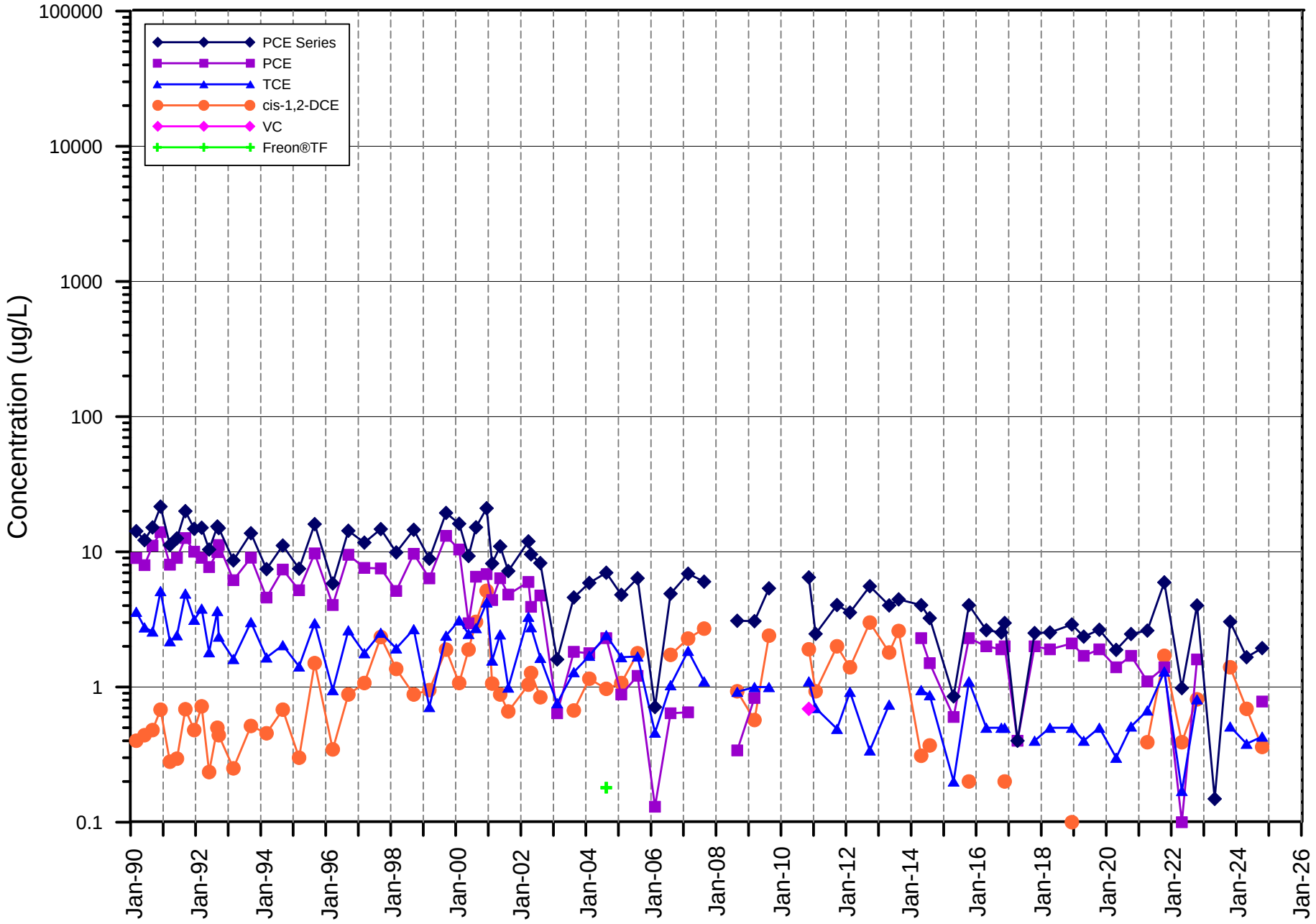


Figure 5-4

Former IBM East Fishkill Remediation
GW-104 (Soil)

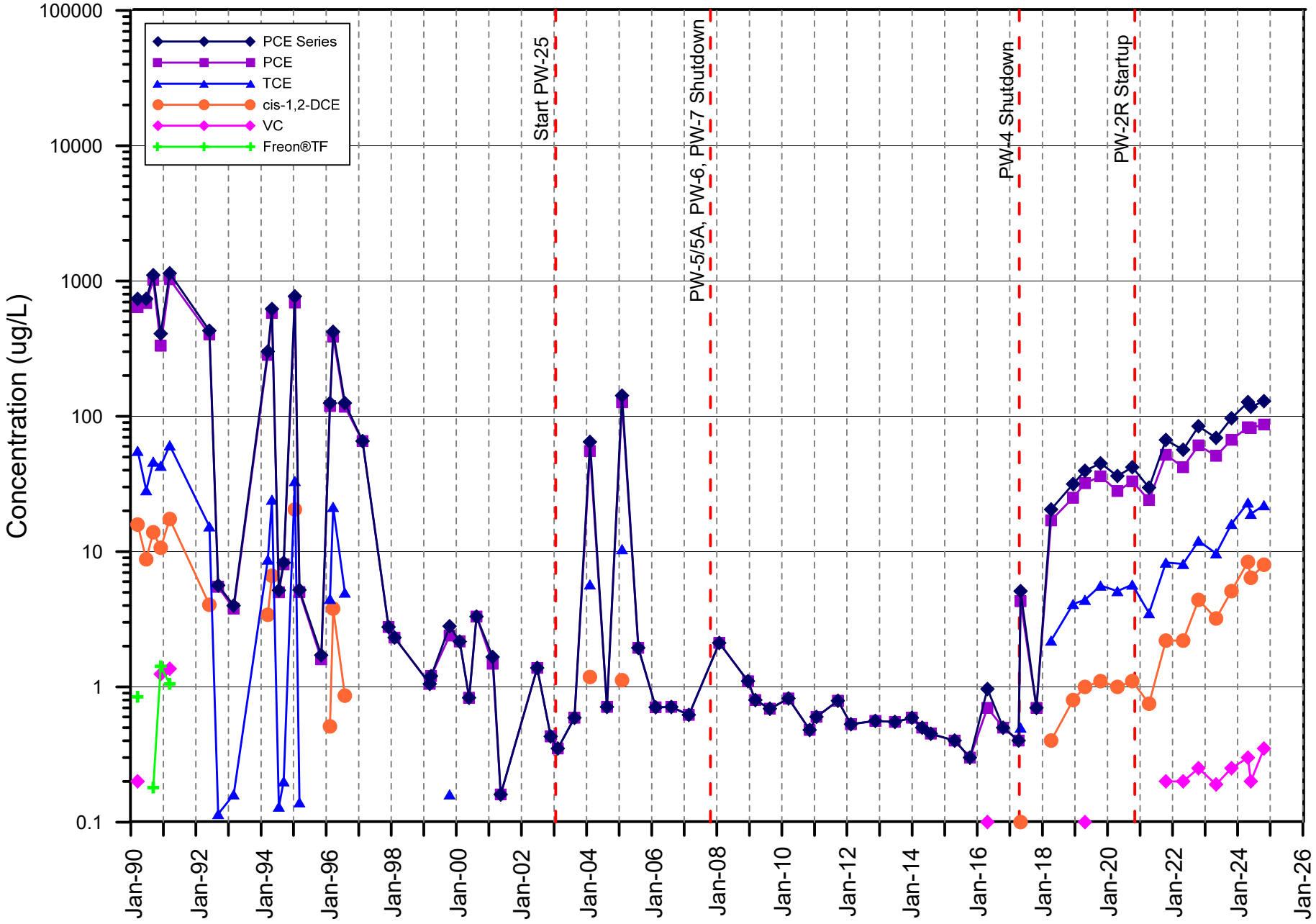


Figure 5-5

Former IBM East Fishkill Remediation
GW-105 (Bedrock)

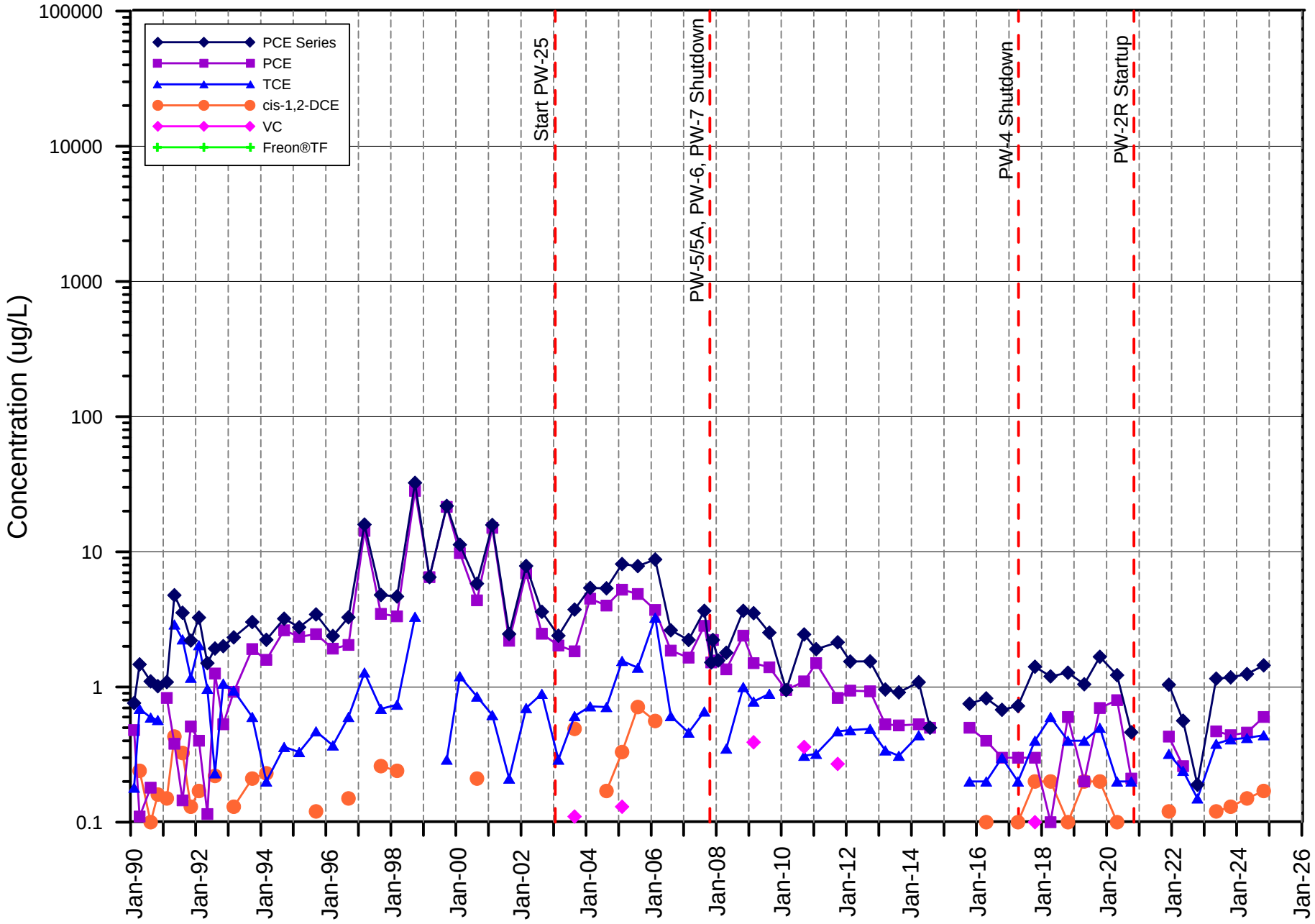


Figure 5-6

Former IBM East Fishkill Remediation
GW-612 (Soil)

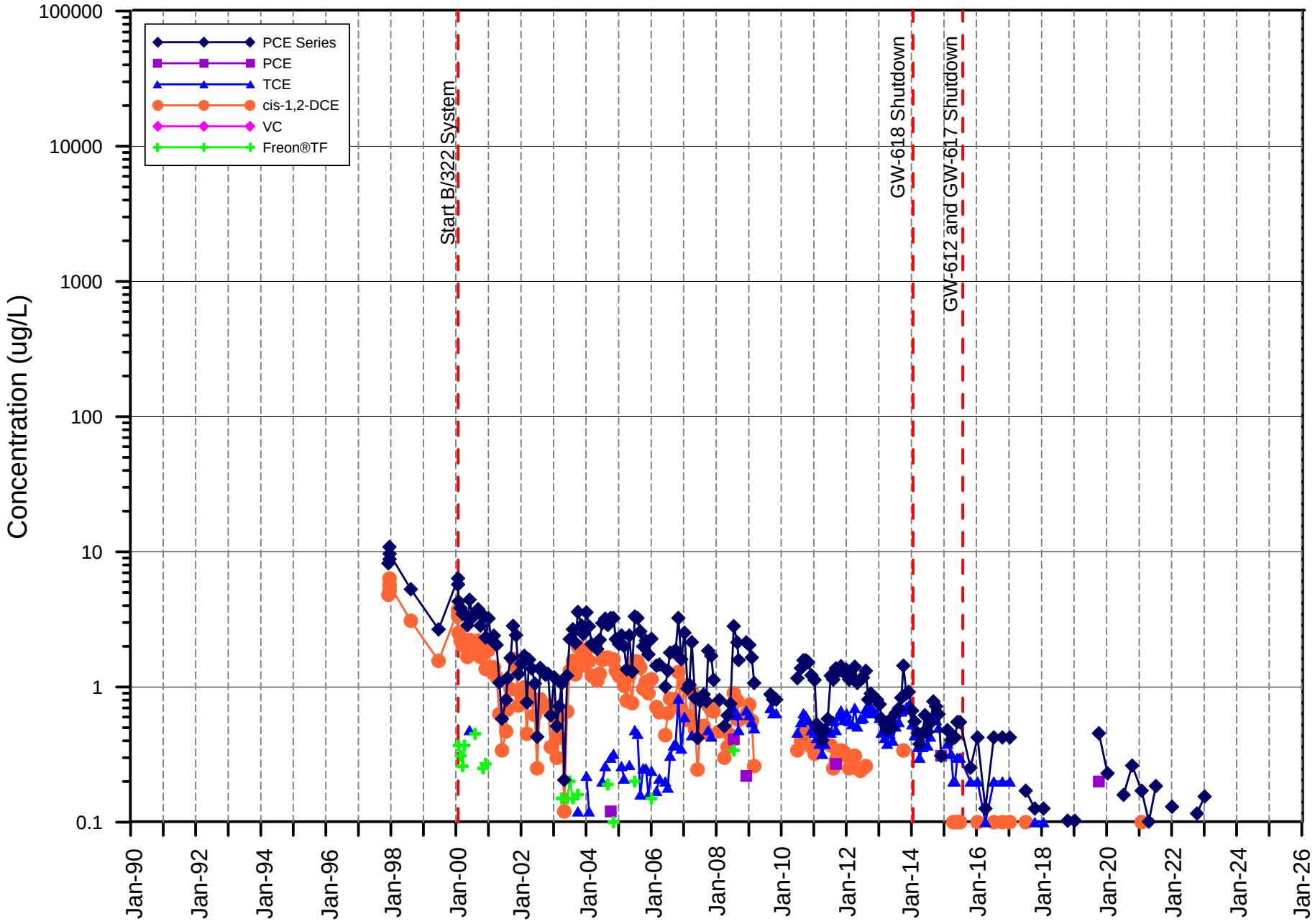


Figure 5-7

Former IBM East Fishkill Remediation
GW-714 (Soil)

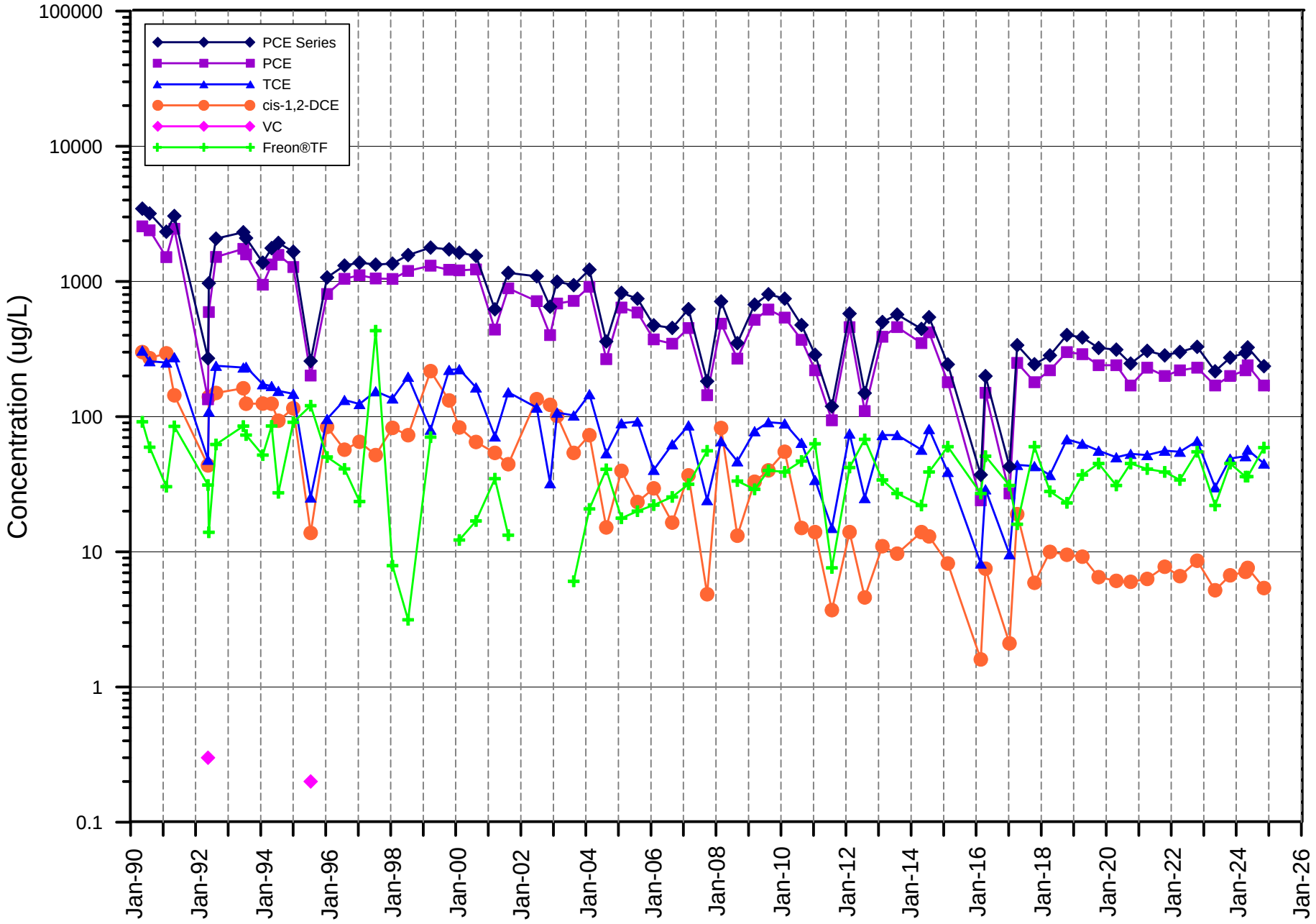


Figure 5-8

Former IBM East Fishkill Remediation
GW-716 (Bedrock)

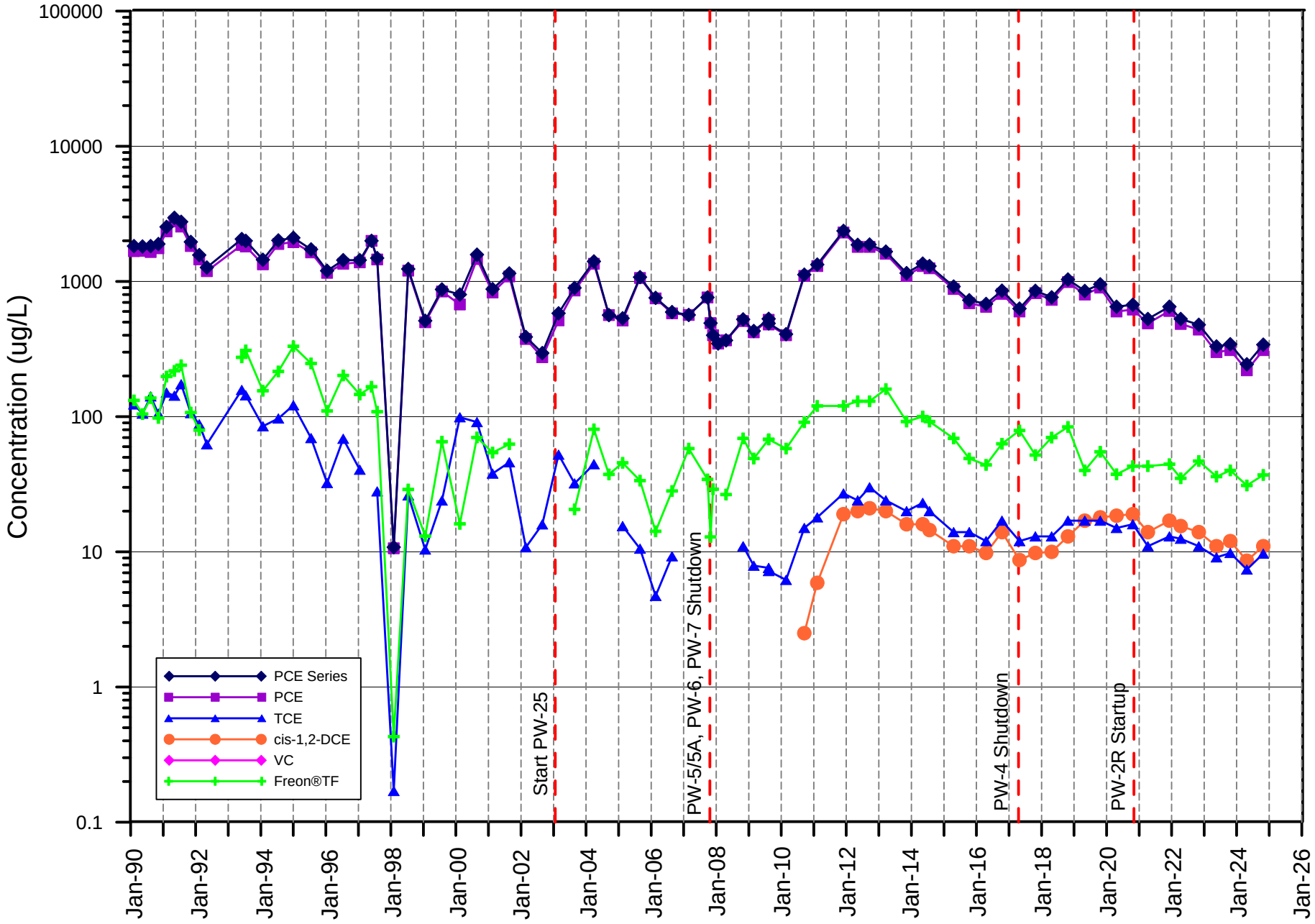


Figure 5-9

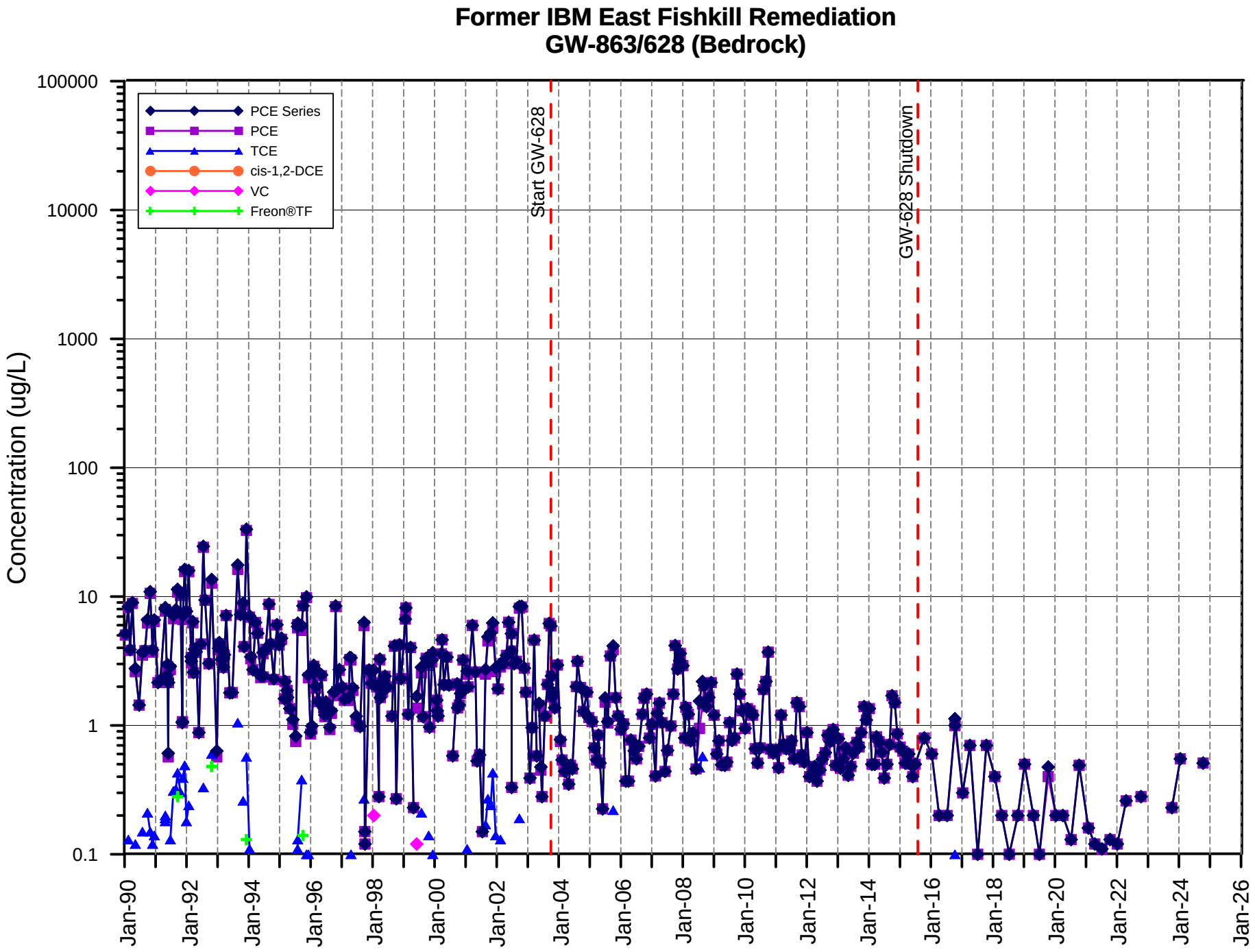

Former IBM East Fishkill Remediation
GW-863/628 (Bedrock)
PCE Series
PCE
TCE
cis-1,2-DCE
VC
Freon®TF
Start GW-628
GW-628 Shutdown
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-90
Jan-92
Jan-94
Jan-96
Jan-98
Jan-00
Jan-02
Jan-04
Jan-06
Jan-08
Jan-10
Jan-12
Jan-14
Jan-16
Jan-18
Jan-20
Jan-22
Jan-24
Jan-26

Figure 5-10

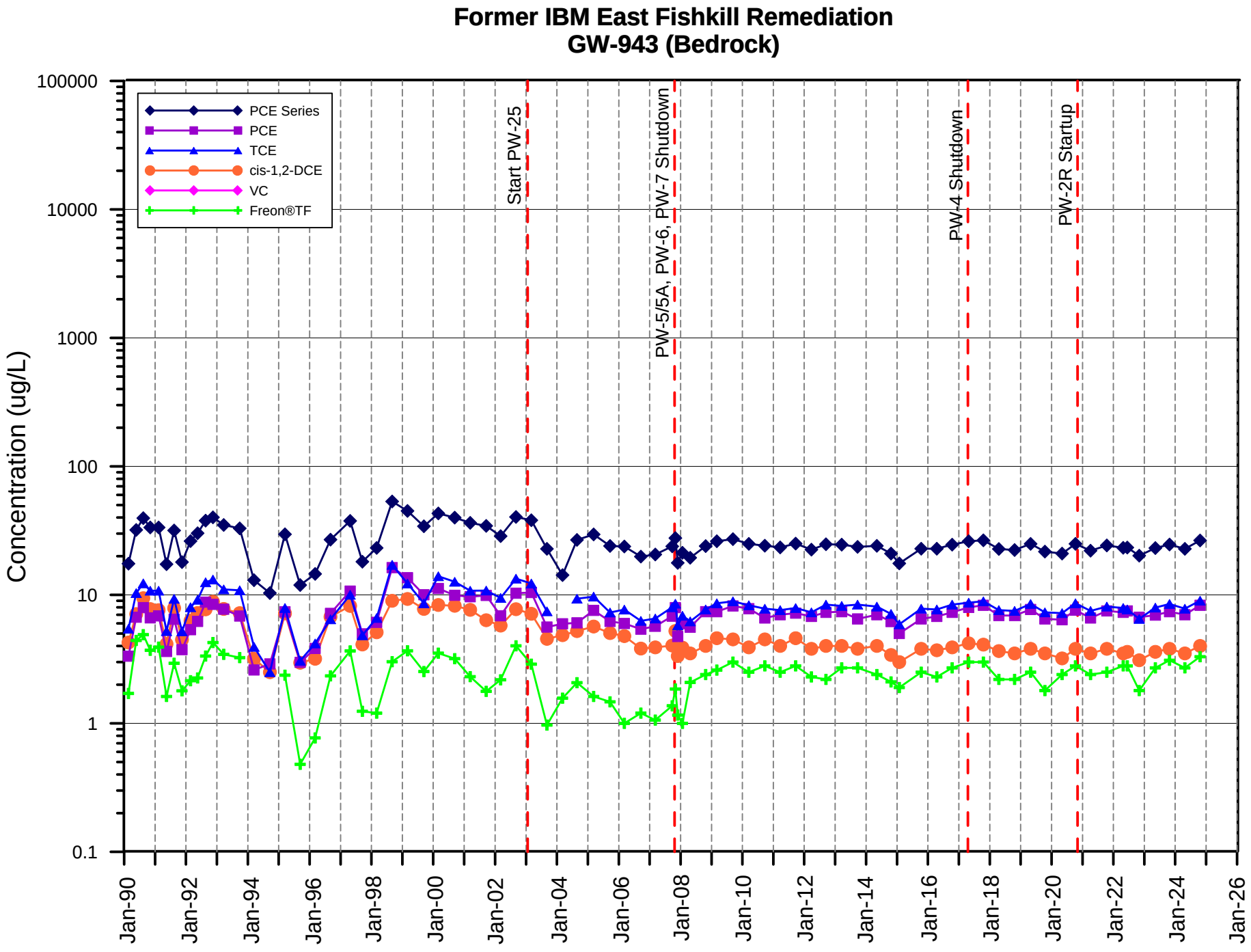

Former IBM East Fishkill Remediation
GW-943 (Bedrock)
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
PCE Series
PCE
TCE
cis-1,2-DCE
VC
Freon®TF
Start PW-25
PW-5/5A, PW-6, PW-7 Shutdown
PW-4 Shutdown
PW-2R Startup
Jan-90
Jan-92
Jan-94
Jan-96
Jan-98
Jan-00
Jan-02
Jan-04
Jan-06
Jan-08
Jan-10
Jan-12
Jan-14
Jan-16
Jan-18
Jan-20
Jan-22
Jan-24
Jan-26

Figure 5-11

Former IBM East Fishkill Remediation
PW-1 (Bedrock)

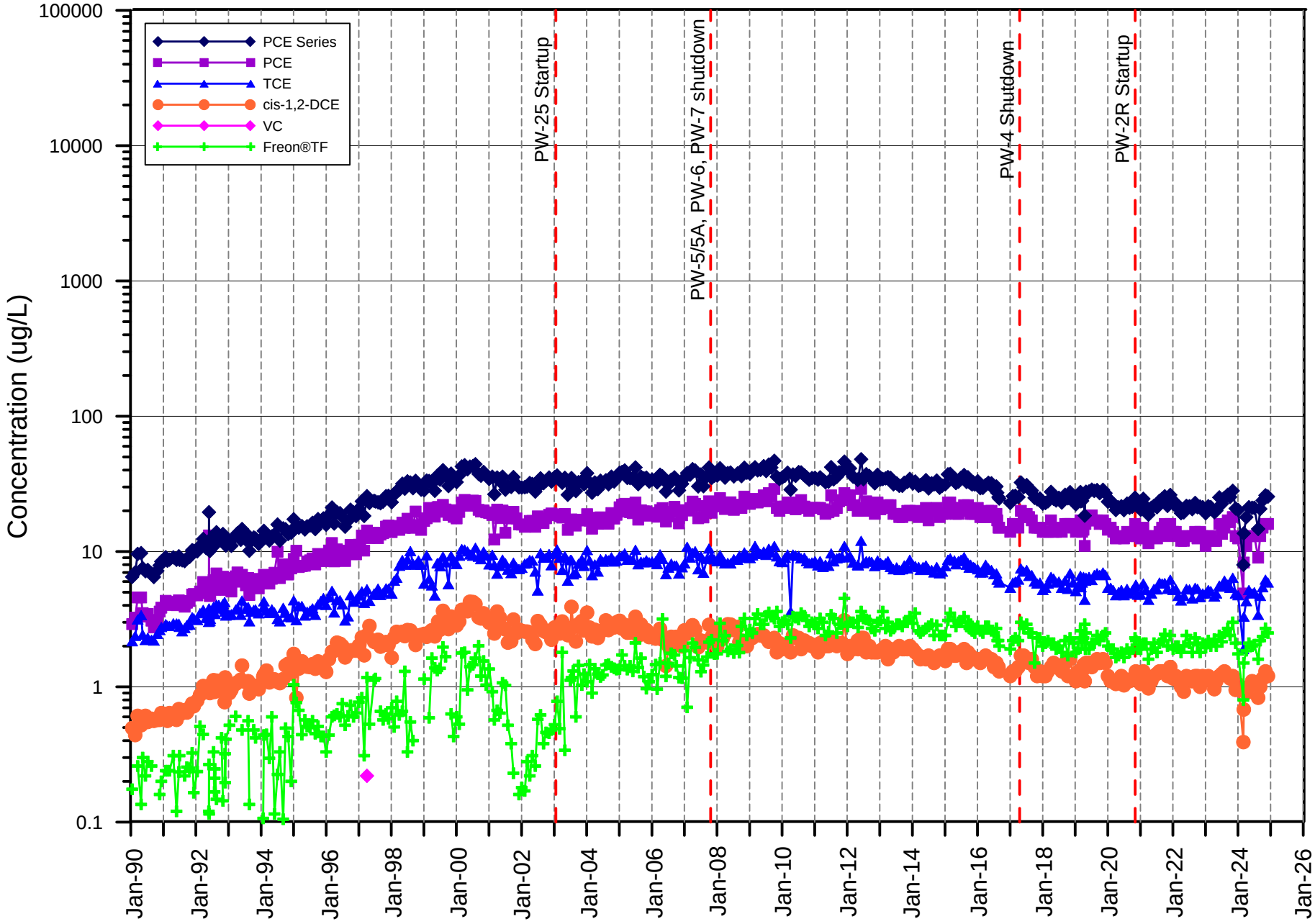


Figure 5-12

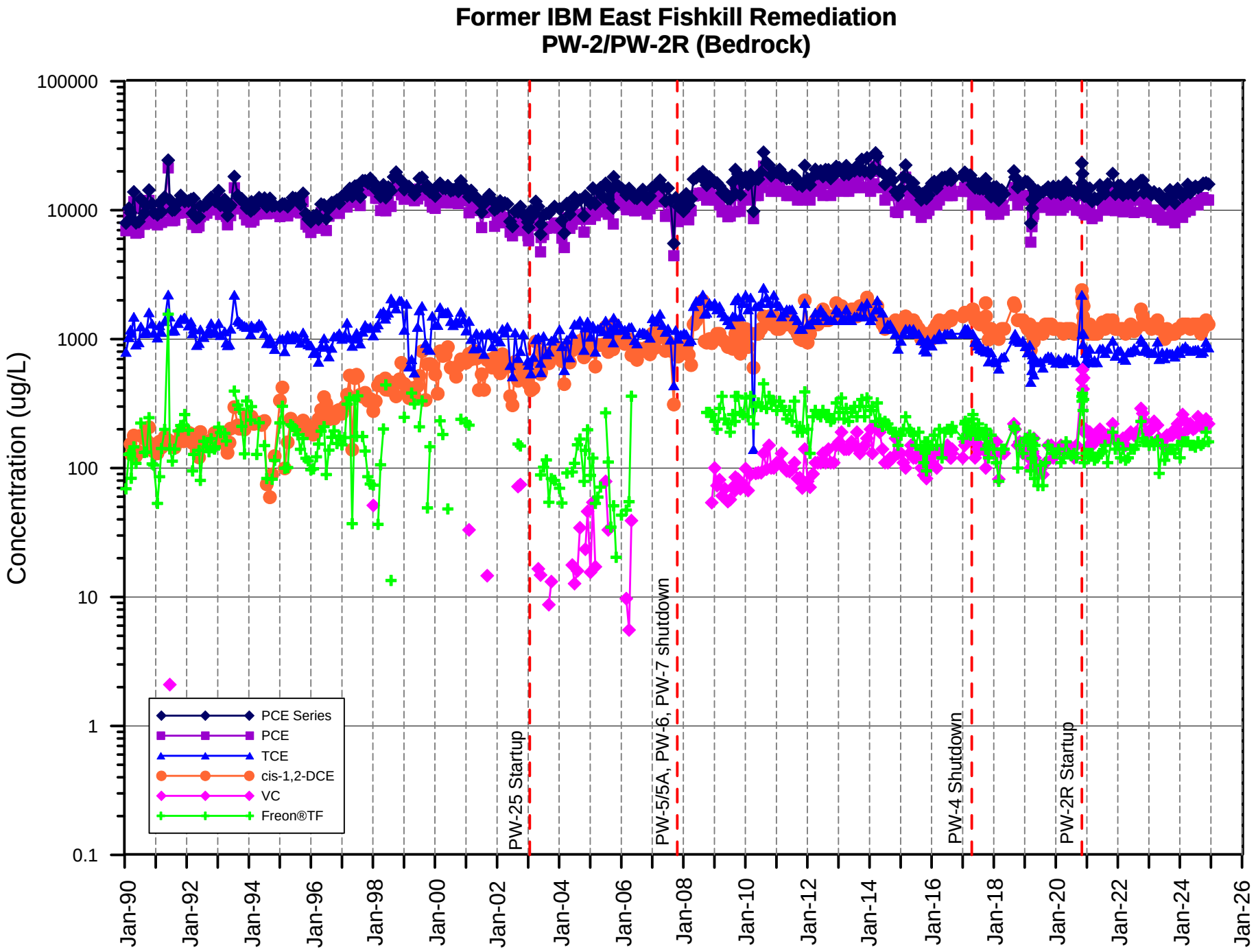

Former IBM East Fishkill Remediation
PW-2/PW-2R (Bedrock)
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-90
Jan-92
Jan-94
Jan-96
Jan-98
Jan-00
Jan-02
Jan-04
Jan-06
Jan-08
Jan-10
Jan-12
Jan-14
Jan-16
Jan-18
Jan-20
Jan-22
Jan-24
Jan-26
PW-25 Startup
PW-5/5A, PW-6, PW-7 shutdown
PW-4 Shutdown
PW-2R Startup
PCE Series
PCE
TCE
cis-1,2-DCE
VC
Freon®TF

Figure 5-13

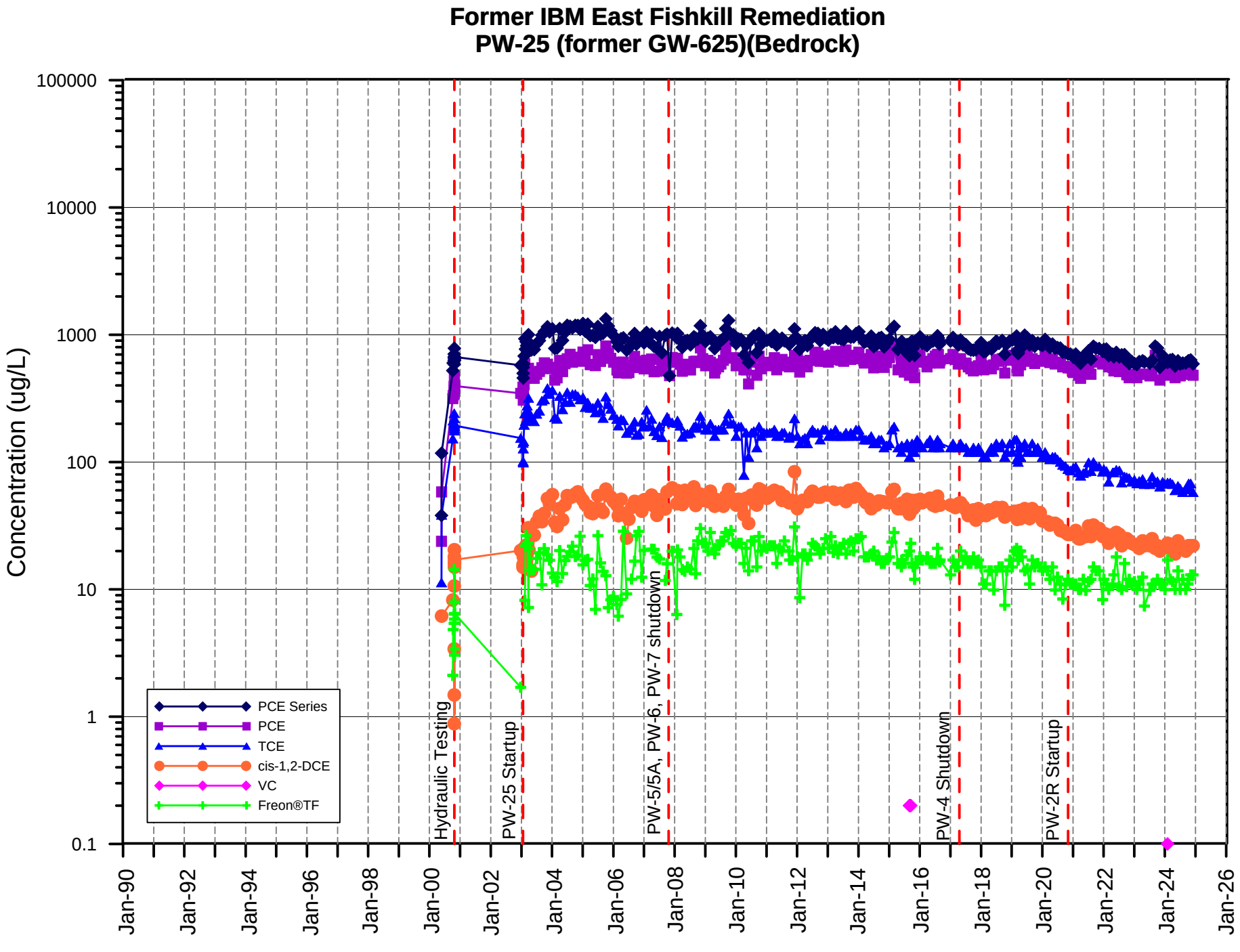

Former IBM East Fishkill Remediation
PW-25 (former GW-625)(Bedrock)
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-90
Jan-92
Jan-94
Jan-96
Jan-98
Jan-00
Jan-02
Jan-04
Jan-06
Jan-08
Jan-10
Jan-12
Jan-14
Jan-16
Jan-18
Jan-20
Jan-22
Jan-24
Jan-26
PCE Series
PCE
TCE
cis-1,2-DCE
VC
Freon®TF
Hydraulic Testing
PW-25 Startup
PW-5/5A, PW-6, PW-7 shutdown
PW-4 Shutdown
PW-2R Startup

Figure 5-14

Former IBM East Fishkill Remediation
B384 Sump (Soil)

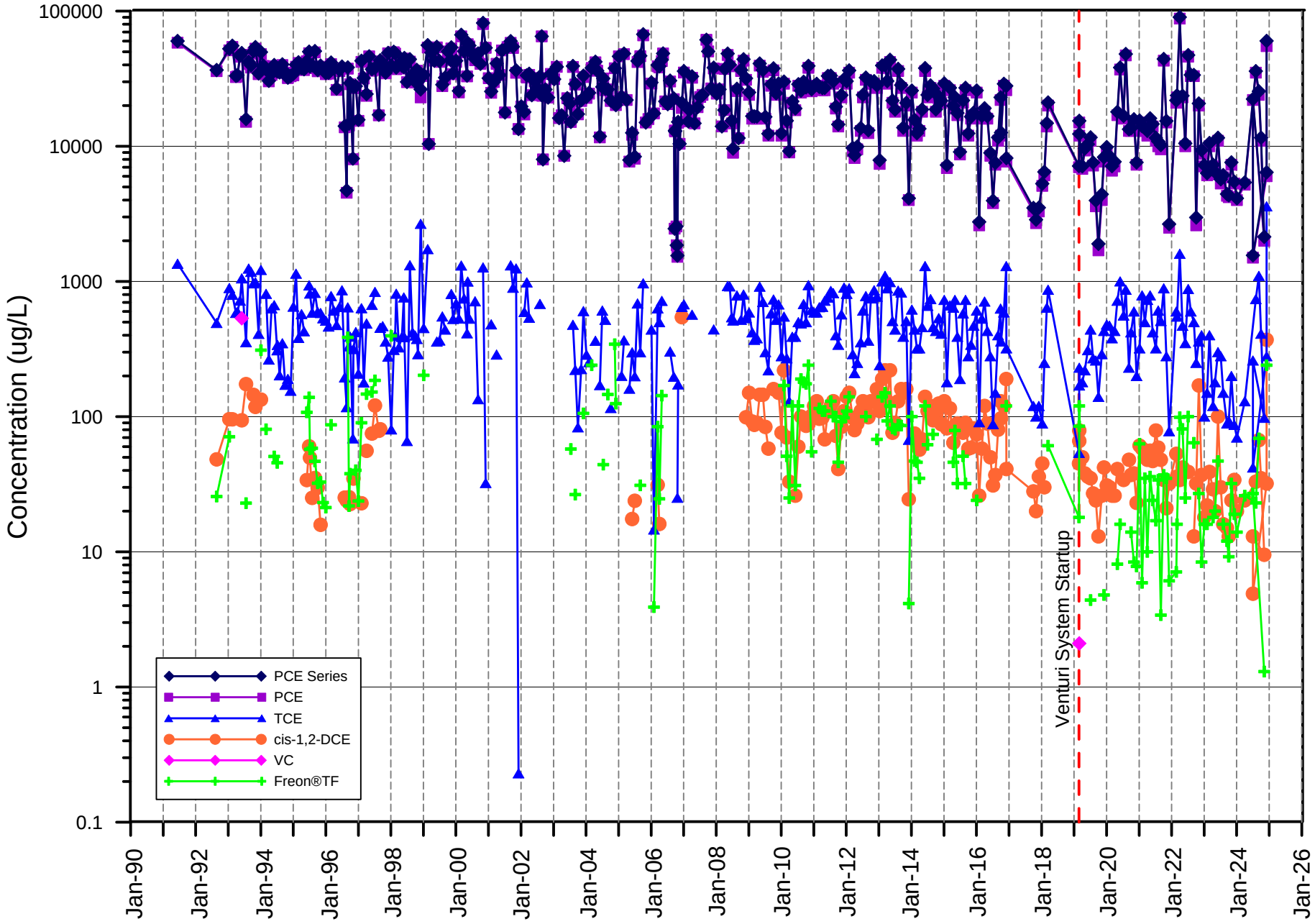


Figure 5-15

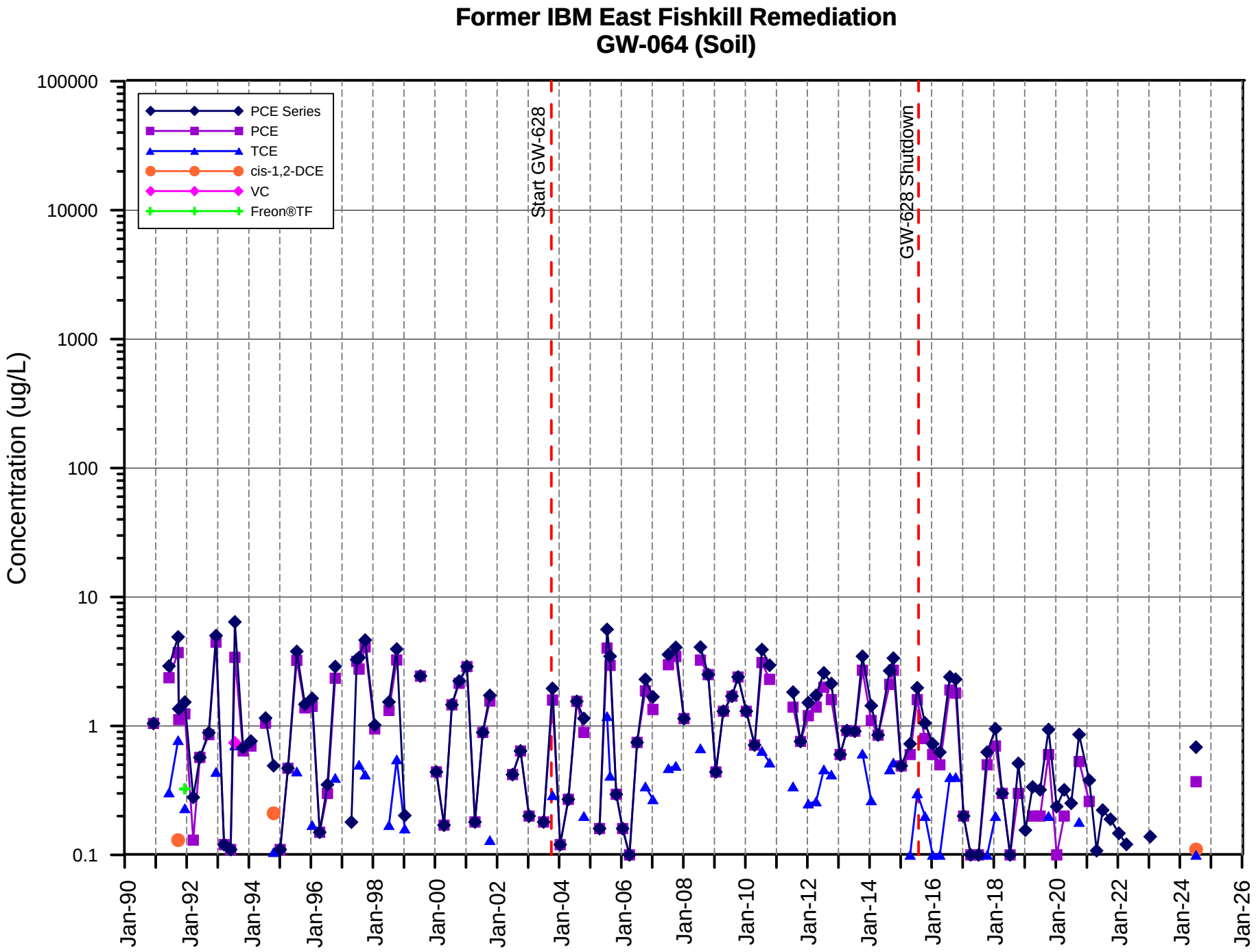

Former IBM East Fishkill Remediation
GW-064 (Soil)
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
PCE Series
PCE
TCE
cis-1,2-DCE
VC
Freon®TF
Start GW-628
GW-628 Shutdown
Jan-90
Jan-92
Jan-94
Jan-96
Jan-98
Jan-00
Jan-02
Jan-04
Jan-06
Jan-08
Jan-10
Jan-12
Jan-14
Jan-16
Jan-18
Jan-20
Jan-22
Jan-24
Jan-26

Figure 5-16

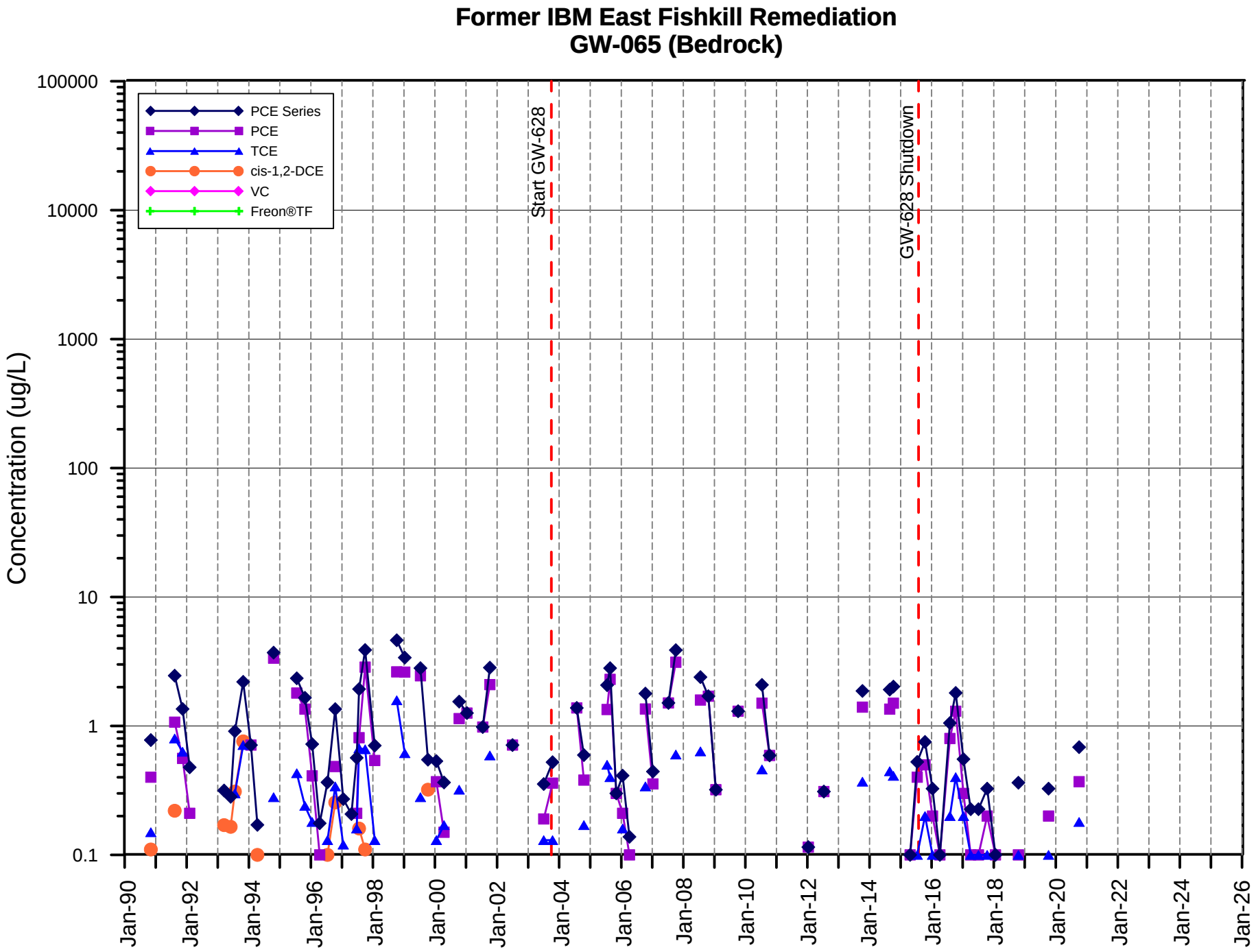

Former IBM East Fishkill Remediation
GW-065 (Bedrock)
PCE Series
PCE
TCE
cis-1,2-DCE
VC
Freon®TF
Start GW-628
GW-628 Shutdown
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-90
Jan-92
Jan-94
Jan-96
Jan-98
Jan-00
Jan-02
Jan-04
Jan-06
Jan-08
Jan-10
Jan-12
Jan-14
Jan-16
Jan-18
Jan-20
Jan-22
Jan-24
Jan-26

Figure 5-17

Former IBM East Fishkill Remediation
GW-066 (Soil)

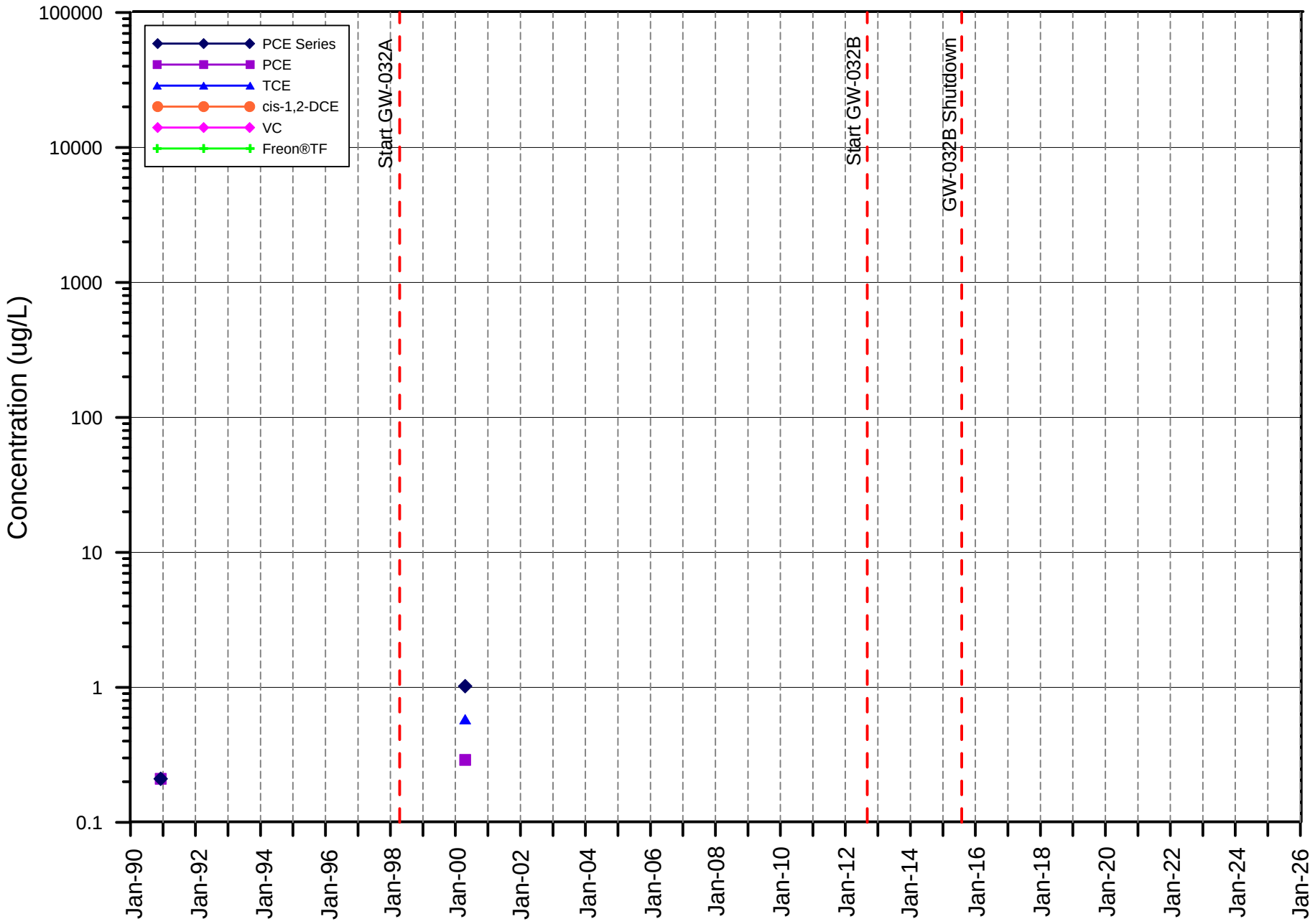


Figure 5-18

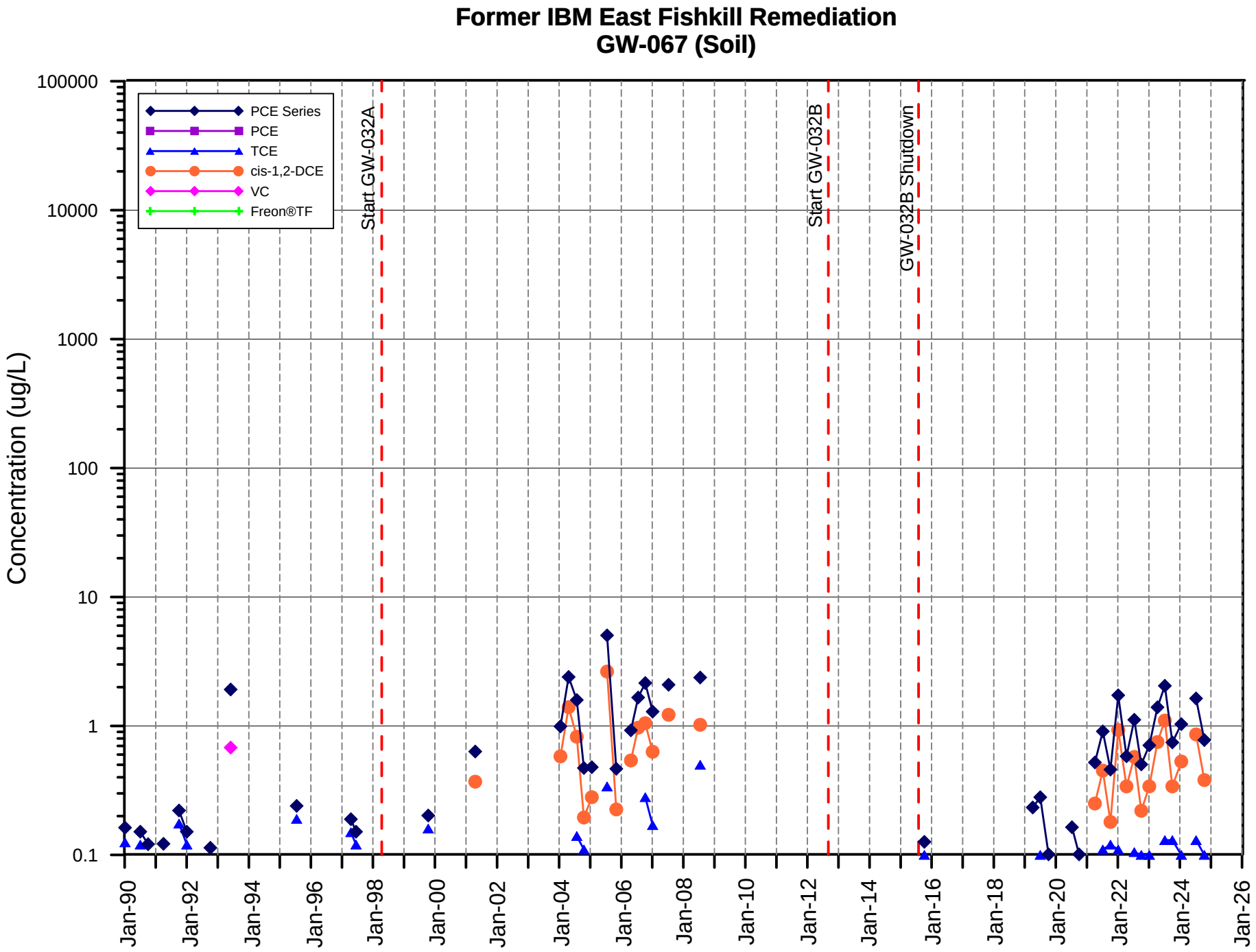

Former IBM East Fishkill Remediation
GW-067 (Soil)
PCE Series
PCE
TCE
cis-1,2-DCE
VC
Freon®TF
Start GW-032A
Start GW-032B
GW-032B Shutdown
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-90
Jan-92
Jan-94
Jan-96
Jan-98
Jan-00
Jan-02
Jan-04
Jan-06
Jan-08
Jan-10
Jan-12
Jan-14
Jan-16
Jan-18
Jan-20
Jan-22
Jan-24
Jan-26

Figure 5-19

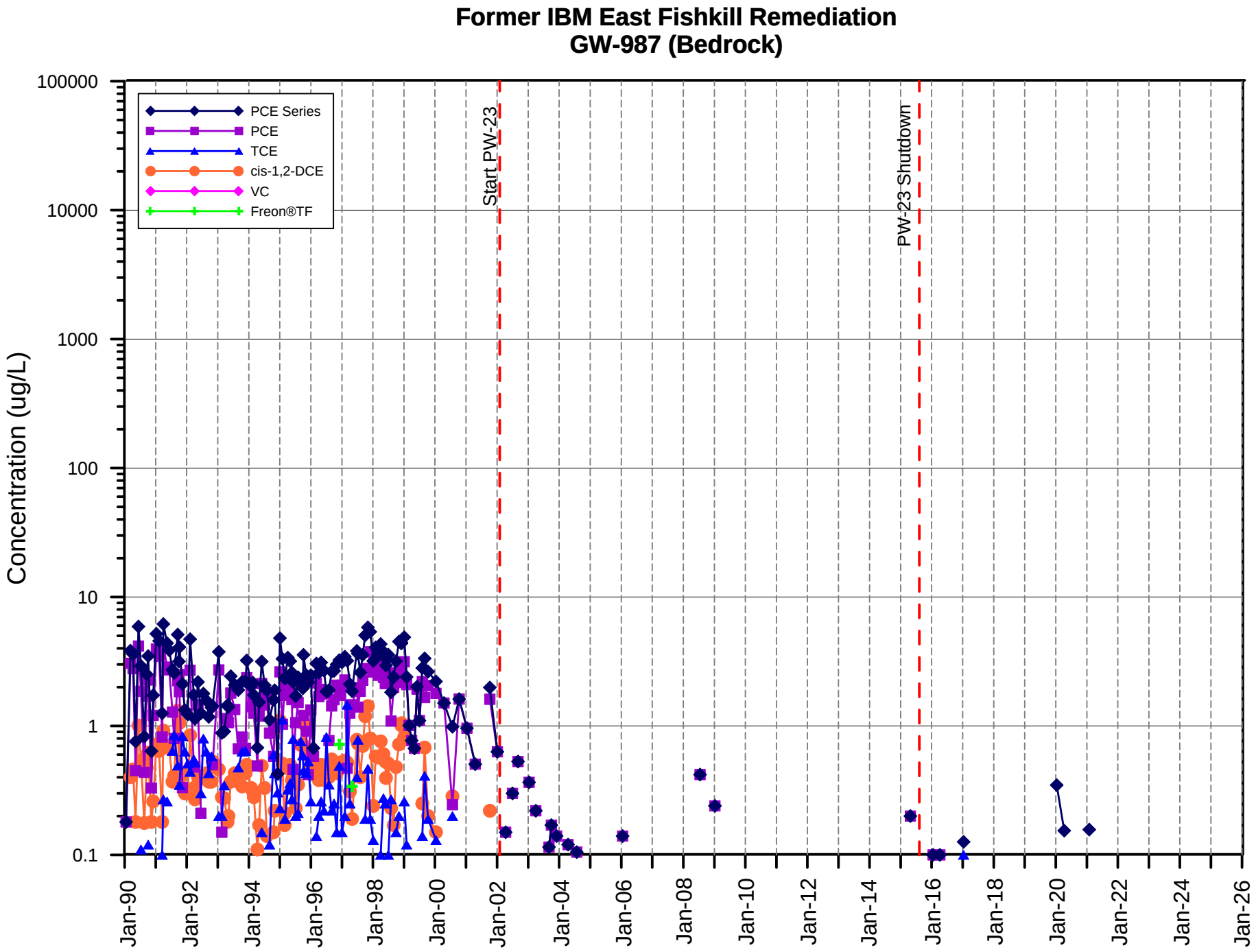

Former IBM East Fishkill Remediation
GW-987 (Bedrock)
PCE Series
PCE
TCE
cis-1,2-DCE
VC
Freon®TF
Start PW-23
PW-23 Shutdown
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-90
Jan-92
Jan-94
Jan-96
Jan-98
Jan-00
Jan-02
Jan-04
Jan-06
Jan-08
Jan-10
Jan-12
Jan-14
Jan-16
Jan-18
Jan-20
Jan-22
Jan-24
Jan-26

Figure 5-20

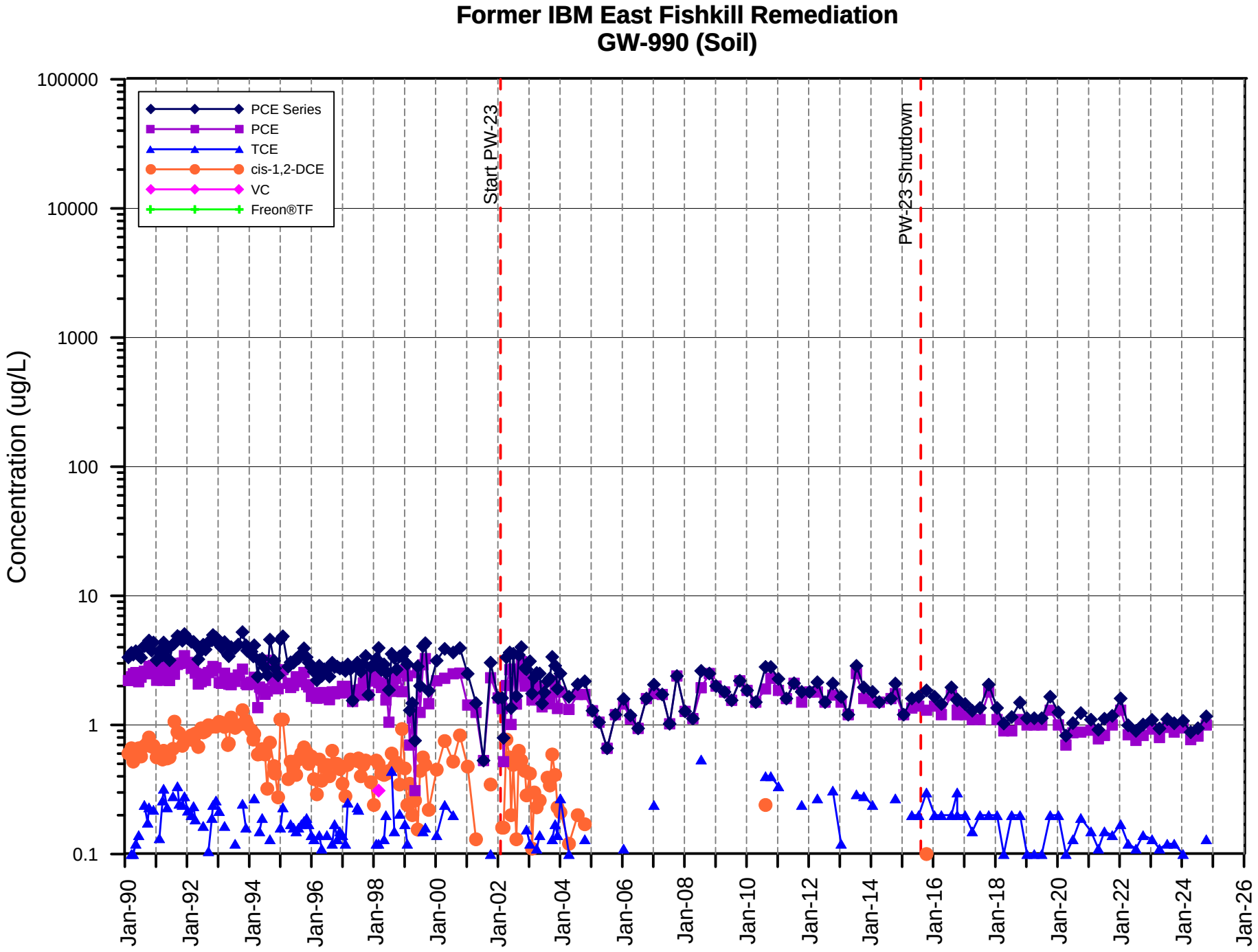

Former IBM East Fishkill Remediation
GW-990 (Soil)
PCE Series
PCE
TCE
cis-1,2-DCE
VC
Freon®TF
Start PW-23
PW-23 Shutdown
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-90
Jan-92
Jan-94
Jan-96
Jan-98
Jan-00
Jan-02
Jan-04
Jan-06
Jan-08
Jan-10
Jan-12
Jan-14
Jan-16
Jan-18
Jan-20
Jan-22
Jan-24
Jan-26

Figure 5-21



GlobalFoundries (~145 acres)		
Lot 1	(45.64 acres)	GlobalFoundries U.S 2 LLC
Lot 5	(98.94 acres)	GlobalFoundries U.S 2 LLC

i.Park (~290 acres)		
Lot 2	(48.34 acres)	i.Park East Fishkill I LLC
Lot 3	(23.85 acres)	i.Park East Fishkill I LLC
Lot 4	(13.72 acres)	i.Park East Fishkill LLC
Lot 6	(56.19 acres)	i.Park East Fishkill LLC
Lot 7	(85.05 acres)	i.Park East Fishkill LLC
Lot 8	(59.40 acres)	i.Park East Fishkill LLC
Building 303		
Building 309		

Notes:

Lot 2 Reversionary Clause - Buildings 303 and 309: In the event GlobalFoundries or its successors ceases to exist or operate the chip fab or the need for hazard waste collection is eliminated, then said portion of Lot 5 containing Buildings 303 and 309 shall revert to Lot 2 owner or its successors.

Lot 4 Reversionary Clause - Bulk Storage Tanks: In the event GlobalFoundries or its succesors ceases to exist or operate the chip fab or the need for hydrogen gas is eliminated, then said portion of Lot 5 east of East Drive containing hydrogen tanks shall revert to Lot 4 owner or its successors.

LEGEND

- Former IBM East Fishkill Facility Property Line
- Subdivision (GlobalFoundries U.S. 2 LLC)
- Subdivision (i.Park East Fishkill LLC)
- Subdivision (i.Park East Fishkill I LLC)
- Right-of-Way
- Fee Road

Irrevocable Offer of Cession and Dedication of Fee Roads:

South Drive	(Deed doc 02 2017 5782)
Fee Road IV and Fee Road VI	(Deed doc 02 2017 5783)
Fee Roads I, II, III and V	(Deed doc 02 2017 5784)

Plate 2-1

Site Basemap: Chazen Engineering, Land Surveying & Landscape Architecture Co., D.P.C., Poughkeepsie, NY (XBASE-SVY_51421-00.dwg, 8/10/15); Parcels: XSUBD_51539-00.dwg
Offsite Basemap: "Groundwater Monitoring Basemap", IBM East Fishkill Facility (9718new.dwg, original date 12/21/98).

Scale
0 200' 400'

Former IBM East Fishkill Facility

GlobalFoundries
Site Subdivision Map, 2017

DRAWN BY: MHM	DATE: 5/13/19	DRAWING NO.
CHECKED & APPROVED BY: CES		95007-140-A1b

GROUNDWATER SCIENCES CORPORATION



LEGEND

- Stream/Water Body
- Wetlands Boundary
- Former IBM East Fishkill Facility Property Line
- 8-Lot Subdivision
- Hopewell Condominium I
- Hopewell Condominium II
- Rolling Frito-Lay Sales, LP

Notes:

Site Basemap: Chazen Engineering, Land Surveying & Landscape Architecture Co., D.P.C., Poughkeepsie, NY (XBASE-SVY_51421-00.dwg, 8/10/15); Parcels: XSUBD_51539-00.dwg
Offsite Basemap: "Groundwater Monitoring Basemap"; IBM East Fishkill Facility (5713new.dwg, original date 12/21/98)
Well Survey Control by: Hayward and Pakan Associates, Poughkeepsie NY
8-Lot Subdivision: Chazen Engineering, Land Surveying & Landscape Architecture Co, DPC "Final Subdivision Plat, Existing Conditions, GlobalFoundries US 2 LLC. Filed with the Dutchess County Clerk on August 3, 2017 (Filed Map #12578)
Hopewell Condominium I & Rolling Frito-Lay Sales, LP: Chazen Engineering, Land Surveying, Landscape Architecture & Geology, Co, DPC "Site Layout Map, Lots, Condominium Units, Rights of Way & Fee Roads" April 22, 2022.
Hopewell Condominium II: Chazen Engineering, Land Surveying & Landscape Architecture Co, DPC "Map of The Hopewell Condominium II, Prepared for I Park East Fishkill LLC. Filed with the Dutchess County Clerk on November 18, 2020 (Filed Map #12692)

Plate 2-2

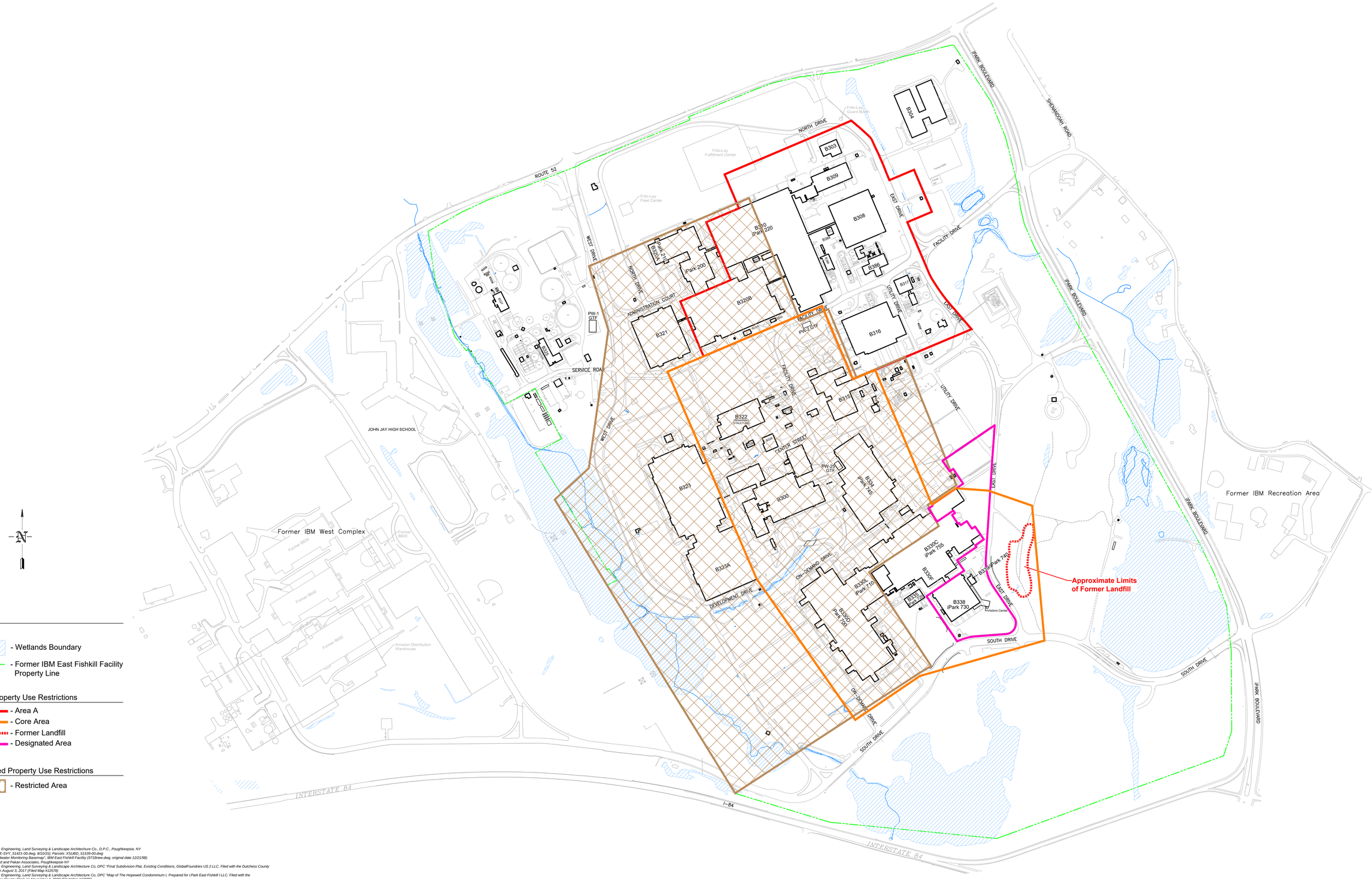
Former IBM East Fishkill Remediation

Site Layout Map
Site Lots, Condominium & Condominium Units

DRAWN BY: KA	DATE: 5/12/25	DRAWING NO.
CHECKED & APPROVED BY: DAB		5007-060_MASTER_rev4

Scale 0 150' 300'

GROUNDWATER SCIENCES CORPORATION



LEGEND

- Wetlands Boundary
- Former IBM East Fishkill Facility Property Line

IBM-Imposed Property Use Restrictions

- Area A
- Core Area
- Former Landfill
- Designated Area

OnSemi- Imposed Property Use Restrictions

- Restricted Area

Notes:

Site Basemap: *Chazen Engineering, Land Surveying & Landscape Architecture Co., D.P.C., Poughkeepsie, NY (KBASE-SVY_51421-00.dwg, 8/10/15); Parcels: XSUBD_51539-00.dwg*

Offsite Basemap: *"Groundwater Monitoring Basemap", IBM East Fishkill Facility (5713brew.dwg, original date 12/21/98)*

Well Survey Control by: *Hayward and Pakan Associates, Poughkeepsie NY*

8-Lot Subdivision: *Chazen Engineering, Land Surveying & Landscape Architecture Co, DPC "Final Subdivision Plat, Existing Conditions, GlobalFoundries US 2 LLC. Filed with the Dutchess County Clerk on August 3, 2017 (Filed Map #12576)*

Hopewell Condominium I: *Chazen Engineering, Land Surveying & Landscape Architecture Co, DPC "Map of The Hopewell Condominium I, Prepared for I Park East Fishkill I LLC. Filed with the Dutchess County Clerk on November 4, 2020 (Filed Map #12685)*

Hopewell Condominium II: *Chazen Engineering, Land Surveying & Landscape Architecture Co, DPC "Map of The Hopewell Condominium II, Prepared for I Park East Fishkill LLC. Filed with the Dutchess County Clerk on November 18, 2020 (Filed Map #12692)*

Vapor Intrusion Mitigation: *Sanborn Head Engineering "Vapor Intrusion Mitigation Status of Buildings, May 2021*

Soil Vapor Extraction Systems: *Sanborn Head Engineering: B330C Temporary Subslab Depressurization System (March 2017, B330C_Temp_SSD.mxd); B330D Temporary Subslab Depressurization Systems (March 2017, Bld310.dwg) B310 Subslab Depressurization System (March 2017, Bld310.dwg) Area A and B308/B319 Linkway Soil Vapor Extraction and Subslab Depressurization Systems (March 2017, AreaA_DP_Contours.dwg).*

Area A, Core Area, Former Landfill: *International Business Machines Corporation, Declaration of Restrictions, Easements & Covenants, Filed with the Dutchess County Clerk on July 9, 2015 (Document No. 2-2015-4059)*

Designated Area: *International Business Machines Corporation, First Amendment to Declaration of Restrictions, Easements & Covenants, Filed with the Dutchess County Clerk on July 9, 2015 (Document No. 02-2015-4059), executed April 14, 2020*

Restricted Area: *GlobalFoundries US 2 LLC, Declarations of Restrictions and Covenants. Filed with the Dutchess County Clerk on November 8, 2017 (Document No. 02-2017-8358).*

Scale: 0 150' 300'

Plate 2-3

Former IBM East Fishkill Remediation

Site Use Areas Location Map

DRAWN BY: KA	DATE: 5/12/25	DRAWING NO. 5007-060_MASTER_rev2-O2
CHECKED & APPROVED BY: DAB		

GROUNDWATER SCIENCES CORPORATION

LEGEND

- Former IBM East Fishkill Facility Property Line
- Former Structure
- Soil Monitoring Well (for groundwater sampling and elevations)
- Soil Monitoring Well (for groundwater elevations only)
- Bedrock Monitoring Well (for groundwater sampling and elevations)
- Bedrock Monitoring Well (for groundwater elevations only)
- Soil/Bedrock Monitoring Well (for groundwater sampling and elevations)
- Soil/Bedrock Monitoring Well (for groundwater elevations only)
- Bedrock Extraction Well
- Inactive Bedrock Extraction Well
- Shallow Extraction Well (all in soil except well 628 in bedrock)
- Inactive Shallow Extraction Well
- OU – Operable Unit

E0000 E1000 E2000 E3000 E4000 E5000 E6000 E7000 E8000

N9000 N8000 N7000 N6000 N5000 N4000

AREA A (OU5)

AREA B (OU3)

AREA C (LANDFILL) (OU6)

AREA D (OU4)

B/322 (OU7)

B/330 (OU8)

SOUTHEAST QUADRANT (OU9)

ROUTE 52

PARK BOULEVARD

SHERMANDOAH ROAD

NORTH DRIVE

WEST DRIVE

EAST DRIVE

FACILITY DRIVE

UTILITY DRIVE

ADMINISTRATION COURT

SERVICE ROAD

CENTER STREET

ON-DEMAND DRIVE

DEVELOPMENT DRIVE

SOUTH DRIVE

IPARK BOULEVARD

INTERSTATE 84

I-84

JOHN JAY HIGH SCHOOL

FORMER WEST COMPLEX

FORMER IBM RECREATION CENTER

B303 B304 B308 B309 B310 iPark 220 B320A iPark 200 B320B B321 B322 (REMAINING STRUCTURE) B323 B324 iPark 745 B330A iPark 750 B330B iPark 755 B330C iPark 756 B330D iPark 700 B330E iPark 710 B330F B335 iPark 720 B338 iPark 730 B338 iPark 740 B384 Sump B386 B300 B315 B316 B317 B323A B325 B327 B328 B329 B330 B331 B332 B333 B334 B335 B336 B337 B338 B339 B340 B341 B342 B343 B344 B345 B346 B347 B348 B349 B350 B351 B352 B353 B354 B355 B356 B357 B358 B359 B360 B361 B362 B363 B364 B365 B366 B367 B368 B369 B370 B371 B372 B373 B374 B375 B376 B377 B378 B379 B380 B381 B382 B383 B385 B387 B388 B389 B390 B391 B392 B393 B394 B395 B396 B397 B398 B399 B400 B401 B402 B403 B404 B405 B406 B407 B408 B409 B410 B411 B412 B413 B414 B415 B416 B417 B418 B419 B420 B421 B422 B423 B424 B425 B426 B427 B428 B429 B430 B431 B432 B433 B434 B435 B436 B437 B438 B439 B440 B441 B442 B443 B444 B445 B446 B447 B448 B449 B450 B451 B452 B453 B454 B455 B456 B457 B458 B459 B460 B461 B462 B463 B464 B465 B466 B467 B468 B469 B470 B471 B472 B473 B474 B475 B476 B477 B478 B479 B480 B481 B482 B483 B484 B485 B486 B487 B488 B489 B490 B491 B492 B493 B494 B495 B496 B497 B498 B499 B500 B501 B502 B503 B504 B505 B506 B507 B508 B509 B510 B511 B512 B513 B514 B515 B516 B517 B518 B519 B520 B521 B522 B523 B524 B525 B526 B527 B528 B529 B530 B531 B532 B533 B534 B535 B536 B537 B538 B539 B540 B541 B542 B543 B544 B545 B546 B547 B548 B549 B550 B551 B552 B553 B554 B555 B556 B557 B558 B559 B560 B561 B562 B563 B564 B565 B566 B567 B568 B569 B570 B571 B572 B573 B574 B575 B576 B577 B578 B579 B580 B581 B582 B583 B584 B585 B586 B587 B588 B589 B590 B591 B592 B593 B594 B595 B596 B597 B598 B599 B600 B601 B602 B603 B604 B605 B606 B607 B608 B609 B610 B611 B612 B613 B614 B615 B616 B617 B618 B619 B620 B621 B622 B623 B624 B625 B626 B627 B628 B629 B630 B631 B632 B633 B634 B635 B636 B637 B638 B639 B640 B641 B642 B643 B644 B645 B646 B647 B648 B649 B650 B651 B652 B653 B654 B655 B656 B657 B658 B659 B660 B661 B662 B663 B664 B665 B666 B667 B668 B669 B670 B671 B672 B673 B674 B675 B676 B677 B678 B679 B680 B681 B682 B683 B684 B685 B686 B687 B688 B689 B690 B691 B692 B693 B694 B695 B696 B697 B698 B699 B700 B701 B702 B703 B704 B705 B706 B707 B708 B709 B710 B711 B712 B713 B714 B715 B716 B717 B718 B719 B720 B721 B722 B723 B724 B725 B726 B727 B728 B729 B730 B731 B732 B733 B734 B735 B736 B737 B738 B739 B740 B741 B742 B743 B744 B745 B746 B747 B748 B749 B750 B751 B752 B753 B754 B755 B756 B757 B758 B759 B760 B761 B762 B763 B764 B765 B766 B767 B768 B769 B770 B771 B772 B773 B774 B775 B776 B777 B778 B779 B780 B781 B782 B783 B784 B785 B786 B787 B788 B789 B790 B791 B792 B793 B794 B795 B796 B797 B798 B799 B800 B801 B802 B803 B804 B805 B806 B807 B808 B809 B810 B811 B812 B813 B814 B815 B816 B817 B818 B819 B820 B821 B822 B823 B824 B825 B826 B827 B828 B829 B830 B831 B832 B833 B834 B835 B836 B837 B838 B839 B840 B841 B842 B843 B844 B845 B846 B847 B848 B849 B850 B851 B852 B853 B854 B855 B856 B857 B858 B859 B860 B861 B862 B863 B864 B865 B866 B867 B868 B869 B870 B871 B872 B873 B874 B875 B876 B877 B878 B879 B880 B881 B882 B883 B884 B885 B886 B887 B888 B889 B890 B891 B892 B893 B894 B895 B896 B897 B898 B899 B900 B901 B902 B903 B904 B905 B906 B907 B908 B909 B910 B911 B912 B913 B914 B915 B916 B917 B918 B919 B920 B921 B922 B923 B924 B925 B926 B927 B928 B929 B930 B931 B932 B933 B934 B935 B936 B937 B938 B939 B940 B941 B942 B943 B944 B945 B946 B947 B948 B949 B950 B951 B952 B953 B954 B955 B956 B957 B958 B959 B960 B961 B962 B963 B964 B965 B966 B967 B968 B969 B970 B971 B972 B973 B974 B975 B976 B977 B978 B979 B980 B981 B982 B983 B984 B985 B986 B987 B988 B989 B990 B991 B992 B993 B994 B995 B996 B997 B998 B999 PW-1 PW-2 PW-3 PW-4 PW-5A PW-5B PW-6 PW-7 PW-9 PW-23 PW-25 PW-2R PW-1 GTF PW-2 GTF PW-2S GTF

Former B600 Former B630 Former B640 Former B650 Former B660 Former B690

Amazon Distribution Warehouse

Visitors Center

Frito-Lay Fulfillment Center Frito-Lay Fleet Center Frito-Lay Depot Booth

Scale 0 200' 400'

Plate 2-4

Former IBM East Fishkill Remediation

Groundwater Monitoring Plan
Well Location Map

DRAWN BY: MHM/KA	DATE: 5/12/2025	DRAWING NO.
CHECKED & APPROVED BY: CES		95007E-086-E5

GROUNDWATER SCIENCES CORPORATION

LEGEND

- Former IBM East Fishkill Facility Property Line
- Former Structure
- Soil Monitoring Well (for groundwater sampling and elevations)
- Soil Monitoring Well (for groundwater elevations only)
- Other Soil Monitoring Well
- Bedrock Monitoring Well (for groundwater sampling and elevations)
- Bedrock Monitoring Well (for groundwater elevations only)
- Other Bedrock Monitoring Well
- Soil/Bedrock Monitoring Well (for groundwater sampling and elevations)
- Soil/Bedrock Monitoring Well (for groundwater elevations only)
- Bedrock Extraction Well
- Inactive Bedrock Extraction Well
- Shallow Extraction Well (all in soil except well 628 in bedrock)
- Inactive Shallow Extraction Well
- MLI (Multilevel Implant) Well
- Existing Well (construction unknown)

OU – Operable Unit

E0000 E1000 E2000 E3000 E4000 E5000 E6000 E7000 E8000

N9000 N8000 N7000 N6000 N5000 N4000

AREA A (OU5)

AREA B (OU3)

AREA C (LANDFILL) (OU6)

AREA D (OU4)

B/322 (OU7)

B/330 (OU8)

SOUTHEAST QUADRANT (OU9)

ROUTE 52

PARK BOULEVARD

SHENANDOAH ROAD

NORTH DRIVE

WEST DRIVE

EAST DRIVE

FACILITY DRIVE

ADMINISTRATION COURT

SERVICE ROAD

UTILITY DRIVE

CENTER STREET

ON-DEMAND DRIVE

DEVELOPMENT DRIVE

SOUTH DRIVE

IPARK BOULEVARD

B303 B304 B308 B309 B310 iPark 220 B320A iPark 200 B320B B321 B322 (REMAINING STRUCTURES) B323 B324 iPark 45 B300 B323A B315 B316 B317 B386 B384 Sump B330C iPark 755 B330F B330L iPark 710 B330D iPark 700 B338 iPark 730 B338 iPark 740

Frito-Lay Fulfillment Center

Frito-Lay Fleet Center

Frito-Lay Dispatch North

Visitors Center

FORMER WEST COMPLEX

FORMER IBM RECREATION CENTER

JOHN JAY HIGH SCHOOL

Former B630 Former B640 Former B650 Former B660 Former B670

Amazon Distribution Warehouse

INTERSTATE 84

I-84

Scale 0 200' 400'

Plate 2-5

Former IBM East Fishkill Remediation

Well Location Map
All Existing Groundwater Monitoring Wells

DRAWN BY: MHM/KA	DATE: 5/12/2025	DRAWING NO. 95007E-086-E7
CHECKED & APPROVED BY: CES		

GROUNDWATER SCIENCES CORPORATION

LEGEND

- Former IBM East Fishkill Facility Property Line
- Former Structure
- GMP Soil Monitoring Well
- GMP Soil Monitoring Well (for groundwater elevations only)
- GMP Soil/Bedrock Monitoring Well
- GMP Soil/Bedrock Monitoring Well (for groundwater elevations only)
- Bedrock Extraction Well
- Inactive Bedrock Extraction Well
- Shallow Extraction Well
- Inactive Shallow Extraction Well
- OU – Operable Unit
- 240 – Contour of Constant Potentiometric Head (feet amsl)
- 226.92 – Contour Elevation (feet amsl)
- Generalized Direction of Groundwater Flow
- Groundwater Divide
- Extent of Clay Mapping
- Extent of Glaciolacustrine Clay
- Inferred Areas of No Saturated Soil (Approximate)

Area of Concern	Extraction Points	Avg. June 25–28, 2024 Flow Rate (GPM)
Area A	B384 Sump	1.7

AREA A (OU5)
AREA B (OU3)
AREA C (LANDFILL) (OU6)
AREA D (OU4)
B/322 (OU7)
B/330 (OU8)
SOUTHEAST QUADRANT (OU9)

B309 sink
B308 sink
PW-1
PW-2
PW-2R
PW-25
PW-5A
PW-6
PW-7
PW-23
PW-4

ROUTE 52
PARK BOULEVARD
SHENANDOAH ROAD
NORTH DRIVE
WEST DRIVE
EAST DRIVE
FACILITY DRIVE
UTILITY DRIVE
ADMINISTRATION COURT
SERVICE ROAD
CENTER STREET
DEVELOPMENT DRIVE
ON-DEMAND DRIVE
SOUTH DRIVE
JOHN JAY HIGH SCHOOL
FORMER WEST COMPLEX
FORMER IBM RECREATION CENTER
INTERSTATE 84
I-84

Plate 4-1

Former IBM East Fishkill Remediation

Elevation Contour Map
Soil Groundwater Table
June 25-28, 2024

DRAWN BY: KA	DATE: 4/21/25	DRAWING NO. 5007W102_2024-W2
CHECKED & APPROVED BY: CES		

GROUNDWATER SCIENCES CORPORATION

Scale 0 200' 400'

LEGEND

- Former IBM East Fishkill Facility Property Line
- Former Structure
- ▼ – GMP Bedrock Monitoring Well
- ▽ – GMP Bedrock Monitoring Well (for groundwater elevations only)
- ★ – Bedrock Extraction Well
- ☆ – Inactive Bedrock Extraction Well
- ✱ – Soil Extraction Well
- OU – Operable Unit
- 220 – Contour of Constant Potentiometric Head (feet amsl)
- Generalized Direction of Groundwater Flow
- Groundwater Divide
- *229.41* – Groundwater Elevation (feet amsl) ">" symbol denotes an artesian well. Elevation listed is the top of casing.

Note: Generally, the data used in contouring this plate is from the deepest of the bedrock wells in a well cluster and corresponds to a screened or open hole interval elevation between approximately 50 and 120 feet amsl. This elevation interval generally correlates with the principal water-bearing zones in the on-site deep bedrock production wells. Only groundwater elevation data from wells used in contouring is shown on this plate.

Extraction Well	Avg. Jun. 25-28, 2024 Flow Rate (GPM)
PW-1	75
PW-2	62
PW-25	234

AREA A (OU5)
AREA B (OU3)
AREA C (LANDFILL) (OU6)
AREA D (OU4)
B/322 (OU7)
B/330 (OU8)
SOUTHEAST QUADRANT (OU9)

FORMER WEST COMPLEX
FORMER IBM RECREATION CENTER
JOHN JAY HIGH SCHOOL
Amazon Distribution Warehouse

ROUTE 52
I-84
INTERSTATE 84
IPARK BOULEVARD
SHENANDOAH ROAD
NORTH DRIVE
WEST DRIVE
EAST DRIVE
FACILITY DRIVE
UTILITY DRIVE
SERVICE ROAD
ADMINISTRATION COURT
CENTER DRIVE
DEVELOPMENT DRIVE
ON-DEMAND DRIVE
SOUTH DRIVE

PW-1 PW-2R PW-25 PW-4 PW-5 PW-5A PW-6 PW-7 PW-23

Plate 4-2

Former IBM East Fishkill Remediation

Elevation Contour Map
Bedrock Potentiometric Surface
June 25-28, 2024

DRAWN BY: KA	DATE: 5/21/25	DRAWING NO. 950071148_2024-12_GMP
CHECKED & APPROVED BY: CES		

GROUNDWATER SCIENCES CORPORATION

Scale 0 200' 400'

LEGEND

- Former IBM East Fishkill Facility Property Line
- Former Structure
- GMP Soil Monitoring Well
- GMP Soil/Bedrock Monitoring Well
- Bedrock Extraction Well
- Inactive Bedrock Extraction Well
- Shallow Extraction Well
- Inactive Shallow Extraction Well

OU - Operable Unit

PCE - Tetrachloroethene

5 - PCE Concentration Contour (ug/l)

0.72 - PCE Concentration (ug/l; April 5-May 31, 2024)

ND@'X' - Not Detected at Laboratory Detection Limit "X"

- **Extent of Clay Mapping**
- **Extent of Glaciolacustrine Clay** (East Complex only) (Approximate)
- Inferred Areas of No Saturated Soil

Note: contouring beneath B335 (iPark 720) and north of GW-181 based on monitoring wells that are not routinely sampled as part of the GMP.

AREA A (OU 5)

AREA B (OU 3)

AREA C (LANDFILL) (OU 6)

AREA D (OU 4)

B/322 (OU 7)

B/330 (OU 8)

SOUTHEAST QUADRANT (OU 9)

ROUTE 52

IPARK BOULEVARD

SHENANDOAH ROAD

NORTH DRIVE

WEST DRIVE

ADMINISTRATION COURT

SERVICE ROAD

FACILITY DRIVE

EAST DRIVE

UTILITY DRIVE

CENTER STREET

ON-DEMAND DRIVE

DEVELOPMENT DRIVE

SOUTH DRIVE

JOHN JAY HIGH SCHOOL

FORMER WEST COMPLEX

FORMER IBM RECREATION CENTER

INTERSTATE 84

I-84

B303, B304, B306, B308, B309, B310 iPark 220, B320A iPark 215, B320B, B321, B322 (REMAINING STRUCTURE), B323, B323A, B324 iPark 145, B325, B328, B330 iPark 165, B330A, B330B iPark 710, B330C iPark 705, B336 iPark 730, B339 iPark 740, B386, B316, B317, B375, Frito-Lay Guard Booth, Frito-Lay Fleet Center, Former B600, Former B630, Former B640, Former B650, Former B660, Amazon Distribution Warehouse, Visitors Center

PW-1 GTF, PW-2 GTF, PW-25 GTF, PW-1, PW-2R, PW-4, PW-5, PW-5A, PW-6, PW-7, PW-23, PW-24

Plate 5-1

Former IBM East Fishkill Remediation

Isoconcentration Contour Map
Soil PCE
April-June 2024

DRAWN BY: KA	DATE: 5/12/2025	DRAWING NO. 95007_PCE_2Q2024_soil
CHECKED & APPROVED BY: CES		

GROUNDWATER SCIENCES CORPORATION

Scale 0 200' 400'

LEGEND

- Former IBM East Fishkill Facility Property Line
- Former Structure
- GMP Soil Monitoring Well
- GMP Soil/Bedrock Monitoring Well
- Bedrock Extraction Well
- Inactive Bedrock Extraction Well
- Shallow Extraction Well
- Inactive Shallow Extraction Well

OU - Operable Unit

TCE - Trichloroethene

5 - TCE Concentration Contour (ug/l)

8.8 - TCE Concentration (ug/l; April 5-May 31, 2024)

ND@"X" - Not Detected at Laboratory Detection Limit "X"

- **Extent of Clay Mapping**
- **Extent of Glaciolacustrine Clay** (East Complex only) (Approximate)
- Inferred Areas of No Saturated Soil

Note: contouring beneath B335 (iPark 720) and north of GW-181 based on monitoring wells that are not routinely sampled as part of the GMP.

AREA A (OU 5)

AREA B (OU 3)

AREA C (LANDFILL) (OU 6)

AREA D (OU 4)

B/322 (OU 7)

B/330 (OU 8)

SOUTHEAST QUADRANT (OU 9)

ROUTE 52

PARK BOULEVARD

SHENANDOAH ROAD

NORTH DRIVE

WEST DRIVE

ADMINISTRATION COURT

SERVICE ROAD

FACILITY DRIVE

EAST DRIVE

UTILITY DRIVE

CENTER STREET

DEVELOPMENT DRIVE

ON-DEMAND DRIVE

SOUTH DRIVE

JOHN JAY HIGH SCHOOL

FORMER WEST COMPLEX

FORMER IBM RECREATION CENTER

INTERSTATE 84

I-84

B303, B304, B309, B308, B384 Sump, B386, B317, B316, B315, B321, B320B, Park 200, B320A, Park 210, B310 Park 220, B322 (REMAINING STRUCTURE), B325, B324 iPark 745, B323, B323A, B300, B330C iPark 765, B330H, B330L iPark 710, B330D iPark 730, B335 iPark 720, B338 iPark 730, B339/Park 740, Visitors Center, Frito-Lay Guard Booth, Frito-Lay Fleet Center, Former B630, Former B640, Former B650, Former B660, Former B600, Amazon Distribution Warehouse

PW-1, PW-1 GTF, PW-2, PW-2R, PW-2 GTF, PW-4, PW-5, PW-5A, PW-6, PW-7, PW-23, PW-25, PW-25 GTF

Plate 5-2

Former IBM East Fishkill Remediation

Isoconcentration Contour Map
Soil TCE
April-June 2024

DRAWN BY: DB/KA	DATE: 5/12/2025	DRAWING NO.
CHECKED & APPROVED BY: CES		95007_TCE_2Q2024_soil

GROUNDWATER SCIENCES CORPORATION

Scale
0 200' 400'

LEGEND

- Former IBM East Fishkill Facility Property Line
- Former Structure
- GMP Soil Monitoring Well
- GMP Soil/Bedrock Monitoring Well
- Bedrock Extraction Well
- Inactive Bedrock Extraction Well
- Shallow Extraction Well
- Inactive Shallow Extraction Well
- OU - Operable Unit
- cis-1,2-DCE - cis-1,2-Dichloroethene
- 5 - cis-1,2-DCE Concentration Contour (ug/l)
- 0.27 - cis-1,2-DCE Concentration (ug/l; April 5-May 31, 2024)
- ND@X - Not Detected at Detection Limit "X"
- **Extent of Clay Mapping**
- **Extent of Glaciolacustrine Clay** (East Complex only) (Approximate)
- Inferred Areas of No Saturated Soil

Note: contouring beneath B335 (iPark 720) and north of GW-181 based on monitoring wells that are not routinely sampled as part of the GMP.

AREA A (OU 5)
AREA B (OU 3)
AREA C (LANDFILL) (OU 6)
AREA D (OU 4)
B/322 (OU 7)
B/330 (OU 8)
SOUTHEAST QUADRANT (OU 9)

ROUTE 52
PARK BOULEVARD
SHENANDOAH ROAD
NORTH DRIVE
WEST DRIVE
EAST DRIVE
FACILITY DRIVE
UTILITY DRIVE
ADMINISTRATION COURT
SERVICE ROAD
CENTER STREET
ON-DEMAND DRIVE
DEVELOPMENT DRIVE
SOUTH DRIVE
JOHN JAY HIGH SCHOOL
FORMER WEST COMPLEX
FORMER IBM RECREATION CENTER
INTERSTATE 84
I-84

B303, B304, B308, B309, B310 iPark 220, B320A iPark 210, B320B iPark 200, B321, B322 (REMAINING STRUCTURE), B323, B323A, B324, B325, B330 iPark 710, B330C iPark 725, B330D iPark 730, B330H, B335 iPark 720, B338 iPark 730, B339/iPark 740, B384 Sump, B386, B316, B317, B315, Visitors Center, Frito-Lay Guard Booth, Frito-Lay Fleet Center, Frito-Lay Fabrication Center, Former B630, Former B600, Former B640, Former B650, Former B660, Amazon Distribution Warehouse

PW-1, PW-1 GTF, PW-2, PW-2R, PW-2 GTF, PW-4, PW-5, PW-5A, PW-6, PW-7, PW-23, PW-25, PW-29 GTF

Plate 5-3

Former IBM East Fishkill Remediation

Isoconcentration Contour Map
Soil cis-1,2-DCE
April-June 2024

DRAWN BY: KA/DB	DATE: 5/8/2025	DRAWING NO. 95007_cis12-DCE_2Q2024_soil
CHECKED & APPROVED BY: CES		

GROUNDWATER SCIENCES CORPORATION

Scale
0 200' 400'

LEGEND

- Former IBM East Fishkill Facility Property Line
- Former Structure
- GMP Soil Monitoring Well
- GMP Soil/Bedrock Monitoring Well
- Bedrock Extraction Well
- Inactive Bedrock Extraction Well
- Shallow Extraction Well
- Inactive Shallow Extraction Well
- OU - Operable Unit
- VC - Vinyl Chloride
- 2 - VC Concentration Contour (ug/l)
- 0.42 - VC Concentration (ug/l; April 5-May 31, 2024)
- ND@'X' - Not Detected at Laboratory Detection Limit "X"
- Extent of Clay Mapping
- Extent of Glaciolacustrine Clay (East Complex only) (Approximate)
- Inferred Areas of No Saturated Soil

Note: contouring beneath B335 (iPark 720) and north of GW-181 based on monitoring wells that are not routinely sampled as part of the GMP.

AREA A (OU 5)
AREA B (OU 3)
AREA C (LANDFILL) (OU 6)
AREA D (OU 4)
B/322 (OU 7)
B/330 (OU 8)
SOUTHEAST QUADRANT (OU 9)

ROUTE 52
PARK BOULEVARD
SHENANDOAH ROAD
NORTH DRIVE
WEST DRIVE
EAST DRIVE
FACILITY DRIVE
UTILITY DRIVE
ADMINISTRATION COURT
SERVICE ROAD
CENTER STREET
ON-DEMAND DRIVE
DEVELOPMENT DRIVE
SOUTH DRIVE
JOHN JAY HIGH SCHOOL
FORMER WEST COMPLEX
FORMER IBM RECREATION CENTER
Former B630
Former B640
Former B650
Former B660
Former B600
Amazon Distribution Warehouse
INTERSTATE 84
I-84
Frito-Lay Guard Booth
Frito-Lay Fishkill Plant
Frito-Lay Fleet Center
B303
B304
B308
B309
B310 iPark 220
B320A iPark 210
B320B iPark 200
B321
B322 (REMAINING STRUCTURE)
B323
B323A
B324
B325
B300
B316
B317
B315
B386
B330 iPark 710
B330C iPark 725
B330D iPark 700
B335 iPark 720
B338 iPark 730
B339/iPark 740
Visitors Center
PW-1
PW-1 GTF
PW-2
PW-2R
PW-2 GTF
PW-4
PW-5
PW-5A
PW-6
PW-7
PW-9
PW-23
PW-25
PW-25 GTF
B304 Sump
Scale 0 200' 400'

Plate 5-4

Former IBM East Fishkill Remediation

Isoconcentration Contour Map
Soil VC
April-June 2024

DRAWN BY: KA	DATE: 5/12/2025	DRAWING NO. 95007_VC_2Q2024_soil
CHECKED & APPROVED BY: CES		

GROUNDWATER SCIENCES CORPORATION

LEGEND

- Former IBM East Fishkill Facility Property Line
- Former Structure
- ▲ - GMP Soil Monitoring Well
- ● - GMP Soil/Bedrock Monitoring Well
- ★ - Bedrock Extraction Well
- ☆ - Inactive Bedrock Extraction Well
- ✸ - Shallow Bedrock Extraction Well
- ☼ - Inactive Shallow Extraction Well
- OU - Operable Unit
- Freon® TF - 1,1,2-trichloro-1,2,2-trifluoroethane
- 5 - Freon® TF Concentration Contour (ug/l)
- 2.2 - Freon® TF Concentration (ug/l; April 5-May 31, 2024)
- ND@'X' - Not Detected at Laboratory Detection Limit "X"
- - Extent of Clay Mapping
- **Extent of Glaciolacustrine Clay** (East Complex only)
- Inferred Areas of No Saturated Soil (Approximate)

Note: contouring beneath B335 (iPark 720) and north of GW-181 based on monitoring wells that are not routinely sampled as part of the GMP.

AREA A (OU5)
AREA B (OU3)
AREA C (LANDFILL) (OU6)
AREA D (OU4)
B/322 (OU7)
B/330 (OU8)
SOUTHEAST QUADRANT (OU9)

ROUTE 52
PARK BOULEVARD
SHENANDOAH ROAD
NORTH DRIVE
WEST DRIVE
ADMINISTRATION COURT
SERVICE ROAD
FACILITY DRIVE
EAST DRIVE
UTILITY DRIVE
CENTER STREET
DEVELOPMENT DRIVE
ON-DEMAND DRIVE
SOUTH DRIVE
JOHN JAY HIGH SCHOOL
FORMER WEST COMPLEX
FORMER IBM RECREATION CENTER
INTERSTATE 84
I-84

B303, B304, B308, B309, B310 Park 220, B316, B317, B320A Park 210, B320B Park 200, B321, B322 (REMAINING STRUCTURE), B323, B323A, B324 iPark 145, B325, B328, B330 iPark 710, B330C iPark 705, B330D iPark 700, B335 iPark 720, B336 iPark 730, B339/Park 740, B386, Visitors Center, Frito-Lay Guard Booth, Frito-Lay Fleet Center, Former B630, Former B640, Former B650, Former B660, Former B600, Amazon Distribution Warehouse

PW-1, PW-1 GTF, PW-2, PW-2R, PW-2 GTF, PW-4, PW-5, PW-5A, PW-6, PW-7, PW-9, PW-23, PW-29, PW-29 GTF, B384 Sump

Plate 5-5

Former IBM East Fishkill Remediation

Isoconcentration Contour Map
Soil Freon® TF
April-June 2024

DRAWN BY: KA	DATE: 5/12/2025	DRAWING NO. 95007_FTF_2Q2024_soil
CHECKED & APPROVED BY: CES		

GROUNDWATER SCIENCES CORPORATION

Scale
0 200' 400'

LEGEND

- Former IBM East Fishkill Facility Property Line
- Former Structure
- ▼ - GMP Bedrock Monitoring Well
- ● - GMP Soil/Bedrock Monitoring Well
- ★ - Bedrock Extraction Well
- ☆ - Inactive Bedrock Extraction Well
- ☼ - Inactive Shallow Bedrock Extraction Well
- OU - Operable Unit
- PCE - Tetrachloroethene
- 5 - PCE Concentration Contour (ug/l)
- *0.27* - PCE Concentration (ug/l; April 5-May 31, 2024)
- *ND@'X'* - Not Detected at Laboratory Detection Limit "X"

AREA A (OU5)
AREA B (OU3)
AREA C (LANDFILL) (OU6)
AREA D (OU4)
B / 3 2 2 (OU7)
B / 3 3 0 (OU8)
SOUTHEAST QUADRANT (OU9)

ROUTE 52
NORTH DRIVE
WEST DRIVE
EAST DRIVE
FACILITY DRIVE
UTILITY DRIVE
ADMINISTRATION COURT
SERVICE ROAD
CENTER STREET
ON-DEMAND DRIVE
DEVELOPMENT DRIVE
SOUTH DRIVE
IPARK BOULEVARD
SHENANDOAH ROAD
INTERSTATE 84
I-84
JOHN JAY HIGH SCHOOL
FORMER WEST COMPLEX
FORMER IBM RECREATION CENTER
Amazon Distribution Warehouse
Frito-Lay Fulfillment Center
Frito-Lay Fleet Center
Frito-Lay Guard Booth
Former B630
Former B600
Former B640
Former B650
Former B690

B303, B304, B309, B310 iPark 220, B306, B320A iPark 210, B320B iPark 200, B321, B316, B317, B315, B322 (REMAINING STRUCTURE), B323, B300, B334 iPark 745, B3234, B330C iPark 755, B330D iPark 750, B330E iPark 760, B339 iPark 740, B338 iPark 730, B328, B329, B327, B326, B325, B324, Visitors Center

PW-1 GTF, PW-2 GTF, PW-3R, PW-4, PW-5A, PW-5B, PW-6, PW-7, PW-23, PW-25 GTF, PW-61

Scale
0 200' 400'

Plate 5-6

Former IBM East Fishkill Remediation

Isoconcentration Contour Map
Bedrock PCE
April-June 2024

DRAWN BY: KA	DATE: 5/12/2025	DRAWING NO. 95007_PCE_2Q2024_BR
CHECKED & APPROVED BY: CES		

GROUNDWATER SCIENCES CORPORATION

LEGEND

- Former IBM East Fishkill Facility Property Line
- Former Structure
- ▼ - GMP Bedrock Monitoring Well
- ● - GMP Soil/Bedrock Monitoring Well
- ★ - Bedrock Extraction Well
- ☆ - Inactive Bedrock Extraction Well
- ☼ - Inactive Shallow Bedrock Extraction Well
- OU - Operable Unit
- TCE - Trichloroethene
- 5 - TCE Concentration Contour (ug/l)
- *1.1* - TCE Concentration (ug/l; April 5-May 31, 2024)
- *ND@'X'* - Not Detected at Laboratory Detection Limit "X"

AREA A (OU5)
AREA B (OU3)
AREA C (LANDFILL) (OU6)
AREA D (OU4)
B/322 (OU7)
B/330 (OU8)
SOUTHEAST QUADRANT (OU9)

ROUTE 52
NORTH DRIVE
WEST DRIVE
EAST DRIVE
SERVICE ROAD
ADMINISTRATION COURT
FACILITY DRIVE
UTILITY DRIVE
CENTER STREET
DEVELOPMENT DRIVE
ON-DEMAND DRIVE
SOUTH DRIVE
PARK BOULEVARD
SHENANDOAH ROAD
INTERSTATE 84
I-84

Frito-Lay Guard Booth
Frito-Lay Fulfillment Center
Frito-Lay Fleet Center
B303
B304
B308
B309
B310 iPark 220
B316
B317
B320A iPark 210
B320B iPark 200
B321
B322 (REMAINING STRUCTURE)
B323
B323A
B324 iPark 145
B330C iPark 755
B330D iPark 760
B330E iPark 770
B330F iPark 750
B338 iPark 730
B339 iPark 740
B386
B300
B315
PW-1 GTF
PW-25 GTF
PW-1
PW-2
PW-3
PW-4
PW-5A
PW-5
PW-7
PW-23
PW-61
JOHN JAY HIGH SCHOOL
FORMER WEST COMPLEX
FORMER IBM RECREATION CENTER
Former B630
Former B600
Former B640
Former B650
Former B660
Amazon Distribution Warehouse

Plate 5-7

Former IBM East Fishkill Remediation

Isoconcentration Contour Map
Bedrock TCE
April-June 2024

DRAWN BY: KA	DATE: 5/12/2025	DRAWING NO. 95007_TCE_2Q2024_BR
CHECKED & APPROVED BY: CES		

GROUNDWATER SCIENCES CORPORATION

Scale
0 200' 400'

LEGEND

- Former IBM East Fishkill Facility Property Line
- Former Structure
- ▼ - GMP Bedrock Monitoring Well
- ● - GMP Soil/Bedrock Monitoring Well
- ★ - Bedrock Extraction Well
- ☆ - Inactive Bedrock Extraction Well
- ☼ - Inactive Shallow Bedrock Extraction Well
- OU - Operable Unit
- cis-1,2-DCE - cis-1,2-Dichloroethene
- 5 - cis-1,2-DCE Concentration Contour (ug/l)
- *1.1* - cis-1,2-DCE Concentration (ug/l; April 5-May 31, 2024)
- *ND@"X"* - Not Detected at Laboratory Detection Limit "X"

AREA A (OU5)
AREA B (OU3)
AREA C (LANDFILL) (OU6)
AREA D (OU4)
B/322 (OU7)
B/330 (OU8)
SOUTHEAST QUADRANT (OU9)
FORMER WEST COMPLEX
FORMER IBM RECREATION CENTER
JOHN JAY HIGH SCHOOL
Amazon Distribution Warehouse
ROUTE 52
PARK BOULEVARD
SHENANDOAH ROAD
NORTH DRIVE
WEST DRIVE
EAST DRIVE
FACILITY DRIVE
UTILITY DRIVE
ADMINISTRATION COURT
SERVICE ROAD
CENTER STREET
ON-DEMAND DRIVE
DEVELOPMENT DRIVE
SOUTH DRIVE
INTERSTATE 84
I-84
Frito-Lay Guard Booth
Frito-Lay Fulfillment Center
Frito-Lay Fleet Center
B303
B304
B308
B309
B310 iPark 220
B316
B317
B320B
iPark 200
iPark 210 B320A
B321
B322 (REMAINING STRUCTURE)
B323
B323A
B324 iPark 145
B330C iPark 755
B330D iPark 760
B330E iPark 770
B330F
B335 iPark 750
B338 iPark 730
B339 iPark 740
B386
B300
B309A
B320C
B320D
B320E
B320F
B320G
B320H
B320I
B320J
B320K
B320L
B320M
B320N
B320O
B320P
B320Q
B320R
B320S
B320T
B320U
B320V
B320W
B320X
B320Y
B320Z
B321A
B321B
B321C
B321D
B321E
B321F
B321G
B321H
B321I
B321J
B321K
B321L
B321M
B321N
B321O
B321P
B321Q
B321R
B321S
B321T
B321U
B321V
B321W
B321X
B321Y
B321Z
B322A
B322B
B322C
B322D
B322E
B322F
B322G
B322H
B322I
B322J
B322K
B322L
B322M
B322N
B322O
B322P
B322Q
B322R
B322S
B322T
B322U
B322V
B322W
B322X
B322Y
B322Z
B323B
B323C
B323D
B323E
B323F
B323G
B323H
B323I
B323J
B323K
B323L
B323M
B323N
B323O
B323P
B323Q
B323R
B323S
B323T
B323U
B323V
B323W
B323X
B323Y
B323Z
B324A
B324B
B324C
B324D
B324E
B324F
B324G
B324H
B324I
B324J
B324K
B324L
B324M
B324N
B324O
B324P
B324Q
B324R
B324S
B324T
B324U
B324V
B324W
B324X
B324Y
B324Z
B325A
B325B
B325C
B325D
B325E
B325F
B325G
B325H
B325I
B325J
B325K
B325L
B325M
B325N
B325O
B325P
B325Q
B325R
B325S
B325T
B325U
B325V
B325W
B325X
B325Y
B325Z
B326A

LEGEND

- Former IBM East Fishkill Facility Property Line
- Former Structure
- GMP Bedrock Monitoring Well
- GMP Soil/Bedrock Monitoring Well
- Bedrock Extraction Well
- Inactive Bedrock Extraction Well
- Inactive Shallow Bedrock Extraction Well
- OU - Operable Unit
- VC - Vinyl Chloride
- 2 - VC Concentration Contour (ug/l)
- 2.4 - VC Concentration (ug/l; April 5-May 31, 2024)
- ND@'X' - Not Detected at Laboratory Detection Limit "X"

AREA A (OU5)
AREA B (OU3)
AREA C (LANDFILL) (OU6)
AREA D (OU4)
B/322 (OU7)
B/330 (OU8)
SOUTHEAST QUADRANT (OU9)

ROUTE 52
NORTH DRIVE
WEST DRIVE
ADMINISTRATION COURT
SERVICE ROAD
FACILITY DRIVE
EAST DRIVE
UTILITY DRIVE
CENTER STREET
DEVELOPMENT DRIVE
ON-DEMAND DRIVE
SOUTH DRIVE
PARK BOULEVARD
SHENANDOAH ROAD
JOHN JAY HIGH SCHOOL
FORMER WEST COMPLEX
FORMER IBM RECREATION CENTER
INTERSTATE 84

Frito-Lay Fulfillment Center
Frito-Lay Fleet Center
Frito-Lay Guard Booth
Amazon Distribution Warehouse

B303, B304, B309, B310 iPark 220, B320A Park 210, B320B iPark 200, B321, B322 (REMAINING STRUCTURE), B323, B323A, B324, B300, B334 iPark 745, B308, B386, B317, B316, B315, B330C iPark 755, B330F, B339/Park 740, B330L iPark 715, B335 iPark 725, B330D iPark 700, B338 iPark 730, Visitors Center

PW-1 GTF, PW-2R, PW-3, PW-4, PW-5A, PW-5B, PW-6, PW-7, PW-23, PW-25 GTF

Former B630, Former B600, Former B640, Former B650, Former B660

Scale: 0 200' 400'

Plate 5-9

Former IBM East Fishkill Remediation

Isoconcentration Contour Map
Bedrock VC
April-June 2024

DRAWN BY: KA	DATE: 5/12/2025	DRAWING NO.
CHECKED & APPROVED BY: CES		95007_VC_2Q2024_BR

GROUNDWATER SCIENCES CORPORATION

LEGEND

- Former IBM East Fishkill Facility Property Line
- Former Structure
- ▼ - GMP Bedrock Monitoring Well
- ● - GMP Soil/Bedrock Monitoring Well
- ★ - Bedrock Extraction Well
- ☆ - Inactive Bedrock Extraction Well
- ☼ - Inactive Shallow Bedrock Extraction Well
- OU - Operable Unit
- Freon® TF - 1,1,2-trichloro-1,2,2-trifluoroethane
- 5 - Freon® TF Concentration Contour (ug/l)
- *8.9* - Freon® TF Concentration (ug/l; April 5-May 31, 2024)
- *ND@"X"* - Not Detected at Laboratory Detection Limit "X"

N

AREA A (OU5)
AREA B (OU3)
AREA C (LANDFILL) (OU6)
AREA D (OU4)
B/322 (OU7)
B/330 (OU8)
SOUTHEAST QUADRANT (OU9)

ROUTE 52
NORTH DRIVE
WEST DRIVE
ADMINISTRATION COURT
SERVICE ROAD
FACILITY DRIVE
UTILITY DRIVE
EAST DRIVE
CENTER STREET
ON-DEMAND DRIVE
DEVELOPMENT DRIVE
SOUTH DRIVE
PARK BOULEVARD
SHENANDOAH ROAD
INTERSTATE 84
I-84

Frito-Lay Guard Booth
Frito-Lay Fulfillment Center
Frito-Lay Fleet Center
B303
B304
B308
B309
B310 Park 220
B316
B317
B320A Park 210
B320B iPark 200
B321
B322 (REMAINING STRUCTURE)
B323
B323A
B324 iPark 145
B325
B326
B327
B328
B329
B330 iPark 700
B330C iPark 705
B330F
B335 Park 750
B338 iPark 730
B339 iPark 740
B339A
B386
Visitors Center
PW-1 GTF
PW-2 GTF
PW-25 GTF
JOHN JAY HIGH SCHOOL
FORMER WEST COMPLEX
FORMER IBM RECREATION CENTER
Former B600
Former B630
Former B640
Former B650
Former B660
Amazon Distribution Warehouse

Plate 5-10

Former IBM East Fishkill Remediation

Isoconcentration Contour Map
Bedrock Freon® TF
April-June 2024

DRAWN BY: KA	DATE: 5/12/2025	DRAWING NO. 95007_FTF_2Q2024_BR
CHECKED & APPROVED BY: CES		

GROUNDWATER SCIENCES CORPORATION

Scale
0 200' 400'

LEGEND

- Former IBM East Fishkill Facility Property Line
- Former Structure
- Soil Monitoring Well (for groundwater sampling and elevations)
- Soil Monitoring Well (for groundwater elevations only)
- Bedrock Monitoring Well (for groundwater sampling and elevations)
- Bedrock Monitoring Well (for groundwater elevations only)
- Soil/Bedrock Monitoring Well (for groundwater sampling and elevations)
- Soil/Bedrock Monitoring Well (for groundwater elevations only)
- Bedrock Extraction Well
- Inactive Bedrock Extraction Well
- Shallow Extraction Well (all in soil except well 628 in bedrock)
- Inactive Shallow Extraction Well
- OU – Operable Unit
- Contaminant Reduction Monitoring (CRM) Well
- Point of Compliance (POC) Well

AREA A (OU5)
AREA B (OU3)
AREA C (LANDFILL) (OU6)
AREA D (OU4)
B/322 (OU7)
B/330 (OU8)
SOUTHEAST QUADRANT (OU9)

PARK BOULEVARD
SHERMANDOAH ROAD
ROUTE 52
NORTH DRIVE
WEST DRIVE
EAST DRIVE
FACILITY DRIVE
UTILITY DRIVE
ADMINISTRATION COURT
SERVICE ROAD
CENTER STREET
ON-DEMAND DRIVE
DEVELOPMENT DRIVE
SOUTH DRIVE
JOHN JAY HIGH SCHOOL
FORMER WEST COMPLEX
FORMER IBM RECREATION CENTER
INTERSTATE 84

Plate 5-11

Former IBM East Fishkill Remediation

Contaminant Reduction Monitoring (CRM) and Point of Compliance (POC) Well Location Map

DRAWN BY: MHM/KA	DATE: 5/12/2025	DRAWING NO.
CHECKED & APPROVED BY: CES		95007E-086-E8

GROUNDWATER SCIENCES CORPORATION

Scale 0 200' 400'

LEGEND

- ▲ - Soil Monitoring Well (for groundwater sampling & elevations)
- △ - Soil Monitoring Well (for groundwater elevations only)
- ▼ - Bedrock Monitoring Well (for groundwater sampling & elevations)
- ▽ - Bedrock Monitoring Well (for groundwater elevations only)
- ▽ - Other Bedrock Monitoring Well
- ● - Soil/Bedrock Monitoring Well (for groundwater sampling & elevations)
- ○ - Soil/Bedrock Monitoring Well (for groundwater elevations only)
- ★ - Bedrock Extraction Well
- ☆ - Inactive Bedrock Extraction Well
- ★ - Shallow Extraction Well (all in soil except well 628 in bedrock)
- ☆ - Inactive Shallow Extraction Well
- OU - Operable Unit
- — — — - Former IBM East Fishkill Facility Property Line
- ▭ - Monitoring Location Selected for PFAS Sampling
- ▭ - Monitoring Location Selected for 1,4-Dioxane Sampling

AREA A
AREA B
AREA C (LANDFILL)
AREA D
B/322
B/330
SOUTHEAST QUADRANT
ROUTE 52
NORTH DRIVE
WEST DRIVE
EAST DRIVE
SOUTH DRIVE
FACILITY DRIVE
UTILITY DRIVE
ADMINISTRATION COURT
SERVICE ROAD
CENTER STREET
ON-DEMAND DRIVE
DEVELOPMENT DRIVE
IPARK BOULEVARD
SHERMAN DAH ROAD
JOHN JAY HIGH SCHOOL
INTERSTATE 84
I-84
Frito-Lay Fulfillment Center
Frito-Lay Fleet Center
Frito-Lay Guard Booth
Former B600
Former B630
Former B640
Former B650
Former B660
Amazon Distribution Warehouse
Visitors Center
B303
B304
B309
B310 iPark 220
B310A iPark 210
iPark 200
B320B
B321
B322 (REMAINING STRUCTURES)
B323
B323A
B324 iPark 745
B300
B330C iPark 755
B330E
B330L iPark 710
B330D iPark 700
B335 iPark 720
B338 iPark 730
B339 iPark 740
B384 Sump
B386
B317
B316
B315
B325
PW-1
PW-1 GTF
PW-2R
PW-2
PW-2 GTF
PW-4
PW-25
PW-25 GTF
PW-5A
PW-5B
PW-6
PW-7
PW-23
PW-24
714
012
732
960
931
990
559
085
066
067
032B
064
065
061

Plate 5-12

Former IBM East Fishkill Remediation

Fourth Quarter 2024
PFAS and 1,4-Dioxane
Sampling Locations

DRAWN BY: JPB/DAB	DATE: 5/12/2025	DRAWING NO.
CHECKED & APPROVED BY: CES		95007-086-F1_rev2

GROUNDWATER SCIENCES CORPORATION

Scale
0 200' 400'

Appendix A

Limitations

APPENDIX A

LIMITATIONS

1. The findings and conclusions in this report are based on data collected from widely spaced monitoring wells. The figures and plates depict inferred conditions during a specified time period. Alternate interpretations are possible. Spatial and temporal variations will result in conditions that are different from those depicted within this report. If additional investigations reveal the nature and extent of these variations, it may be necessary to re-evaluate the conclusions of this report.

2. The generalized soil and bedrock profile described in the text is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized and have been developed in part on the data obtained from soil and groundwater samples from subsurface explorations observed and logged by others. The nature and extent of variations between these explorations may not become evident until further investigation or remediation.

3. Water level measurements have been recorded by GSC at times and under conditions stated within the text of this report. Note that fluctuations in the level of the groundwater may occur due to variations in rainfall and other factors not evident at the time measurements were made.

4. The subsurface conditions presented in this report are based, in part, upon various types of chemical data as well as historical and hydrogeologic information developed by previous investigators. While GSC has reviewed that data and information as stated in this report, any of GSC's conclusions that have relied on that information will be contingent on its validity. Should additional chemical data, historical information, or hydrogeologic information become available in the future, such information should be reviewed by GSC and the conclusions presented herein may be modified accordingly.

5. This report has been prepared for, and is intended for the exclusive use of the IBM Corporation. The contents of this report should not be relied upon by any other party without the express written consent of IBM and GSC. No other warranty, express or implied, is made.

6. In the event that any changes in the nature, design, or location of the facilities are planned, the conclusions contained in this report should not be considered valid unless the changes are reviewed and conclusions of this report modified or verified in writing by GSC. GSC is not responsible for any claims, damages, or liability associated with interpretation of data provided in this report or re-use of the data provided in this report without the express written authorization of GSC.

Appendix B

Groundwater Monitoring Plan - Well Specifications and Lists

Table B-1: Hydraulic Effectiveness Monitoring Wells
Table B-2: Well Specifications, Corrective Action Performance Monitoring Network
Table B-3: Sampling Schedule, Corrective Action Performance Monitoring Network

Table B-1
Hydraulic Effectiveness Monitoring Wells

Well	M.P. Elev. (ft amsl)	Coordinates	
		Northing	Easting
002	275.39	8518.014	4537.868
003	275.32	8515.747	4538.284
005	255.16	7772.055	6134.484
006	254.38	7764.886	6126.095
007	257.35	7592.128	5547.170
008	265.29	8072.229	5042.508
009	265.35	8067.344	5043.589
010	270.76	8076.990	4661.237
011	266.47	7831.768	4697.559
013	263.26	7630.268	4904.651
014	262.60	7626.342	4906.258
015	262.86	7622.508	4907.920
016	254.91	7140.621	5083.247
017	254.31	7133.611	5089.249
018	257.78	7150.694	4924.310
019	257.70	7155.420	4922.857
020	250.88	6920.006	5024.650
022	250.88	6916.125	5015.190
027	260.24	7204.062	3450.750
028	259.22	7244.167	3358.706
030	232.87	7531.247	2282.942
032B	233.09	6701.970	2690.670
035	249.53	6773.709	3152.987
038	250.61	6320.836	4765.408
039	249.87	6322.183	4769.064
044	267.36	6897.844	5984.595
046	267.59	6649.354	6428.358
048	264.31	5756.458	6897.932
049	266.41	5256.598	6835.595
050	264.51	5251.734	6838.602
053	266.58	4965.757	6073.504
054	264.50	4696.491	5978.780
059	235.94	4833.049	3997.592
060	235.68	4828.527	4000.564
061	244.66	4136.068	4504.733
062	250.56	4322.084	5469.567
063	250.70	4320.995	5467.872
064	259.23	7040.533	6596.366
065	258.76	7055.103	6595.751
066	229.84	6987.994	2265.582
067	234.42	6463.455	2607.405
068	233.85	6253.894	2982.574

Table B-1
Hydraulic Effectiveness Monitoring Wells

Well	M.P. Elev. (ft amsl)	Coordinates	
		Northing	Easting
069	253.55	4482.364	6084.653
075	259.51	7366.983	3317.645
085	276.34	9058.705	5844.268
086	276.34	9058.705	5844.268
087	256.00	7832.757	6082.700
088	256.00	7832.757	6082.700
091	264.56	4806.212	7610.031
092	264.56	4806.212	7610.031
096	275.48	8066.420	5550.380
097	277.69	8070.910	5548.480
098	277.69	8070.910	5548.480
100	267.09	8383.665	4803.894
101	267.09	8384.262	4808.809
102	267.09	8384.262	4808.809
103	257.59	7422.942	5337.874
104	257.59	7422.942	5337.874
105	257.74	7426.962	5342.224
106	257.74	7426.962	5342.224
108	255.45	6742.206	5806.444
109	255.45	6742.206	5806.444
112	269.38	4285.998	7014.122
113	269.03	4227.305	7004.293
114	269.03	4227.305	7004.293
118	263.06	7579.473	4816.285
121	263.18	8015.845	3544.898
122	263.18	8015.845	3544.898
129	252.37	6282.508	4651.089
130	252.37	6282.508	4651.089
143	251.08	4709.770	4756.370
145	253.97	4301.093	5498.184
146	253.97	4301.093	5498.184
147	234.55	7663.575	2397.319
150	234.78	7659.624	2386.796
151	241.06	6279.506	3076.270
156	242.58	5003.112	3793.197
157	243.09	5009.063	3786.807
158	245.05	4084.387	4549.216
161	259.63	7206.137	3378.741
164	273.99	6299.089	7593.114
165	273.99	6299.089	7593.114
166	254.58	7422.875	6512.986
167	254.58	7422.875	6512.986

Table B-1
Hydraulic Effectiveness Monitoring Wells

Well	M.P. Elev. (ft amsl)	Coordinates	
		Northing	Easting
168	265.12	6794.614	6318.692
169	265.12	6794.614	6318.692
170	229.55	6965.743	2292.464
178	267.22	5685.196	5758.662
180	248.31	5035.183	5203.440
181	248.88	4988.890	5242.059
182	236.11	5859.220	2687.226
183	236.11	5859.220	2687.226
185	237.04	6481.471	2316.242
186	237.04	6481.471	2316.242
191	229.18	7123.366	1981.277
192	229.18	7123.366	1981.277
200	266.77	7694.652	4014.447
204	252.79	6694.859	4521.394
224	256.86	6741.816	3477.018
226	233.54	6151.658	3101.790
227	233.08	6144.019	3108.542
400	241.81	6939.843	1437.518
401	242.22	6935.937	1437.490
402	255.37	6315.556	1611.175
403	249.39	5909.759	1848.452
404	248.45	5905.340	1856.890
405	258.01	4341.985	3409.956
407	345.71	3941.830	1834.730
415	265.73	5224.890	461.160
416	252.61	5985.020	129.180
418	253.40	5938.351	149.519
500	259.89	7545.320	6326.260
501	257.76	7580.570	6317.010
502	259.26	6219.330	7079.510
503	259.88	6183.280	7102.810
504	259.88	6087.120	7153.830
505	259.90	6087.120	7153.830
506	263.85	6010.120	7146.450
507	262.80	6014.130	7163.870
508	262.80	6014.130	7163.870
509	265.32	5912.440	7234.330
510	263.31	5808.400	7224.900
511	263.70	5812.890	7254.280
512	260.94	5734.740	7337.260
513	261.91	5717.960	7357.420
514	261.45	5488.000	7183.300

Table B-1
Hydraulic Effectiveness Monitoring Wells

Well	M.P. Elev. (ft amsl)	Coordinates	
		Northing	Easting
515	260.81	5486.400	7170.800
516	262.73	5428.830	7424.550
517	262.58	5445.700	7419.710
518	262.58	5445.700	7419.710
519	264.51	5182.090	7626.300
520	262.28	6648.150	6936.870
521	262.24	6688.820	6912.930
522	262.45	6713.370	6899.050
523	273.28	6108.470	8049.880
524	272.91	6095.860	7992.490
525	273.08	6106.720	8040.160
526	271.18	4797.560	7658.790
527	270.43	4770.130	7620.990
528	270.55	4773.360	7625.630
529	270.55	4773.360	7625.630
530	265.22	4538.130	7213.110
531	266.12	4549.280	7245.530
532	266.12	4549.280	7245.530
533	266.53	4566.230	7019.720
534	266.29	4548.820	7051.260
535	266.35	4555.640	7037.660
536	269.12	5346.300	6788.300
537	268.97	5324.500	6780.240
538	268.97	5324.500	6780.240
539	270.44	5478.760	6773.550
541	279.98	5711.500	6793.650
542	279.98	5711.500	6793.650
543	263.07	5956.040	6877.880
544	265.72	5988.650	6843.350
545	264.96	6143.040	6928.740
546	266.92	6098.760	6897.090
547	266.11	6140.200	6908.280
548	261.84	5796.160	6945.380
549	262.09	5833.700	6918.700
550	262.09	5833.700	6918.700
551	267.54	5648.190	6900.200
553	267.42	5510.740	6953.610
554	267.31	5525.200	6942.580
556	266.76	5382.290	6916.300
557	268.22	5304.090	6831.390
558	284.02	5270.310	6223.150
559	282.75	5251.530	6221.420

Table B-1
Hydraulic Effectiveness Monitoring Wells

Well	M.P. Elev. (ft amsl)	Coordinates	
		Northing	Easting
560	282.73	5251.530	6221.420
561	296.33	5445.380	6239.200
562	285.63	5584.350	6294.510
563	285.63	5584.350	6294.510
564	289.59	5835.500	6318.800
565	285.69	6081.080	6428.040
566	285.69	6081.080	6428.040
567	266.64	6656.400	6502.600
568	279.50	6487.650	6526.560
569	279.99	6491.880	6539.820
570	279.99	6491.880	6539.820
571	286.39	6274.080	6265.500
572	251.13	4806.400	5115.400
574	269.09	5547.400	5776.000
576	265.95	5657.000	5807.900
577	230.42	7043.390	2387.000
578	272.35	8432.860	4112.480
579	247.54	6219.930	3828.970
580	257.24	6538.850	4344.560
581	267.23	8381.000	4797.100
600	265.91	5838.318	5989.885
601	266.08	5833.022	5988.055
602	253.38	4841.290	5230.675
603	252.54	4493.647	5141.553
604	252.66	4497.252	5144.622
605	253.01	4931.463	4777.329
606	253.27	6115.035	5326.621
607	253.77	5020.203	5360.277
608	255.51	5688.197	5270.023
609	249.18	6188.755	5261.662
610	250.87	5562.575	4953.575
611	244.23	5432.960	4432.190
612	249.89	6407.200	3337.800
613	249.02	6445.900	3265.700
614	230.29	6719.000	2684.000
615	230.82	6710.600	2688.600
616	231.14	6692.800	2698.500
617	248.91	6410.800	3250.200
618	239.17	6276.600	3011.900
619	267.00	6635.600	6432.000
620	259.27	7232.300	3381.700
621	255.80	6776.700	4356.100

Table B-1
Hydraulic Effectiveness Monitoring Wells

Well	M.P. Elev. (ft amsl)	Coordinates	
		Northing	Easting
622	268.08	5752.000	5510.200
623	246.74	5719.497	4864.655
624	246.31	5592.540	4175.380
626	304.58	5357.900	7953.800
627	263.85	6925.360	4251.830
640	253.22	4792.669	4837.987
700	248.79	7121.200	5605.400
701	248.83	7124.900	5603.600
702	255.09	7252.100	5584.800
703	254.89	7255.900	5582.500
704	255.00	7239.500	5591.700
705	259.94	7651.700	5262.600
706	259.92	7649.400	5260.000
707	260.94	7722.600	5252.000
708	260.83	7727.700	5249.900
709	263.98	8017.500	5015.800
710	263.93	7996.700	5047.200
711	263.69	8023.400	5014.200
712	265.48	8180.400	4989.600
714	266.26	8063.100	4772.200
716	272.14	7964.440	4457.970
717	277.47	8063.080	5531.360
718	278.69	8048.650	5496.710
719	279.03	8076.750	5467.890
720	275.43	8012.780	5463.900
721	259.92	8290.600	5327.000
722	260.15	8294.500	5330.900
723	269.98	8653.200	5304.700
724	269.70	8649.400	5298.500
725	263.25	8775.600	5647.800
726	262.93	8769.300	5650.200
727	263.49	8779.800	5645.200
728	259.64	8454.300	5785.900
729	260.29	8480.800	5776.200
730	259.41	8448.000	5788.100
732	265.17	7294.800	4520.600
734	261.79	7004.400	4656.100
735	259.11	6828.700	4210.900
737	259.10	6824.500	4211.700
739	261.35	7240.400	3863.800
740	256.69	6685.900	3852.800
742	256.78	6687.600	3858.300

Table B-1
Hydraulic Effectiveness Monitoring Wells

Well	M.P. Elev. (ft amsl)	Coordinates	
		Northing	Easting
743	261.06	7234.500	3862.800
744	254.46	7887.200	5717.200
745	254.47	7890.300	5716.300
746	254.05	7731.800	5780.900
747	263.77	8480.700	5057.300
748	267.95	8152.000	4774.100
749	263.16	8484.600	5544.700
750	257.15	8325.200	5779.300
751	254.24	6760.000	4728.100
752	260.87	6913.000	4791.600
753	248.38	6755.800	5125.000
754	249.19	6587.200	3187.000
755	238.91	6392.400	3029.900
756	252.61	5000.100	5501.900
757	234.36	6678.800	2706.900
758	260.71	7896.780	5188.710
759	261.20	7893.170	5179.772
760	261.07	7897.478	4995.327
761	264.13	8271.640	5101.240
763	268.68	8252.690	4640.574
766	258.82	6501.571	3979.481
767	252.26	6363.480	3913.980
768	253.31	6506.100	3763.540
769	256.86	6569.128	3624.668
770	252.45	6469.710	3671.010
771	252.32	6466.790	3664.890
772	241.83	6208.100	3561.150
773	248.26	6417.860	3323.160
774	244.92	6089.045	3305.752
775	244.65	5886.936	3333.238
776	272.19	8431.465	4148.300
777	276.03	8555.239	4540.041
779	263.34	8113.332	3177.082
782	241.89	6868.581	2812.497
783	242.98	4995.956	3803.820
789	242.66	5542.741	3561.687
791	243.35	5736.641	3395.917
792	243.01	5913.540	3607.460
793	248.89	6174.694	3830.274
799	242.83	4995.150	3809.957
816	263.53	7821.917	4858.527
818	263.58	7728.867	4846.227

Table B-1
Hydraulic Effectiveness Monitoring Wells

Well	M.P. Elev. (ft amsl)	Coordinates	
		Northing	Easting
819	266.09	7683.873	4739.418
820	263.17	7587.709	4815.166
821	259.25	7595.669	4883.064
822	259.69	7611.786	4925.902
823	262.89	7546.746	5030.185
824	263.17	7533.202	4998.828
826	266.23	7787.289	4717.390
827	266.28	7838.292	4706.758
830	268.16	6631.393	6507.576
831	268.16	6631.393	6507.576
832	281.62	6446.260	6390.277
833	281.62	6446.260	6390.277
835	287.32	5732.456	6298.291
836	287.32	5732.456	6298.291
837	286.45	5650.743	6266.199
838	268.43	5053.607	6148.528
839	235.12	6671.416	2869.429
855	274.71	5839.970	8554.478
856	274.25	5824.081	8548.398
857	262.41	6655.420	6927.500
858	260.85	6639.380	6938.800
859	262.80	7312.421	7300.249
860	262.83	7298.574	7298.820
861	267.06	7826.369	7016.729
862	266.13	7816.150	7025.670
863	266.77	6658.536	6436.742
864	263.22	7793.411	4822.753
895	262.21	5420.504	7427.220
896	262.04	5414.132	7431.928
897	270.06	4934.338	6682.141
898	270.12	4928.359	6679.239
899	303.02	5649.460	6555.720
900	302.69	5658.950	6554.370
902	259.14	6196.074	7092.091
903	258.99	6231.299	7073.207
910	271.16	8404.686	5263.731
921	262.48	5383.703	5909.176
922	262.71	5370.449	5919.909
923	262.76	5366.539	5900.128
924	262.83	5382.716	5890.598
928	252.16	4924.716	5240.517
929	252.16	4924.716	5240.517

Table B-1
Hydraulic Effectiveness Monitoring Wells

Well	M.P. Elev. (ft amsl)	Coordinates	
		Northing	Easting
930	251.84	4664.774	5357.051
931	252.10	4697.190	5340.540
932	267.11	4950.680	6078.512
934	250.21	6719.264	4854.781
935	254.14	4921.320	5488.640
936	254.14	4921.320	5488.640
941	254.52	5331.321	5137.291
943	254.19	4481.165	6103.694
944	254.21	4488.497	6097.271
946	249.87	6172.939	3845.249
947	249.44	6176.877	3837.508
948	249.98	6170.128	3845.793
949	248.46	6194.257	3939.047
952	245.34	5869.760	3631.250
953	251.77	5090.590	4671.000
954	268.20	5627.761	5859.991
955	268.20	5631.698	5865.731
956	268.23	5636.339	5872.566
957	268.28	5640.382	5878.574
958	266.68	4786.231	7605.657
959	251.45	5923.400	4432.322
960	251.40	5938.559	4428.870
963	264.55	6001.330	7144.318
964	264.55	6001.330	7144.318
965	255.40	6056.588	5582.108
966	255.28	6064.807	5592.027
968	271.29	5257.910	5484.861
976	234.73	7274.448	2489.640
980	260.46	7292.800	5019.300
983	305.52	5459.845	6315.578
984	305.45	5459.845	6315.578
985	304.86	5466.675	6322.653
986	304.70	5466.675	6322.653
987	260.20	6384.320	6988.373
988	260.56	6379.532	6995.451
989	260.57	6379.532	6995.451
990	260.08	6361.989	6999.717
991	260.10	6355.954	7002.989
992	260.12	6355.954	7002.989
993	264.50	7465.500	4029.200
994	264.32	7274.400	4052.900
997	257.11	7710.200	5463.800

Table B-1
Hydraulic Effectiveness Monitoring Wells

Well	M.P. Elev. (ft amsl)	Coordinates	
		Northing	Easting
998	258.02	7789.600	5428.600
999	257.25	7794.100	5426.400

Key:

M.P. = Measuring Point

ft amsl = feet above mean sea level

All coordinates in feet relative to site grid

Table B-2: Well Specifications
Corrective Action Performance Monitoring Network

Well Number	Current M.P. Elevation (ft amsl)	Baseline Depth to Bottom (ft below M.P.)	Baseline Elevation of Bottom (ft amsl)	Well Diameter (inches)	Screen Length (feet)	Completion Date	Area of Concern/ OU	Upgradient (U), Downgradient (D), Sidegradient (S), or Source
007	257.35	48.1	209.3	2.00	10.0	11/07/1979	Area A (OU5)	NA
010	270.76	53.8	217.0	2.00	15.0	04/16/1979	Area A (OU5)	Source
015	262.86	28.3	234.6	2.00	20.0	04/05/1979	Area A (OU5)	Source
016	254.91	51.1	203.8	4.00	10.0	10/03/1979	Area A (OU5)	D
032B	233.09	22.2	210.9	4.00	5.0	06/14/2011	Area D (OU4)	Source
046	267.59	19.2	248.4	4.00	10.0	11/07/1979	Area B (OU3)	Source
048	264.31	15.7	248.6	4.00	5.0	11/01/1979	SEQ (OU9)	Source
053	266.58	38.7	227.9	2.00	15.0	03/02/1979	Area C (OU6)	D
054	264.50	28.5	236.1	4.00	10.0	11/06/1979	Area C (OU6)	D
059	235.94	17.4	218.5	4.00	10.0	11/01/1979	B/330 (OU8)	U/S
060	235.68	46.4	189.3	4.00	10.0	11/01/1979	B/330 (OU8)	U/S
061	244.66	29.4	215.3	4.00	20.0	03/29/1979	B/330 (OU8)	U/S
064	259.23	18.2	241.0	4.00	10.0	03/10/1980	Area B (OU3)	D
065	258.76	43.5	215.3	4.00	10.0	03/18/1980	Area B (OU3)	D
066	229.84	11.0	218.8	4.00	5.0	03/11/1980	Area D (OU4)	U
067	234.42	14.7	219.7	2.00	10.0	03/11/1980	Area D (OU4)	U
068	233.85	23.1	210.8	4.00	15.0	03/19/1980	B/322 (OU7)	D
069	253.55	15.5	238.2	4.00	5.0	03/24/1980	Area C (OU6)	S
085	276.34	123.0	153.3	2.00	3.0	12/10/1980	BR (OU2)	NA
087	256.00	109.7	146.3	2.00	5.0	12/02/1980	BR (OU2)	NA
103	257.59	14.6	243.0	2.00	1.0	11/21/1980	Area A (OU5)	D
104	257.59	32.2	225.4	2.00	1.0	11/21/1980	Area A (OU5)	D
105	257.74	105.4	152.3	2.00	3.0	12/01/1980	BR (OU2)	NA
106	257.74	150.2	107.5	2.00	5.0	12/01/1980	BR (OU2)	NA
109	255.45	162.6	92.8	2.00	3.0	12/04/1980	BR (OU2)	NA
113	269.03	110.6	158.4	2.00	5.0	01/14/1981	BR (OU2)	NA
118	263.06	153.5	109.6	2.00	5.0	12/20/1980	Area A (OU5)	Source
143	251.08	145.9	105.2	2.00	3.0	12/09/1980	B/330+BR	U
146	253.97	147.7	106.2	2.00	5.0	01/20/1981	B/330+BR	U
151	241.06	18.4	222.7	2.00	1.0	11/17/1980	B/322 (OU7)	D
156	242.58	86.8	155.8	2.00	3.0	12/05/1980	BR (OU2)	NA
167	254.58	148.1	106.5	2.00	3.0	04/21/1981	BR (OU2)	NA
178	267.22	26.2	241.0	2.00	5.0	04/22/1981	B/330 (OU8)	D
181	248.88	18.1	230.8	4.00	5.0	04/26/1981	B/330 (OU8)	Source
204	252.79	12.9	239.9	2.00	10.0	06/14/1991	Area A (OU5)	U(B/322), D(AA)
502	259.26	35.9	223.3	2.00	10.0	12/23/1986	SEQ (OU9)	D
520	262.28	24.8	237.5	2.00	10.0	12/11/1986	SEQ (OU9)	D
521	262.24	34.9	227.3	2.00	5.0	03/17/1987	BR (OU2)	D
545	264.96	29.8	235.2	2.00	20.5	01/17/1987	SEQ (OU9)	D
559	282.75	83.5	199.3	2.00	10.0	05/05/1987	Area C (OU6)	Source
561	296.33	38.3	258.0	2.00	4.0	04/22/1987	Area C (OU6)	Source
563	285.63	130.0	155.6	2.00	15.0	04/28/1987	Area C+BR	U
564	289.59	94.5	194.9	2.00	5.0	04/21/1987	BR (OU2)	NA
571	286.39	15.0	271.4	2.00	4.0	03/17/1987	Area B (OU3)	U
572	251.13	16.6	234.5	2.00	5.0	04/13/1989	B/330 (OU8)	Source
574	269.09	32.6	236.5	2.00	5.0	10/19/1989	B/330 (OU8)	Source
576	265.95	19.9	246.0	2.00	5.0	12/17/1991	B/330 (OU8)	Source
577	230.42	223.3	7.1	2.00	20.0	12/22/1994	BR (OU2)	NA
579	247.54	254.2	-6.7	2.00	20.0	04/06/1995	B/322+BR	NA
580	257.24	17.5	239.8	2.00	10.0	03/31/1995	B/322 (OU7)	U
581	267.23	28.9	238.3	2.00	5.0	06/20/1996	Area A (OU5)	U
600	265.91	19.9	246.0	2.00	10.0	11/01/1996	B/330 (OU8)	U/S
601	266.08	137.7	128.3	2.00	5.0	10/16/1996	B/330 (OU8)	S
602	253.38	22.5	230.9	2.00	10.0	10/30/1996	B/330 (OU8)	S
603	252.54	26.0	226.5	2.00	10.0	10/31/1996	B/330 (OU8)	U

Table B-2: Well Specifications
Corrective Action Performance Monitoring Network

Well Number	Current M.P. Elevation (ft amsl)	Baseline Depth to Bottom (ft below M.P.)	Baseline Elevation of Bottom (ft amsl)	Well Diameter (inches)	Screen Length (feet)	Completion Date	Area of Concern/ OU	Upgradient (U), Downgradient (D), Sidegradient (S), or Source
604	252.66	139.4	113.3	2.00	10.0	10/18/1996	B/330 (OU8)	U
607	253.77	118.9	134.8	2.00	20.0	12/06/1996	B/330+BR	Source
609	249.18	235.3	13.9	2.00	10.0	12/13/1996	B/330+BR	D
610	250.87	180.6	70.3	2.00	20.0	12/20/1996	B/330+BR	D/S
611	244.23	216.6	27.6	2.00	20.0	01/30/1997	B/330+BR	D/S
612	249.89	33.4	216.5	4.00	15.2	12/02/1997	B/322 (OU7)	D
622	268.08	218.3	49.8	2.00	20.1	02/10/1999	B/330+BR	D
623	246.74	338.7	-92.0	2.00	15.0	02/26/1999	B/330+BR	D
624	246.31	364.0	-128.2	2.00	10.0	03/12/1999	B/330+BR	D
627	263.85	19.7	244.2	2.00	10.0	04/17/2000	B/322 (OU7)	U(B/322), D(AA)
628	267.42	64.2	203.2	4.00	40.0	04/12/2001	Area B (OU3)	Source
640	253.22	20.2	233.0	2.00	10.0	12/08/2009	B/330 (OU8)	D
701	248.83	20.0	228.8	2.00	5.0	12/04/1986	Area A (OU5)	D
702	255.09	17.7	237.4	2.00	5.0	12/05/1986	Area A (OU5)	D
706	259.92	45.4	214.5	2.00	10.0	11/22/1986	Area A (OU5)	D
711	263.69	349.3	-85.6	6.00	OPEN HOLE	10/15/1986	BR (OU2)	NA
714	266.26	37.4	228.9	2.00	10.0	11/28/1986	Area A (OU5)	Source
716	272.14	171.2	100.9	4.00	20.0	10/20/1986	BR (OU2)	NA
720	275.43	53.1	222.4	2.00	22.5	01/07/1987	Area A (OU5)	U
722	260.15	350.6	-90.5	6.00	OPEN HOLE	10/03/1986	BR (OU2)	NA
732	265.17	248.0	17.2	4.00	80.0	10/28/1986	Area A (OU5)	D
734	261.79	219.7	42.1	2.00	30.0	11/05/1986	Area A (OU5)	D
735	259.11	23.6	235.6	2.00	10.0	12/11/1986	B/322 (OU7)	Source
737	259.10	190.1	69.0	2.00	30.0	07/07/1987	B/322+BR	Source
739	261.35	214.4	47.0	4.00	40.0	10/26/1986	BR (OU2)	NA
740	256.69	21.4	235.3	2.00	10.0	12/06/1986	B/322 (OU7)	D
742	256.78	217.9	38.9	4.00	80.0	10/30/1986	B/322+BR	NA
743	261.06	19.5	241.6	2.00	10.0	05/09/1987	B/322 (OU7)	U/S
744	254.46	28.7	225.8	2.00	5.0	08/18/1987	Area A (OU5)	U
745	254.47	14.4	240.1	2.00	5.0	08/19/1987	Area A (OU5)	U
751	254.24	13.4	240.8	4.00	6.0	07/23/1987	Area A (OU5)	D
753	248.38	13.1	235.3	4.00	3.6	07/27/1987	Area A (OU5)	D
754	249.19	22.8	226.4	4.00	15.0	07/17/1987	B/322 (OU7)	D/S
755	238.91	23.2	215.7	4.00	16.0	07/17/1987	B/322 (OU7)	D/S
756	252.61	20.0	232.6	4.00	12.0	07/09/1987	B/330 (OU8)	D
757	234.36	20.3	214.1	2.00	10.0	09/25/1987	Area D (OU4)	Source
761	264.13	32.6	231.5	2.00	10.0	11/09/1990	Area A (OU5)	U
763	268.68	49.7	219.0	2.00	5.0	10/12/1990	Area A (OU5)	U
766	258.82	25.6	233.4	2.00	5.0	10/24/1990	B/322 (OU7)	Source
767	252.26	18.4	233.8	2.00	10.0	11/20/1990	B/322 (OU7)	Source
768	253.31	22.8	230.5	2.00	10.0	10/19/1990	B/322 (OU7)	D
769	256.86	26.9	230.0	2.00	10.0	10/22/1990	B/322 (OU7)	D
771	252.32	18.7	233.6	2.00	5.0	10/18/1990	B/322 (OU7)	D
772	241.83	18.8	223.0	2.00	10.0	11/20/1990	B/322 (OU7)	D
773	248.26	28.9	219.4	2.00	10.0	11/19/1990	B/322 (OU7)	D
774	244.92	30.1	214.8	2.00	10.0	10/23/1990	B/322 (OU7)	D
775	244.65	30.4	214.3	2.00	10.0	11/16/1990	B/322 (OU7)	D
777	276.03	130.5	145.5	2.00	10.0	12/21/1990	BR (OU2)	NA
779	263.34	233.0	30.3	2.00	10.0	12/21/1990	BR (OU2)	NA
789	242.66	21.3	221.4	2.00	10.0	05/09/1991	B/322 (OU7)	D
791	243.35	22.5	220.8	2.00	10.0	05/02/1991	B/322 (OU7)	D
792	243.01	20.9	222.1	2.00	10.0	06/04/1991	B/322 (OU7)	D
793	248.89	29.5	219.4	2.00	10.0	06/11/1991	B/322 (OU7)	D
832	281.62	30.4	251.2	2.00	5.0	03/23/1982	Area B (OU3)	U
857	262.41	110.1	151.3	4.00	3.0	06/28/1982	BR (OU2)	NA

Table B-2: Well Specifications
Corrective Action Performance Monitoring Network

Well Number	Current M.P. Elevation (ft amsl)	Baseline Depth to Bottom (ft below M.P.)	Baseline Elevation of Bottom (ft amsl)	Well Diameter (inches)	Screen Length (feet)	Completion Date	Area of Concern/ OU	Upgradient (U), Downgradient (D), Sidegradient (S), or Source
858	260.85	159.0	101.8	4.00	5.0	06/25/1982	BR (OU2)	NA
921	262.48	86.2	176.3	3.75	10.0	03/27/1984	B/330 (OU8)	D
922	262.71	116.6	146.1	3.75	10.0	04/24/1984	B/330 (OU8)	D
923	262.76	160.9	101.9	2.00	10.0	04/04/1984	B/330 (OU8)	D
929	252.16	152.9	99.3	2.00	10.0	06/14/1984	B/330 (OU8)	U
931	252.10	151.5	100.6	3.75	10.0	05/23/1984	B/330 (OU8)	S
932	267.11	172.8	94.3	4.00	20.0	05/24/1984	Area C+BR	D
941	254.52	134.1	120.4	4.00	20.0	12/08/1984	B/330 (OU8)	D
943	254.19	144.1	110.1	4.00	20.0	01/09/1985	Area C+BR	D
944	254.21	71.9	182.2	4.00	20.0	01/14/1985	Area C (OU6)	D
952	245.34	198.0	47.3	4.00	40.0	02/01/1985	B/322+BR	NA
953	251.77	153.1	98.7	4.00	10.0	02/07/1985	B/330+BR	D/S
954	268.20	172.5	95.7	4.00	20.0	02/12/1985	B/330 (OU8)	U
956	268.23	107.7	160.5	4.00	10.0	02/18/1985	B/330 (OU8)	U
958	266.68	106.4	160.3	4.00	20.0	02/20/1986	BR (OU2)	NA
959	251.45	157.4	94.0	4.00	10.0	02/21/1985	B/322+BR	Source
960	251.40	90.6	160.8	4.00	20.0	02/22/1985	B/322+BR	Source
963	264.55	165.4	99.2	2.00	20.0	03/01/1985	BR (OU2)	NA
964	264.55	95.3	169.3	2.00	10.0	03/01/1985	BR (OU2)	NA
965	255.40	144.8	110.6	4.00	10.0	03/05/1985	B/330+BR	U
966	255.28	126.3	129.0	4.00	35.0	03/06/1985	B/330+BR	U
987	260.20	44.8	215.4	6.00	10.0	08/04/1986	SEQ (OU9)	D
990	260.08	20.8	239.3	4.00	5.0	08/06/1986	SEQ (OU9)	D
998	258.02	21.8	236.2	2.00	5.0	07/27/1987	Area A (OU5)	D
999	257.25	52.9	204.3	2.00	10.0	07/23/1987	Area A (OU5)	D
PW-1	262.24	518.5	-256.3	12.0	OPEN HOLE	1962	BR (OU2)	NA
PW-2	255.34	280.2	-24.8	12.0	OPEN HOLE	1963	BR (OU2)	NA
PW-2R	257.77	323	-65.3	10.0	70.0	06/14/2018	BR (OU2)	NA
PW-4*	248.73	267.6	-18.8	8.0	40.0	1968	BR (OU2)	NA
PW-5*	241.88	545.1	-303.1	10.0	OPEN HOLE	1970	BR (OU2)	NA
PW-5A*	242.01	524.6	-282.6	12.0	425.7	1984	BR (OU2)	NA
PW-6*	244.19	440.5	-196.3	12.0	OPEN HOLE	1979	BR (OU2)	NA
PW-7*	268.16	748.7	-480.6	12.0	OPEN HOLE	1979	B/330+BR	D
PW-9*	263.50	704.7	-441.2	14.0	OPEN HOLE	1981	BR (OU2)	NA
PW-23	267.03	48.1	219.0	6.00	OPEN HOLE	03/03/1987	SEQ (OU9)	Source
PW-25	250.53	432.3	-182.0	10.0	91.1	06/15/2000	B/330+BR	NA

Key:

Area A = Area A (OU5)
Area B = Area B (OU3)
Area C = Landfill (OU6)
Area D = Area D (OU4)
B/322 = Building 322 (OU7)
B/330 = Building 330 (OU8)

BR = Bedrock (OU2)
SEQ = Southeast Quadrant (OU9)
NA = Not applicable or not available
ft amsl = feet above mean sea level
M.P. = measuring point (generally a survey mark at top of inner monitoring pipe or casing
* =PW-4, PW5/5A, PW-6, PW-7, PW-9 are sampled only when in use (water supply emergencies only).

Table B-3: Sampling Schedule
Corrective Action Performance Monitoring Network

Well	Area of Concern/OU	Inorganics[&]	VOC Frequency	Monitoring Category				
				CAM	PCT	CRM	POC	AM
007	Area A (OU5)	Cr	A					X
010	Area A (OU5)	Cr	S	X		X		
015	Area A (OU5)	Cr, TF	S	X				
016	Area A (OU5)		S	X		X		
032B	Area D (OU4)		Q	X		X		
046	Area B (OU3)		Q	X				
048	SEQ (OU9)		Q	X				
053	Area C (OU6)		S	X				
054	Area C (OU6)		S	X				
059	B/330 (OU8)		A					X
060	B/330 (OU8)		A					X
061	B/330 (OU8)		A					X
064	Area B (OU3)		Q	X			X	
065	Area B (OU3)		Q	X			X	
066	Area D (OU4)		Q	X			X	
067	Area D (OU4)		Q	X			X	
068	B/322 (OU7)	As	Q	X				
069	Area C (OU6)		A					X
085	BR (OU2)		S	X				
087	BR (OU2)		S	X				
103	Area A (OU5)		S	X		X		
104	Area A (OU5)	Cr	S	X		X		
105	BR (OU2)		S	X		X		
106	BR (OU2)		A					X
109	BR (OU2)		S	X				
113	BR (OU2)		S	X				
118	Area A (OU5)		A					X
143	B/330+BR		A					X
146	B/330+BR		A					X
151	B/322 (OU7)		S	X				
156	BR (OU2)		S	X				
167	BR (OU2)		S	X				
178	B/330 (OU8)		A					X
181	B/330 (OU8)		S	X				
204	Area A (OU5)	Cr	A					X
502	SEQ (OU9)		A					X
520	SEQ (OU9)		S	X				
521	BR (OU2)		S	X				
545	SEQ (OU9)		S	X				
559	Area C (OU6)		S	X				
561	Area C (OU6)		S	X				
563	Area C+BR		S	X				
564	BR (OU2)		S	X				
571	Area B (OU3)		A					X
572	B/330 (OU8)		A					X
574	B/330 (OU8)		A					X
576	B/330 (OU8)		S	X				

Table B-3: Sampling Schedule
Corrective Action Performance Monitoring Network

Well	Area of Concern/OU	Inorganics[&]	VOC Frequency	Monitoring Category				
				CAM	PCT	CRM	POC	AM
577	BR (OU2)		S	X				
579	B/322+BR		A					X
580	B/322 (OU7)	Cr, TF	A					X
581	Area A (OU5)	Cr	A					X
600	B/330 (OU8)		A					X
601	B/330 (OU8)		S	X				
602	B/330 (OU8)		A					X
603	B/330 (OU8)		A					X
604	B/330 (OU8)		A					X
607	B/330+BR		S	X				
609	B/330+BR		S	X				
610	B/330+BR		S	X				
611	B/330+BR		A					X
612	B/322 (OU7)		Q	X		X		
622	B/330+BR		S	X				
623	B/330+BR		S	X				
624	B/330+BR		S	X				
627	B/322 (OU7)	As, Ni, TF	A					X
628	Area B (OU3)		Q	X		X		
640	B/330 (OU8)		S	X				
701	Area A (OU5)	Cr	A					X
702	Area A (OU5)		S	X				
706	Area A (OU5)	TF	S	X				
711	BR (OU2)		A					X
714	Area A (OU5)		S	X		X		
716	BR (OU2)		S	X		X		
720	Area A (OU5)		S	X				
722	BR (OU2)		A					X
732	Area A (OU5)		S	X				
734	Area A (OU5)		S	X				
735	B/322 (OU7)	As, TF	S	X				
737	B/322+BR		S	X				
739	BR (OU2)		A					X
740	B/322 (OU7)	Cr, TF	A	X				
742	B/322+BR		S	X				
743	B/322 (OU7)		A					X
744	Area A (OU5)		S	X				
745	Area A (OU5)		A					X
751	Area A (OU5)		A					X
753	Area A (OU5)		A					X
754	B/322 (OU7)	Cr	A					X
755	B/322 (OU7)		S	X				
756	B/330 (OU8)		A					X
757	Area D (OU4)		S	X				
761	Area A (OU5)	Cr	A					X
763	Area A (OU5)	Cr	A					X
766	B/322 (OU7)	As, Cr, Ni, TF	S	X				

Table B-3: Sampling Schedule
Corrective Action Performance Monitoring Network

Well	Area of Concern/OU	Inorganics[&]	VOC Frequency	Monitoring Category				
				CAM	PCT	CRM	POC	AM
767	B/322 (OU7)	As, Cr, TF	S	X				
768	B/322 (OU7)	As, Cr, Ni, TF	S	X				
769	B/322 (OU7)	As, Cr, Ni, TF	S	X				
771	B/322 (OU7)	Cr	A					X
772	B/322 (OU7)	As, Cr, Ni	S	X				
773	B/322 (OU7)	Cr	A					X
774	B/322 (OU7)	Cr	S	X				
775	B/322 (OU7)	Cr	A					X
777	BR (OU2)		S	X				
779	BR (OU2)		S	X				
789	B/322 (OU7)	Cr	A					X
791	B/322 (OU7)	Cr	A					X
792	B/322 (OU7)	As, Cr	A					X
793	B/322 (OU7)	As, Cr, Ni, TF	S	X				
832	Area B (OU3)		A					X
857	BR (OU2)		S	X				
858	BR (OU2)		S	X				
921	B/330 (OU8)		S	X				
922	B/330 (OU8)		S	X				
923	B/330 (OU8)		S	X				
929	B/330 (OU8)		S	X				
931	B/330 (OU8)		S	X				
932	Area C+BR		S	X				
941	B/330 (OU8)		S	X				
943	Area C+BR		S	X		X		
944	Area C (OU6)		S	X				
952	B/322+BR	As, Cr	S	X				
953	B/330+BR		S	X				
954	B/330 (OU8)		S	X				
956	B/330 (OU8)		S	X				
958	BR (OU2)		S	X				
959	B/322+BR	As	S	X				
960	B/322+BR	As	S	X				
963	BR (OU2)		S	X				
964	BR (OU2)		S	X				
965	B/330+BR		A					X
966	B/330+BR		S	X				
987	SEQ (OU9)		Q	X			X	
990	SEQ (OU9)		Q	X			X	
998	Area A (OU5)		S	X				
999	Area A (OU5)		S	X				
PW-1	BR (OU2)		M	X	X	X		
PW-2/2R	BR (OU2)		M	X	X	X		
PW-4*	BR (OU2)		M					
PW-5/5A*	BR (OU2)		M					
PW-6*	BR (OU2)		M					

Table B-3: Sampling Schedule
Corrective Action Performance Monitoring Network

Well	Area of Concern/OU	Inorganics[&]	VOC Frequency	Monitoring Category				
				CAM	PCT	CRM	POC	AM
PW-7*	B/330+BR		M					
PW-9*	BR (OU2)		M					
PW-23	SEQ (OU9)		Q	X				
PW-25	B/330+BR		M	X	X	X		
SUMP/B384	Area A (OU5)	Cr, TF (Monthly)	M	X	X	X		

Key:

Area A = Area A (OU5)
Area B = Area B (OU3)
Area C = Landfill (OU6)
Area D = Area D (OU4)
B/322 = Building 322 (OU7)
B/330 = Building 330 (OU8)
BR = Bedrock (OU2)
SEQ = Southeast Quadrant (OU9)

A = Annual
S = Semiannual
Q = Quarterly
M = Monthly

CAM = Corrective Action Monitoring
PCT = Process Control for Treatment
CRM = Contaminant Reduction Monitoring
POC = Point of Compliance Monitoring
AM = Annual Monitoring

[&] Unfiltered and filtered metals, sampled annually unless noted. Total Fluoride (TF) will be unfiltered.
*Sampled only when used for water supply emergency.

Appendix C

Groundwater Collection and Mass Removal Data

Table C-1: Pumping Volumes for Groundwater Extraction Wells/Sumps, 2024
Table C-2: Mass Removal Data for Groundwater Extraction Wells/Sumps, 2024

Table C-1: Pumping Volumes for Groundwater Extraction Wells/Sump
Former IBM East Fishkilll Remediation
January 2024 to December 2024

Period		Location			
from	to	PW-1	PW-2R	PW-25	Area A AOC[#]
1-Jan-24	31-Jan-24	2,607,543	3,424,071	10,517,971	190,856
1-Feb-24	29-Feb-24	267,408	2,965,912	9,816,476	149,568
1-Mar-24	31-Mar-24	3,347,989	2,982,470	10,466,836	175,219
1-Apr-24	30-Apr-24	3,240,204	2,780,544	7,746,572	169,342
1-May-24	31-May-24	3,348,008	2,763,244	10,471,001	151,891
1-Jun-24	30-Jun-24	2,960,705	2,702,471	10,094,469	92,121
1-Jul-24	31-Jul-24	1,174,763	3,063,842	10,426,978	104,056
1-Aug-24	31-Aug-24	2,424,369	3,650,767	10,402,630	87,261
1-Sep-24	30-Sep-24	3,021,197	2,662,663	10,017,423	36,841
1-Oct-24	31-Oct-24	3,347,889	2,436,921	9,110,929	23,883
1-Nov-24	30-Nov-24	3,243,226	2,312,854	9,998,263	17,908
1-Dec-24	31-Dec-24	2,219,719	1,920,284	10,398,361	29,586
12-Month Volume (gal)		31,203,019	33,666,044	119,467,908	1,228,532
***Average Rate (gpm)**		59	64	227	2.3

Volume Treated from January 1, 2024 through December 31, 2024:

PW-1 GTF	31,203,019	Bedrock
PW-2 GTF	33,666,044	Bedrock
PW-25 GTF	119,467,908	Bedrock
B/384 GTF	1,228,532	Overburden
Total	185,565,503	gallons (all systems)

[#]Pumping volume for Area A AOC includes conbined withrawals of shallow groundwater from the B384 Sump and pilot extraction well GW-634.

Table C-2: Mass Removal Data for Groundwater Extraction Wells/Sumps 2024
Former IBM East Fishkilll Remediation
January 2024 to December 2024

		Chemical Concentrations (ug/l)								Pounds of Chemicals Removed										
Location	Period	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon® 113)	1,2-Dichloro-1,2,2-Trifluoroethane (Freon® 123a)	Other VOCs*	Volume Pumped (gallons)	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon® 113)	1,2-Dichloro-1,2,2-Trifluoroethane (Freon® 123a)	*Other VOCs	Total VOCs Removed (pounds)	Period	Location	Pounds Removed January - December 2022
PW-1	Jan-24	12.5	4.8	1.0	0.0	1.9	0.0	0.0	2,607,543	0.27	0.10	0.02	0.00	0.04	0.00	0.00	0.44	Jan-24	PW-1	5.3
	Feb-24	4.9	1.9	0.4	0.0	0.8	0.0	0.0	267,408	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	Feb-24		
	Mar-24	8.3	3.3	0.7	0.0	1.5	0.0	0.0	3,347,989	0.23	0.09	0.02	0.00	0.04	0.00	0.00	0.38	Mar-24		
	Apr-24	11.0	4.3	0.9	0.0	1.9	0.0	0.0	3,240,204	0.30	0.12	0.02	0.00	0.05	0.00	0.00	0.49	Apr-24		
	May-24	13.0	5.2	1.0	0.0	2.1	0.0	0.0	3,348,008	0.36	0.15	0.03	0.00	0.06	0.00	0.00	0.60	May-24		
	Jun-24	13.0	4.9	1.1	0.0	2.0	0.0	0.0	2,960,705	0.32	0.12	0.03	0.00	0.05	0.00	0.00	0.52	Jun-24		
	Jul-24	13.0	5.0	1.0	0.0	2.1	0.0	0.0	1,174,763	0.13	0.05	0.01	0.00	0.02	0.00	0.00	0.21	Jul-24		
	Aug-24	9.0	3.4	0.8	0.0	1.6	0.0	0.0	2,424,369	0.18	0.07	0.02	0.00	0.03	0.00	0.00	0.30	Aug-24		
	Sep-24	13.0	4.7	1.0	0.0	2.2	0.0	0.0	3,021,197	0.33	0.12	0.03	0.00	0.06	0.00	0.00	0.53	Sep-24		
	Oct-24	15.0	5.5	1.2	0.0	2.4	0.0	0.0	3,347,889	0.42	0.15	0.03	0.00	0.07	0.00	0.00	0.67	Oct-24		
	Nov-24	16.0	6.2	1.3	0.0	2.7	0.0	0.0	3,243,226	0.43	0.17	0.04	0.00	0.07	0.00	0.00	0.71	Nov-24		
	Dec-24	16.0	5.9	1.2	0.0	2.5	0.0	0.0	2,219,719	0.30	0.11	0.02	0.00	0.05	0.00	0.00	0.47	Dec-24		
PW-2R	Jan-24	10,000.0	790.0	1,200.0	180.0	120.0	11.5	0.0	3,424,071	285.72	22.57	34.29	5.14	3.43	0.33	0.00	351.48	Jan-24	PW-2R	3773.8
	Feb-24	8,800.0	850.0	1,300.0	260.0	160.0	16.0	0.0	2,965,912	217.79	21.04	32.17	6.43	3.96	0.40	0.00	281.79	Feb-24		
	Mar-24	9,700.0	880.0	1,300.0	230.0	160.0	15.0	0.0	2,982,470	241.40	21.90	32.35	5.72	3.98	0.37	0.00	305.74	Mar-24		
	Apr-24	12,000.0	840.0	1,300.0	200.0	160.0	12.5	0.0	2,780,544	278.42	19.49	30.16	4.64	3.71	0.29	0.00	336.72	Apr-24		
	May-24	10,000.0	810.0	1,200.0	220.0	150.0	14.0	0.0	2,763,244	230.58	18.68	27.67	5.07	3.46	0.32	0.00	285.78	May-24		
	Jun-24	11,000.0	820.0	1,300.0	200.0	150.0	13.0	9.4	2,702,471	248.06	18.49	29.32	4.51	3.38	0.29	0.21	304.26	Jun-24		
	Jul-24	11,500.0	825.0	1,300.0	205.0	145.0	13.5	0.0	3,063,842	294.01	21.09	33.24	5.24	3.71	0.35	0.00	357.63	Jul-24		
	Aug-24	11,000.0	830.0	1,300.0	250.0	160.0	14.0	0.0	3,650,767	335.10	25.28	39.60	7.62	4.87	0.43	0.00	412.90	Aug-24		
	Sep-24	12,000.0	780.0	1,100.0	210.0	150.0	0.0	0.0	2,662,663	266.62	17.33	24.44	4.67	3.33	0.00	0.00	316.39	Sep-24		
	Oct-24	12,500.0	800.0	1,200.0	215.0	155.0	0.0	0.0	2,436,921	254.18	16.27	24.40	4.37	3.15	0.00	0.00	302.38	Oct-24		
	Nov-24	12,000.0	950.0	1,400.0	240.0	190.0	15.0	0.0	2,312,854	231.59	18.33	27.02	4.63	3.67	0.29	0.00	285.53	Nov-24		
	Dec-24	12,000.0	860.0	1,300.0	220.0	160.0	17.0	0.0	1,920,284	192.28	13.78	20.83	3.53	2.56	0.27	0.00	233.26	Dec-24		
PW-25	Jan-24	535.0	67.5	21.5	0.0	10.0	0.0	0.0	10,517,971	46.95	5.92	1.89	0.00	0.87	0.00	0.00	55.64	Jan-24	PW-25	591.2
	Feb-24	480.0	69.0	23.0	0.1	17.0	0.5	0.3	9,816,476	39.32	5.65	1.88	0.01	1.39	0.04	0.03	48.32	Feb-24		
	Mar-24	510.0	69.0	21.0	0.0	12.0	0.0	0.0	10,466,836	44.54	6.03	1.83	0.00	1.05	0.00	0.00	53.45	Mar-24		
	Apr-24	515.0	67.0	23.0	0.0	11.5	0.0	0.0	7,746,572	33.29	4.33	1.49	0.00	0.74	0.00	0.00	39.85	Apr-24		
	May-24	460.0	60.0	19.0	0.0	10.0	0.0	0.0	10,471,001	40.19	5.24	1.66	0.00	0.87	0.00	0.00	47.97	May-24		
	Jun-24	500.0	65.0	24.0	0.0	14.0	0.4	0.3	10,094,469	42.12	5.48	2.02	0.00	1.18	0.03	0.03	50.85	Jun-24		
	Jul-24	475.0	62.0	21.5	0.0	10.0	0.1	0.1	10,426,978	41.33	5.39	1.87	0.00	0.87	0.01	0.01	49.49	Jul-24		
	Aug-24	490.0	58.0	21.0	0.0	12.0	0.3	0.3	10,402,630	42.53	5.03	1.82	0.00	1.04	0.03	0.02	50.48	Aug-24		
	Sep-24	490.0	61.0	20.0	0.0	10.0	0.3	0.2	10,017,423	40.96	5.10	1.67	0.00	0.84	0.02	0.02	48.61	Sep-24		
	Oct-24	505.0	63.5	21.0	0.0	11.0	0.2	0.0	9,110,929	38.39	4.83	1.60	0.00	0.84	0.01	0.00	45.66	Oct-24		
	Nov-24	510.0	68.0	22.0	0.0	13.0	0.0	0.0	9,998,263	42.55	5.67	1.84	0.00	1.08	0.00	0.00	51.14	Nov-24		
	Dec-24	480.0	58.0	22.0	0.0	13.0	0.2	0.0	10,398,361	41.65	5.03	1.91	0.00	1.13	0.02	0.00	49.74	Dec-24		
Area A AOC	Jan-24	1,500.0	26.0	3.9	0.0	6.2	4.5	0.0	190,856	2.39	0.04	0.01	0.00	0.01	0.01	0.00	2.45	Jan-24	B/384 Sump	196.3
	Feb-24	6,400.0	120.0	32.0	0.0	31.0	0.0	0.0	149,568	7.99	0.15	0.04	0.00	0.04	0.00	0.00	8.22	Feb-24		
	Mar-24	9,300.0	330.0	44.0	0.0	42.0	0.0	0.0	175,219	13.60	0.48	0.06	0.00	0.06	0.00	0.00	14.21	Mar-24		
	Apr-24	5,800.0	160.0	30.0	0.0	31.0	0.0	0.0	169,342	8.20	0.23	0.04	0.00	0.04	0.00	0.00	8.51	Apr-24		
	May-24	8,800.0	220.0	32.0	0.0	34.0	0.0	0.0	151,891	11.15	0.28	0.04	0.00	0.04	0.00	0.00	11.52	May-24		
	Jun-24	120,000.0	1,800.0	43.0	0.0	140.0	0.0	363.0	92,121	92.24	1.38	0.03	0.00	0.11	0.00	0.28	94.05	Jun-24		
	Jul-24	22,000.0	260.0	13.0	0.0	27.0	0.4	48.4	104,056	19.10	0.23	0.01	0.00	0.02	0.00	0.04	19.41	Jul-24		
	Aug-24	35,000.0	740.0	33.0	0.0	23.0	0.0	0.0	87,261	25.48	0.54	0.02	0.00	0.02	0.00	0.00	26.06	Aug-24		
	Sep-24	24,000.0	1,100.0	67.0	0.0	69.0	0.0	0.0	36,841	7.38	0.34	0.02	0.00	0.02	0.00	0.00	7.76	Sep-24		
	Oct-24	11,000.0	410.0	35.0	0.0	0.0	0.0	0.0	23,883	2.19	0.08	0.01	0.00	0.00	0.00	0.00	2.28	Oct-24		
	Nov-24	2,000.0	98.0	9.5	0.0	1.3	0.0	0.0	17,908	0.30	0.01	0.00	0.00	0.00	0.00	0.00	0.32	Nov-24		
	Dec-24	6,000.0	280.0	32.0	0.0	0.0	0.0	0.0	29,586	1.48	0.07	0.01	0.00	0.00	0.00	0.00	1.56	Dec-24		
								Totals	185,565,503	3764.4	303.0	377.5	61.6	56.0	3.5	0.6	4567			

*Other VOCs
Trichlorofluoromethane
Dichlorodifluoromethane
1,1,1-Trichloroethane
Chlorobenzene
1,2-Dichlorobenzene
Acetone
m,p-Xylene
o-Xylene
Acetone

#Mass removed from the Area A AOC includes combined withrawals of shallow groundwater from the B384 Sump and pilot extraction well GW-634.

Appendix D

Quarterly Groundwater Elevation Data, 2024

Former IBM East Fishkill Remediation
Quarterly Groundwater Elevation Data: January through December 2024

	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
Well	**Date**	**Elev.**	**Date**	**Elev.**	**Date**	**Elev.**	**Date**	**Elev.**
002	01/25/2024	262.67	06/26/2024	255.07	09/18/2024	251.89	10/10/2024	250.94
003	01/25/2024	262.34	06/26/2024	255.05	09/18/2024	251.84	10/10/2024	250.91
005	01/23/2024	251.72	06/26/2024	248.68	09/16/2024	247.83	10/08/2024	247.52
006	01/23/2024	251.26	06/26/2024	248.43	09/16/2024	247.59	10/08/2024	247.26
007	01/23/2024	247.97	06/25/2024	245.43	09/16/2024	243.39	10/07/2024	242.65
008	01/22/2024	252.99	06/25/2024	249.12	09/16/2024	246.33	10/09/2024	245.28
009	01/22/2024	253.31	06/25/2024	249.09	09/16/2024	246.14	10/09/2024	245.30
010	01/22/2024	250.53	06/25/2024	244.05	09/18/2024	239.66	10/10/2024	238.06
011	01/22/2024	254.96	06/25/2024	254.05	09/16/2024	253.81	10/07/2024	253.19
013	01/24/2024	245.45	06/25/2024	240.92	09/16/2024	237.77	10/07/2024	236.70
014	01/24/2024	243.58	06/25/2024	240.21	09/16/2024	236.10	10/07/2024	235.11
015	01/24/2024	249.11	06/25/2024	245.27	09/16/2024	244.84	10/07/2024	244.12
016	01/23/2024	240.49	06/26/2024	237.55	09/17/2024	234.89	10/07/2024	234.24
017	01/23/2024	246.43	06/26/2024	245.16	09/17/2024	240.91	10/07/2024	244.63
018	01/24/2024	225.98	06/27/2024	224.27	09/17/2024	220.78	10/08/2024	220.15
019	01/24/2024	247.45	06/27/2024	246.48	09/17/2024	246.45	10/08/2024	245.75
020	01/25/2024	240.66	06/27/2024	237.89	09/18/2024	235.38	10/09/2024	234.62
022	01/25/2024	244.44	06/27/2024	244.52	09/18/2024	243.12	10/09/2024	242.85
027	01/22/2024	233.86	06/25/2024	228.92	09/16/2024	225.20	10/07/2024	224.83
028	01/22/2024	229.83	06/25/2024	225.26	09/16/2024	221.98	10/07/2024	220.82
030	01/22/2024	228.38	06/27/2024	226.92	09/16/2024	225.04	10/08/2024	224.62
032B	01/22/2024	229.36	06/27/2024	228.17	09/16/2024	226.91	10/08/2024	226.53
035	01/25/2024	242.95	06/27/2024	241.24	09/17/2024	239.78	10/07/2024	239.25
038	01/24/2024	235.94	06/26/2024	234.14	09/17/2024	232.16	10/09/2024	231.26
039	01/24/2024	235.89	06/26/2024	233.85	09/17/2024	231.77	10/09/2024	230.77
044	01/23/2024	248.01	06/25/2024	245.58	09/17/2024	245.57	10/07/2024	245.57
046	01/23/2024	262.87	06/26/2024	255.17	09/17/2024	252.54	10/09/2024	250.88
048	01/23/2024	259.19	06/26/2024	258.06	09/16/2024	257.90	10/08/2024	257.37
049	01/23/2024	260.70	06/26/2024	258.45	09/16/2024	258.16	10/08/2024	257.91
050	01/23/2024	261.03	06/26/2024	258.80	09/16/2024	258.51	10/08/2024	258.26
053	01/24/2024	254.48	06/27/2024	251.10	09/17/2024	248.50	10/07/2024	247.34
054	01/23/2024	253.78	06/26/2024	249.95	09/17/2024	248.70	10/08/2024	247.86
059	01/24/2024	231.56	06/26/2024	230.48	09/17/2024	229.43	10/08/2024	229.99
060	01/24/2024	229.47	06/26/2024	227.56	09/17/2024	226.34	10/08/2024	225.50
061	01/24/2024	236.15	06/26/2024	235.46	09/17/2024	235.01	10/08/2024	234.68
062	01/23/2024	246.68	06/26/2024	241.56	09/17/2024	238.56	10/08/2024	236.21
063	01/23/2024	246.50	06/26/2024	241.05	09/17/2024	238.48	10/08/2024	236.05
064	01/23/2024	255.81	06/26/2024	253.58	09/16/2024	252.18	10/08/2024	251.19
065	01/23/2024	255.76	06/26/2024	253.46	09/16/2024	252.18	10/08/2024	251.10
066	01/22/2024	225.26	06/27/2024	224.20	09/16/2024	223.47	10/08/2024	223.68
067	01/22/2024	227.19	06/27/2024	226.90	09/16/2024	226.59	10/08/2024	227.07
068	01/25/2024	231.97	06/27/2024	230.66	09/16/2024	229.75	10/09/2024	229.53
069	01/23/2024	250.84	06/26/2024	249.03	09/17/2024	247.94	10/08/2024	247.11
075	01/22/2024	246.08	06/25/2024	244.32	09/16/2024	243.45	10/07/2024	243.14
085	01/23/2024	256.49	06/26/2024	250.89	09/16/2024	249.24	10/09/2024	248.39
086	01/23/2024	255.52	06/26/2024	250.34	09/16/2024	248.64	10/09/2024	247.80
087	01/23/2024	249.88	06/26/2024	246.87	09/16/2024	246.60	10/08/2024	246.24
088	01/23/2024	249.45	06/26/2024	247.28	09/16/2024	246.49	10/08/2024	246.19
091	01/23/2024	260.52	06/26/2024	259.21	09/16/2024	258.87	10/09/2024	258.35

Key:
FLOW: Flowing Water
NA: Not Accessible - Construction
All Elevations are in feet above mean sea level

Former IBM East Fishkill Remediation
Quarterly Groundwater Elevation Data: January through December 2024

	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
Well	**Date**	**Elev.**	**Date**	**Elev.**	**Date**	**Elev.**	**Date**	**Elev.**
092	01/23/2024	260.52	06/26/2024	259.35	09/16/2024	258.88	10/09/2024	258.38
096	01/23/2024	250.01	06/27/2024	248.43	09/16/2024	247.17	10/07/2024	238.66
097	01/23/2024	249.95	06/27/2024	248.53	09/16/2024	247.17	10/07/2024	246.65
098	01/23/2024	249.86	06/27/2024	248.06	09/16/2024	246.65	10/07/2024	246.11
100	01/22/2024	256.78	06/26/2024	251.08	09/18/2024	247.64	10/10/2024	246.33
101	01/22/2024	256.50	06/26/2024	250.76	09/18/2024	247.29	10/10/2024	246.11
102	01/22/2024	255.15	06/26/2024	253.30	09/18/2024	249.94	10/10/2024	248.71
103	01/23/2024	248.53	06/26/2024	246.81	09/17/2024	243.98	10/07/2024	245.42
104	01/23/2024	243.22	06/26/2024	240.44	09/17/2024	238.09	10/07/2024	237.45
105	01/23/2024	241.12	06/26/2024	238.66	09/17/2024	236.25	10/17/2024	234.96
106	01/23/2024	239.40	06/26/2024	236.54	09/17/2024	234.60	10/07/2024	233.92
108	01/23/2024	240.64	06/25/2024	238.09	09/17/2024	236.64	10/07/2024	236.10
109	01/23/2024	238.85	06/25/2024	235.45	09/17/2024	233.71	10/07/2024	233.26
112	01/23/2024	266.68	06/26/2024	264.38	09/16/2024	263.04	10/08/2024	261.05
113	01/23/2024	FLOW	06/26/2024	268.65	09/16/2024	268.42	10/07/2024	265.18
114	01/23/2024	FLOW	06/26/2024	266.83	09/16/2024	265.22	10/07/2024	263.51
118	01/24/2024	238.82	06/25/2024	234.70	09/16/2024	231.31	10/07/2024	230.51
121	01/25/2024	248.86	06/26/2024	242.69	09/18/2024	230.03	10/10/2024	228.68
122	01/25/2024	244.97	06/26/2024	236.23	09/18/2024	229.69	10/10/2024	227.86
129	01/24/2024	235.29	06/27/2024	234.82	09/18/2024	234.59	10/10/2024	237.35
130	01/24/2024	234.21	06/27/2024	234.37	09/18/2024	233.78	10/10/2024	233.40
143	01/24/2024	206.47	06/25/2024	202.89	09/16/2024	199.60	10/07/2024	197.92
145	01/23/2024	228.85	06/26/2024	223.47	09/17/2024	220.52	10/08/2024	218.65
146	01/23/2024	227.35	06/26/2024	222.32	09/17/2024	219.24	10/08/2024	217.49
147	01/22/2024	232.01	06/27/2024	231.10	09/16/2024	225.49	10/08/2024	224.70
150	02/01/2024	234.08	06/27/2024	227.97	09/16/2024	224.00	10/08/2024	222.80
151	01/22/2024	231.87	06/25/2024	230.98	09/16/2024	230.00	10/07/2024	229.95
156	01/24/2024	228.78	06/26/2024	226.88	09/17/2024	226.68	10/07/2024	226.13
157	01/24/2024	226.14	06/26/2024	225.89	09/17/2024	225.32	10/07/2024	224.81
158	01/24/2024	237.88	06/26/2024	234.72	09/17/2024	233.33	10/09/2024	231.80
161	01/22/2024	245.82	06/25/2024	244.23	09/16/2024	243.22	10/07/2024	243.08
164	01/23/2024	260.61	06/26/2024	256.92	09/18/2024	256.40	10/09/2024	255.84
165	01/23/2024	260.57	06/26/2024	256.87	09/18/2024	256.38	10/09/2024	255.76
166	01/23/2024	253.58	06/26/2024	250.08	09/16/2024	248.70	10/08/2024	248.15
167	01/23/2024	253.58	06/26/2024	249.60	09/16/2024	248.48	10/08/2024	247.71
168	01/23/2024	251.79	06/26/2024	248.21	09/17/2024	245.93	10/09/2024	243.48
169	01/23/2024	250.01	06/26/2024	246.46	09/17/2024	240.49	10/09/2024	239.78
170	01/22/2024	FLOW	06/27/2024	225.57	09/16/2024	224.26	10/08/2024	223.50
178	01/24/2024	253.42	06/25/2024	249.80	09/17/2024	247.54	10/07/2024	245.66
180	01/24/2024	247.91	06/27/2024	247.03	09/17/2024	246.55	10/07/2024	246.37
181	01/24/2024	246.86	06/27/2024	246.32	09/17/2024	245.66	10/07/2024	245.23
182	01/25/2024	229.61	06/27/2024	228.11	09/18/2024	226.73	10/10/2024	226.44
183	01/25/2024	229.58	06/27/2024	228.01	09/18/2024	226.81	10/10/2024	226.43
185	01/25/2024	228.93	06/27/2024	227.44	09/18/2024	224.34	10/10/2024	223.61
186	01/25/2024	229.32	06/27/2024	227.52	09/18/2024	224.52	10/10/2024	223.80
191	01/25/2024	FLOW	06/27/2024	227.48	09/18/2024	227.18	10/10/2024	226.21
192	01/25/2024	FLOW	06/27/2024	226.36	09/18/2024	227.48	10/10/2024	226.76
200	01/22/2024	249.53	06/26/2024	246.86	09/20/2024	245.72	10/07/2024	245.39
204	01/24/2024	245.81	06/27/2024	245.51	09/17/2024	243.18	10/07/2024	242.80

Key:
FLOW: Flowing Water
NA: Not Accessible - Construction
All Elevations are in feet above mean sea level

Former IBM East Fishkill Remediation
Quarterly Groundwater Elevation Data: January through December 2024

	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
Well	**Date**	**Elev.**	**Date**	**Elev.**	**Date**	**Elev.**	**Date**	**Elev.**
224	01/22/2024	240.97	06/27/2024	239.30	09/16/2024	237.93	10/07/2024	237.52
226	01/22/2024	229.92	06/25/2024	229.29	09/16/2024	228.63	10/07/2024	228.80
227	01/22/2024	227.69	06/25/2024	226.41	09/16/2024	224.90	10/07/2024	224.67
400	01/25/2024	233.73	06/27/2024	232.32	09/18/2024	231.69	10/10/2024	231.20
401	01/25/2024	234.82	06/27/2024	232.75	09/18/2024	232.11	10/10/2024	231.67
402	01/25/2024	242.18	06/27/2024	240.34	09/18/2024	237.85	10/10/2024	235.58
403	01/25/2024	NM	06/27/2024	NM	09/18/2024	NM	10/10/2024	NM
404	01/25/2024	NM	06/27/2024	NM	09/18/2024	NM	10/10/2024	NM
405	01/25/2024	243.30	06/27/2024	239.12	09/18/2024	236.29	10/10/2024	234.71
407	01/25/2024	275.76	06/27/2024	269.25	09/18/2024	267.02	10/10/2024	265.84
415	01/25/2024	246.69	06/27/2024	244.78	09/18/2024	243.47	10/10/2024	243.71
416	01/25/2024	NM	06/27/2024	NM	09/18/2024	233.73	10/10/2024	233.11
418	01/25/2024	NM	06/27/2024	NM	09/18/2024	216.87	10/10/2024	216.32
500	01/23/2024	250.19	06/26/2024	248.57	09/16/2024	248.09	10/08/2024	247.72
501	01/23/2024	251.01	06/26/2024	249.55	09/16/2024	249.76	10/08/2024	248.36
502	01/23/2024	258.74	06/26/2024	257.04	09/16/2024	256.86	10/08/2024	256.48
503	01/23/2024	259.07	06/26/2024	257.73	09/16/2024	257.46	10/08/2024	257.12
504	01/23/2024	259.68	06/26/2024	257.91	09/17/2024	257.57	10/08/2024	257.24
505	01/23/2024	259.77	06/26/2024	257.90	09/17/2024	257.47	10/08/2024	257.22
506	01/23/2024	258.80	06/26/2024	258.31	09/16/2024	258.10	10/08/2024	257.68
507	01/23/2024	259.68	06/26/2024	258.00	09/16/2024	257.69	10/08/2024	257.33
508	01/23/2024	259.75	06/26/2024	257.99	09/16/2024	257.65	10/08/2024	257.29
509	01/23/2024	259.74	06/26/2024	258.04	09/16/2024	257.74	10/08/2024	257.38
510	01/23/2024	259.21	06/26/2024	258.09	09/16/2024	258.06	10/08/2024	257.53
511	01/23/2024	259.20	06/26/2024	257.89	09/16/2024	257.63	10/08/2024	257.26
512	01/23/2024	259.39	06/26/2024	258.42	09/16/2024	257.56	10/08/2024	257.01
513	01/23/2024	260.09	06/26/2024	258.83	09/16/2024	258.19	10/08/2024	258.00
514	01/23/2024	259.05	06/26/2024	258.75	09/16/2024	258.73	10/08/2024	258.39
515	02/01/2024	FLOW	06/26/2024	258.18	09/16/2024	257.81	10/08/2024	257.52
516	01/23/2024	260.16	06/26/2024	258.63	09/16/2024	258.39	10/08/2024	257.89
517	01/23/2024	259.88	06/26/2024	258.53	09/16/2024	258.33	10/08/2024	257.88
518	01/23/2024	260.48	06/26/2024	258.64	09/16/2024	258.47	10/08/2024	257.94
519	01/23/2024	261.40	06/26/2024	259.33	09/18/2024	259.06	10/08/2024	258.55
520	01/23/2024	257.48	06/26/2024	255.78	09/16/2024	255.70	10/08/2024	255.30
521	01/23/2024	259.81	06/26/2024	256.14	09/16/2024	256.89	10/08/2024	255.60
522	01/23/2024	FLOW	06/26/2024	262.25	09/16/2024	259.00	10/08/2024	256.77
523	01/23/2024	265.80	06/26/2024	262.97	09/18/2024	262.45	10/09/2024	261.77
524	01/23/2024	265.98	06/26/2024	263.00	09/18/2024	262.53	10/09/2024	261.87
525	01/23/2024	265.64	06/26/2024	262.76	09/18/2024	261.62	10/09/2024	261.10
526	01/23/2024	264.38	06/26/2024	259.98	09/16/2024	259.28	10/09/2024	258.53
527	01/23/2024	263.84	06/26/2024	260.45	09/16/2024	259.43	10/08/2024	258.69
528	01/23/2024	270.28	06/26/2024	270.10	09/16/2024	270.44	10/08/2024	270.21
529	01/23/2024	270.28	06/26/2024	270.15	09/16/2024	270.45	10/08/2024	270.22
530	01/23/2024	262.05	06/26/2024	260.22	09/16/2024	259.18	10/08/2024	258.40
531	02/01/2024	265.32	06/26/2024	265.02	09/16/2024	FLOW	10/08/2024	264.01
532	02/01/2024	265.22	06/26/2024	265.42	09/16/2024	FLOW	10/08/2024	265.17
533	01/23/2024	261.73	06/26/2024	259.99	09/16/2024	258.92	10/08/2024	258.04
534	01/23/2024	263.18	06/26/2024	260.72	09/16/2024	259.61	10/08/2024	258.65
535	01/23/2024	FLOW	06/26/2024	265.77	09/16/2024	265.69	10/08/2024	266.10

Key:
FLOW: Flowing Water
NA: Not Accessible - Construction
All Elevations are in feet above mean sea level

Former IBM East Fishkill Remediation
Quarterly Groundwater Elevation Data: January through December 2024

	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
Well	**Date**	**Elev.**	**Date**	**Elev.**	**Date**	**Elev.**	**Date**	**Elev.**
536	01/23/2024	260.72	06/26/2024	258.27	09/16/2024	258.01	10/08/2024	257.72
537	01/23/2024	FLOW	06/26/2024	268.22	09/16/2024	266.72	10/08/2024	265.01
538	01/23/2024	FLOW	06/26/2024	267.66	09/16/2024	263.15	10/08/2024	261.80
539	01/23/2024	FLOW	06/26/2024	269.89	09/16/2024	270.04	10/08/2024	269.59
541	01/23/2024	276.18	06/26/2024	265.28	09/16/2024	260.94	10/08/2024	258.47
542	01/23/2024	276.43	06/26/2024	265.33	09/16/2024	260.96	10/08/2024	258.41
543	01/23/2024	259.46	06/26/2024	256.25	09/16/2024	255.93	10/08/2024	255.59
544	01/23/2024	260.08	06/26/2024	256.21	09/16/2024	255.72	10/08/2024	255.54
545	01/23/2024	259.02	06/26/2024	256.34	09/16/2024	255.96	10/08/2024	255.68
546	01/23/2024	FLOW	06/26/2024	260.60	09/16/2024	258.25	10/08/2024	256.93
547	03/20/2024	FLOW	06/26/2024	259.91	09/16/2024	258.11	10/08/2024	257.01
548	01/23/2024	259.47	06/26/2024	258.03	09/16/2024	257.76	10/08/2024	257.45
549	01/23/2024	259.56	06/26/2024	256.81	09/16/2024	256.49	10/08/2024	256.15
550	01/23/2024	260.09	06/26/2024	256.90	09/16/2024	256.51	10/08/2024	256.16
551	01/23/2024	259.44	06/26/2024	257.86	09/16/2024	257.54	10/08/2024	257.29
553	01/23/2024	258.91	06/26/2024	258.50	09/16/2024	258.42	10/08/2024	258.17
554	01/23/2024	259.91	06/26/2024	258.49	09/16/2024	258.21	10/08/2024	257.99
556	01/23/2024	260.36	06/26/2024	258.37	09/16/2024	257.86	10/08/2024	257.82
557	01/23/2024	260.60	06/26/2024	258.34	09/16/2024	258.03	10/08/2024	257.74
558	01/23/2024	268.52	06/26/2024	257.02	09/16/2024	253.89	10/08/2024	252.55
559	01/23/2024	259.95	06/26/2024	253.03	09/16/2024	250.55	10/08/2024	249.12
560	01/23/2024	257.17	06/26/2024	251.83	09/16/2024	249.67	10/08/2024	248.32
561	01/23/2024	274.90	06/26/2024	264.95	09/16/2024	263.68	10/16/2024	261.77
562	01/23/2024	269.63	06/26/2024	259.02	09/16/2024	255.58	10/08/2024	254.19
563	01/23/2024	255.75	06/26/2024	249.55	09/16/2024	247.43	10/08/2024	246.25
564	01/23/2024	260.59	06/26/2024	257.37	09/16/2024	256.90	10/08/2024	255.40
565	01/23/2024	270.44	06/26/2024	260.17	09/17/2024	257.40	10/08/2024	255.88
566	01/23/2024	265.39	06/26/2024	255.71	09/17/2024	252.87	10/08/2024	251.35
567	01/23/2024	262.32	06/26/2024	255.06	09/17/2024	252.38	10/09/2024	250.67
568	01/23/2024	268.22	06/26/2024	256.69	09/17/2024	254.60	10/09/2024	253.27
569	01/23/2024	271.19	06/26/2024	260.84	09/17/2024	257.09	10/09/2024	254.98
570	01/23/2024	252.04	06/26/2024	245.31	09/17/2024	242.78	10/09/2024	241.01
571	01/23/2024	271.69	06/26/2024	DRY	09/17/2024	DRY	10/08/2024	DRY
572	01/23/2024	247.30	06/26/2024	246.71	09/18/2024	246.29	10/09/2024	246.10
574	01/23/2024	254.12	06/26/2024	249.59	09/18/2024	248.11	10/09/2024	245.68
576	01/24/2024	253.43	06/27/2024	250.75	09/17/2024	249.92	10/07/2024	249.44
577	02/01/2024	FLOW	06/27/2024	227.13	09/16/2024	223.68	10/10/2024	222.19
578	01/25/2024	248.11	06/26/2024	239.15	09/18/2024	235.40	10/10/2024	233.84
579	01/24/2024	226.42	06/27/2024	224.54	09/18/2024	222.54	10/09/2024	221.56
580	01/24/2024	244.13	06/25/2024	243.53	09/17/2024	242.62	10/08/2024	242.31
581	01/24/2024	257.60	06/26/2024	251.79	09/18/2024	248.23	10/10/2024	246.95
600	01/23/2024	252.23	06/25/2024	247.97	09/17/2024	247.05	10/07/2024	246.91
601	01/23/2024	243.43	06/25/2024	237.14	09/17/2024	234.31	10/07/2024	232.87
602	01/24/2024	247.91	06/25/2024	247.50	09/17/2024	246.14	10/07/2024	245.89
603	01/24/2024	246.08	06/25/2024	243.16	09/16/2024	242.72	10/07/2024	241.75
604	01/24/2024	219.89	06/25/2024	215.99	09/16/2024	212.55	10/07/2024	211.25
605	01/24/2024	207.64	06/25/2024	204.37	09/16/2024	200.84	10/07/2024	199.07
606	01/23/2024	210.09	06/25/2024	208.54	09/17/2024	205.20	10/09/2024	204.00
607	01/24/2024	217.92	06/25/2024	213.79	09/17/2024	209.91	10/07/2024	208.53

Key:
FLOW: Flowing Water
NA: Not Accessible - Construction
All Elevations are in feet above mean sea level

Former IBM East Fishkill Remediation
Quarterly Groundwater Elevation Data: January through December 2024

	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
Well	**Date**	**Elev.**	**Date**	**Elev.**	**Date**	**Elev.**	**Date**	**Elev.**
608	01/24/2024	236.13	06/25/2024	229.77	09/18/2024	226.21	10/07/2024	224.70
609	01/23/2024	209.50	06/28/2024	207.93	09/17/2024	204.56	10/09/2024	203.61
610	01/24/2024	207.52	06/25/2024	204.73	09/17/2024	201.45	10/07/2024	199.97
611	01/25/2024	219.72	06/28/2024	220.02	09/17/2024	213.83	10/10/2024	211.89
612	01/17/2024	235.05	06/25/2024	234.11	09/16/2024	232.91	10/07/2024	232.68
613	01/22/2024	233.40	06/25/2024	232.65	09/16/2024	231.33	10/07/2024	231.07
614	01/24/2024	228.88	06/27/2024	227.70	09/16/2024	226.55	10/08/2024	226.31
615	01/24/2024	229.27	06/27/2024	228.08	09/16/2024	226.88	10/08/2024	226.64
616	01/24/2024	229.27	06/27/2024	228.08	09/16/2024	226.90	10/08/2024	226.62
617	01/22/2024	233.53	06/25/2024	232.83	09/16/2024	231.47	10/07/2024	231.19
618	01/22/2024	231.53	06/25/2024	230.58	09/16/2024	229.65	10/07/2024	229.65
619	01/23/2024	262.90	06/26/2024	255.20	09/17/2024	252.61	10/09/2024	250.90
620	01/22/2024	242.49	06/25/2024	238.51	09/16/2024	236.29	10/07/2024	235.76
621	01/24/2024	245.69	06/27/2024	244.70	09/17/2024	243.22	10/07/2024	242.77
622	01/24/2024	236.59	06/25/2024	230.33	09/18/2024	226.98	10/07/2024	225.57
623	01/25/2024	203.12	06/27/2024	201.54	09/17/2024	198.74	10/07/2024	196.86
624	01/25/2024	220.83	06/27/2024	219.66	09/17/2024	217.21	10/09/2024	216.03
626	01/23/2024	263.25	06/26/2024	259.79	09/18/2024	259.34	10/09/2024	258.10
627	01/24/2024	247.32	06/27/2024	245.88	09/16/2024	246.48	10/07/2024	246.39
640	01/24/2024	241.11	06/25/2024	240.14	09/16/2024	240.04	10/07/2024	239.57
700	01/23/2024	240.73	06/25/2024	239.62	09/17/2024	238.75	10/07/2024	238.60
701	01/23/2024	240.21	06/25/2024	239.14	09/17/2024	238.32	10/07/2024	238.14
702	01/23/2024	245.56	06/25/2024	244.91	09/17/2024	244.63	10/07/2024	244.55
703	01/23/2024	241.70	06/25/2024	238.77	09/17/2024	237.15	10/07/2024	236.61
704	01/23/2024	234.69	06/25/2024	231.23	09/17/2024	228.88	10/07/2024	228.47
705	01/22/2024	250.76	06/25/2024	249.62	09/16/2024	248.51	10/07/2024	248.16
706	01/22/2024	247.47	06/25/2024	244.50	09/16/2024	242.38	10/07/2024	241.63
707	01/22/2024	249.26	06/25/2024	247.59	09/16/2024	246.10	10/07/2024	245.57
708	01/22/2024	248.17	06/25/2024	244.96	09/16/2024	242.73	10/07/2024	242.95
709	01/22/2024	252.26	06/25/2024	248.39	09/16/2024	245.72	10/09/2024	244.79
710	01/22/2024	252.14	06/25/2024	248.23	09/16/2024	245.49	10/09/2024	244.49
711	01/22/2024	251.59	06/25/2024	246.87	09/16/2024	243.80	10/09/2024	242.73
712	01/22/2024	257.70	06/25/2024	252.20	09/16/2024	DRY	10/10/2024	DRY
714	01/22/2024	250.30	06/25/2024	244.15	09/18/2024	240.06	10/10/2024	238.44
716	01/22/2024	245.79	06/26/2024	239.29	09/16/2024	235.18	10/07/2024	234.09
717	01/23/2024	249.99	06/27/2024	248.45	09/16/2024	247.21	10/07/2024	246.67
718	01/23/2024	250.00	06/27/2024	248.40	09/16/2024	247.18	10/07/2024	246.60
719	01/23/2024	250.15	06/27/2024	248.56	09/16/2024	247.36	10/07/2024	246.83
720	01/23/2024	249.79	06/27/2024	248.34	09/16/2024	247.10	10/07/2024	246.55
721	01/23/2024	252.24	06/26/2024	249.92	09/16/2024	247.83	10/08/2024	247.06
722	01/23/2024	254.14	06/26/2024	249.26	09/16/2024	246.15	10/08/2024	245.24
723	01/23/2024	253.88	06/25/2024	251.10	09/16/2024	248.05	10/08/2024	247.35
724	01/23/2024	254.64	06/25/2024	251.21	09/16/2024	248.37	10/08/2024	247.42
725	01/23/2024	254.57	06/25/2024	250.69	09/16/2024	248.83	10/08/2024	248.12
726	01/23/2024	254.71	06/25/2024	249.94	09/16/2024	248.84	10/08/2024	248.12
727	01/23/2024	254.62	06/25/2024	250.57	09/16/2024	248.77	10/08/2024	248.11
728	01/23/2024	251.23	06/25/2024	249.05	09/16/2024	247.82	10/08/2024	247.41
729	01/23/2024	252.03	06/25/2024	249.59	09/16/2024	248.29	10/08/2024	247.86
730	01/23/2024	248.39	06/25/2024	245.07	09/16/2024	243.09	10/08/2024	242.69

Key:
FLOW: Flowing Water
NA: Not Accessible - Construction
All Elevations are in feet above mean sea level

Former IBM East Fishkill Remediation
Quarterly Groundwater Elevation Data: January through December 2024

	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
Well	**Date**	**Elev.**	**Date**	**Elev.**	**Date**	**Elev.**	**Date**	**Elev.**
732	01/23/2024	231.20	06/26/2024	227.24	09/16/2024	223.81	10/07/2024	223.26
734	01/24/2024	224.19	06/28/2024	222.07	09/17/2024	219.07	10/09/2024	217.86
735	01/24/2024	245.75	06/25/2024	244.73	09/17/2024	244.21	10/08/2024	243.11
737	01/24/2024	226.59	06/25/2024	224.18	09/17/2024	222.02	10/08/2024	220.96
739	01/24/2024	231.54	06/27/2024	226.76	09/17/2024	223.35	10/08/2024	222.37
740	01/24/2024	241.36	06/25/2024	240.48	09/17/2024	239.37	11/19/2024	238.42
742	01/24/2024	226.59	06/25/2024	224.05	09/17/2024	221.45	10/08/2024	220.76
743	01/24/2024	248.31	06/27/2024	246.46	09/17/2024	246.06	10/08/2024	245.13
744	01/23/2024	248.88	06/27/2024	247.41	09/16/2024	246.19	10/07/2024	245.88
745	01/23/2024	248.55	06/27/2024	247.93	09/16/2024	246.74	10/07/2024	246.60
746	01/23/2024	247.78	06/27/2024	246.61	09/16/2024	244.37	10/07/2024	244.04
747	01/23/2024	254.93	06/26/2024	251.33	09/16/2024	248.16	10/07/2024	247.15
748	01/22/2024	253.13	06/25/2024	247.34	09/18/2024	244.10	10/10/2024	242.92
749	01/23/2024	251.54	06/26/2024	250.65	09/16/2024	250.09	10/08/2024	249.84
750	01/23/2024	251.02	06/25/2024	248.99	09/16/2024	247.79	10/08/2024	247.34
751	01/24/2024	242.80	06/27/2024	241.42	09/18/2024	241.14	10/09/2024	DRY
752	01/24/2024	246.49	06/27/2024	244.93	09/18/2024	244.57	10/09/2024	244.46
753	01/24/2024	237.87	06/27/2024	237.69	09/18/2024	237.09	10/09/2024	236.86
754	01/22/2024	236.91	06/25/2024	236.15	09/17/2024	235.73	10/09/2024	235.55
755	01/22/2024	233.65	06/27/2024	231.41	09/16/2024	230.33	10/07/2024	230.20
756	01/24/2024	249.23	06/27/2024	243.66	09/17/2024	241.09	10/07/2024	239.47
757	01/22/2024	229.12	06/27/2024	228.01	09/16/2024	226.78	10/08/2024	226.56
758	01/22/2024	253.89	06/25/2024	253.51	09/16/2024	253.18	10/07/2024	253.24
759	01/22/2024	250.04	06/25/2024	246.63	09/16/2024	244.36	10/07/2024	243.51
760	01/22/2024	250.14	06/25/2024	245.34	09/16/2024	242.65	10/07/2024	241.84
761	01/22/2024	253.92	06/25/2024	250.84	09/16/2024	248.02	10/10/2024	246.79
763	01/22/2024	254.39	06/25/2024	247.83	09/18/2024	244.82	10/10/2024	243.25
766	01/24/2024	239.99	06/25/2024	239.99	09/17/2024	239.00	10/08/2024	237.64
767	01/24/2024	239.82	06/25/2024	239.73	09/16/2024	238.83	10/08/2024	238.53
768	01/24/2024	238.94	06/25/2024	238.45	09/16/2024	237.57	10/08/2024	237.36
769	01/24/2024	239.37	06/25/2024	237.95	09/16/2024	236.98	10/08/2024	236.66
770	01/24/2024	250.68	06/25/2024	250.87	09/16/2024	243.43	10/08/2024	244.47
771	01/24/2024	238.81	06/25/2024	237.85	09/16/2024	236.83	10/08/2024	236.86
772	01/24/2024	233.20	06/25/2024	233.11	09/16/2024	232.30	10/08/2024	232.05
773	01/22/2024	234.49	06/25/2024	233.66	09/16/2024	232.59	10/08/2024	232.35
774	01/23/2024	231.53	06/25/2024	231.54	09/16/2024	230.76	10/08/2024	230.51
775	01/23/2024	230.98	06/25/2024	230.57	09/16/2024	229.79	10/08/2024	229.67
776	01/25/2024	262.27	06/26/2024	260.44	09/18/2024	258.23	10/10/2024	257.40
777	01/25/2024	260.23	06/26/2024	252.78	09/18/2024	248.19	10/10/2024	246.85
779	01/25/2024	237.03	06/26/2024	228.08	09/18/2024	223.28	10/10/2024	221.72
782	01/24/2024	228.85	06/27/2024	227.55	09/16/2024	226.58	10/08/2024	226.28
783	01/24/2024	228.30	06/26/2024	226.73	09/17/2024	226.50	10/07/2024	226.06
789	01/23/2024	232.68	06/25/2024	231.83	09/16/2024	231.03	10/08/2024	230.83
791	01/23/2024	230.43	06/25/2024	230.21	09/16/2024	229.55	10/08/2024	229.44
792	01/24/2024	231.93	06/25/2024	232.00	09/16/2024	231.36	10/08/2024	230.77
793	01/24/2024	230.28	06/27/2024	230.36	09/17/2024	228.91	10/09/2024	228.71
799	01/24/2024	228.97	06/26/2024	227.88	09/17/2024	227.03	10/07/2024	226.57
816	01/22/2024	251.35	06/25/2024	246.01	09/16/2024	244.39	10/07/2024	243.76
818	01/22/2024	250.76	06/25/2024	246.47	09/16/2024	246.15	10/07/2024	245.91

Key:
FLOW: Flowing Water
NA: Not Accessible - Construction
All Elevations are in feet above mean sea level

Former IBM East Fishkill Remediation
Quarterly Groundwater Elevation Data: January through December 2024

	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
Well	**Date**	**Elev.**	**Date**	**Elev.**	**Date**	**Elev.**	**Date**	**Elev.**
819	01/22/2024	252.64	06/25/2024	251.37	09/16/2024	251.08	10/07/2024	250.58
820	01/24/2024	251.42	06/25/2024	250.28	09/16/2024	250.00	10/07/2024	249.81
821	01/24/2024	250.53	06/27/2024	248.63	09/16/2024	248.02	10/07/2024	247.55
822	01/24/2024	249.24	06/27/2024	245.57	09/16/2024	244.91	10/07/2024	244.26
823	01/22/2024	249.63	06/25/2024	246.55	09/16/2024	245.77	10/07/2024	244.80
824	01/22/2024	250.03	06/25/2024	247.12	09/16/2024	246.29	10/07/2024	245.85
826	01/22/2024	259.62	06/25/2024	260.65	09/16/2024	256.97	10/07/2024	254.59
827	01/22/2024	254.70	06/25/2024	253.86	09/16/2024	253.77	10/07/2024	252.80
830	01/23/2024	263.66	06/26/2024	255.31	09/17/2024	252.32	10/09/2024	249.83
831	01/23/2024	258.10	06/26/2024	250.68	09/17/2024	247.89	10/09/2024	245.78
832	02/01/2024	265.10	06/26/2024	256.47	09/17/2024	255.40	10/08/2024	DRY
833	02/01/2024	274.68	06/26/2024	258.77	09/17/2024	255.17	10/08/2024	253.37
835	01/23/2024	278.08	06/26/2024	268.62	09/16/2024	265.67	10/08/2024	264.25
836	01/23/2024	273.32	06/26/2024	263.67	09/16/2024	260.32	10/08/2024	259.01
837	01/23/2024	277.94	06/26/2024	268.57	09/16/2024	266.70	10/09/2024	265.60
838	01/23/2024	259.85	06/26/2024	253.37	09/18/2024	252.33	10/08/2024	DRY
839	01/22/2024	229.44	06/27/2024	228.11	09/16/2024	227.01	10/08/2024	226.69
855	01/23/2024	262.53	06/26/2024	258.57	09/18/2024	258.18	10/09/2024	257.13
856	01/23/2024	263.91	06/26/2024	259.95	09/18/2024	259.47	10/09/2024	258.31
857	01/23/2024	FLOW	06/26/2024	261.39	09/16/2024	261.38	10/08/2024	256.16
858	01/23/2024	FLOW	06/26/2024	260.27	09/16/2024	257.47	10/08/2024	255.04
859	01/23/2024	257.25	06/26/2024	256.45	09/16/2024	255.80	10/08/2024	255.24
860	01/23/2024	258.01	06/26/2024	258.62	09/16/2024	256.05	10/08/2024	255.07
861	01/23/2024	258.86	06/26/2024	253.58	09/16/2024	251.56	10/08/2024	250.90
862	01/23/2024	258.41	06/26/2024	253.35	09/16/2024	251.03	10/08/2024	250.55
863	01/23/2024	262.62	06/26/2024	255.17	09/17/2024	252.48	10/09/2024	250.78
864	01/22/2024	252.01	06/25/2024	248.44	09/16/2024	248.05	10/07/2024	247.71
895	01/23/2024	260.11	06/26/2024	258.59	09/16/2024	258.21	10/08/2024	257.83
896	01/23/2024	260.29	06/26/2024	258.59	09/16/2024	258.26	10/08/2024	257.94
897	01/23/2024	FLOW	06/26/2024	268.41	09/16/2024	265.94	10/08/2024	265.10
898	01/23/2024	269.30	06/26/2024	269.32	09/16/2024	268.47	10/08/2024	268.18
899	01/23/2024	277.87	06/26/2024	267.67	09/16/2024	261.22	10/08/2024	258.87
900	01/23/2024	272.41	06/26/2024	272.95	09/16/2024	272.49	10/08/2024	272.08
902	01/23/2024	257.86	06/26/2024	257.76	09/16/2024	256.92	10/08/2024	256.63
903	01/23/2024	258.18	06/26/2024	257.99	09/16/2024	257.86	10/08/2024	257.37
910	01/23/2024	253.88	06/26/2024	251.07	09/16/2024	248.30	10/07/2024	247.32
921	01/24/2024	252.47	06/27/2024	249.29	09/17/2024	246.63	10/07/2024	245.05
922	01/24/2024	250.34	06/27/2024	249.05	09/17/2024	243.90	10/07/2024	242.41
923	01/24/2024	244.24	06/27/2024	238.04	09/17/2024	234.73	10/07/2024	233.62
924	01/24/2024	254.10	06/27/2024	252.56	09/17/2024	249.85	10/07/2024	252.07
928	01/24/2024	215.11	06/25/2024	211.57	09/17/2024	207.83	10/07/2024	206.52
929	01/24/2024	214.73	06/25/2024	211.04	09/17/2024	207.34	10/07/2024	205.95
930	01/24/2024	221.37	06/25/2024	217.08	09/17/2024	213.48	10/07/2024	212.08
931	01/24/2024	220.40	06/25/2024	216.14	09/17/2024	212.56	10/07/2024	211.18
932	01/24/2024	254.89	06/27/2024	251.01	09/17/2024	248.02	10/07/2024	247.38
934	01/24/2024	239.69	06/27/2024	239.68	09/18/2024	238.70	10/09/2024	238.47
935	01/24/2024	246.96	06/25/2024	236.90	09/17/2024	232.52	10/07/2024	229.73
936	01/24/2024	246.17	06/25/2024	236.23	09/17/2024	231.91	10/07/2024	229.09
941	01/24/2024	212.27	06/25/2024	208.29	09/16/2024	204.70	10/07/2024	203.08

Key:
FLOW: Flowing Water
NA: Not Accessible - Construction
All Elevations are in feet above mean sea level

Former IBM East Fishkill Remediation
Quarterly Groundwater Elevation Data: January through December 2024

	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
Well	**Date**	**Elev.**	**Date**	**Elev.**	**Date**	**Elev.**	**Date**	**Elev.**
943	01/23/2024	251.24	06/26/2024	246.64	09/17/2024	244.78	10/08/2024	243.68
944	01/23/2024	252.70	06/26/2024	248.61	09/17/2024	246.69	10/08/2024	245.43
946	01/24/2024	227.94	06/27/2024	228.05	09/17/2024	228.19	10/09/2024	228.10
947	01/24/2024	230.14	06/27/2024	230.12	09/17/2024	229.61	10/09/2024	228.32
948	01/24/2024	228.84	06/27/2024	228.86	09/17/2024	228.33	10/09/2024	227.96
949	01/24/2024	232.98	06/27/2024	232.67	09/17/2024	232.85	10/09/2024	231.74
952	01/24/2024	227.05	06/25/2024	225.21	09/16/2024	223.30	10/08/2024	222.57
953	01/24/2024	206.64	06/25/2024	203.52	09/16/2024	200.45	10/07/2024	198.62
954	01/24/2024	245.60	06/25/2024	240.27	09/17/2024	237.66	10/07/2024	235.96
955	01/24/2024	252.73	06/25/2024	249.23	09/17/2024	247.04	10/07/2024	245.14
956	01/24/2024	251.93	06/25/2024	247.79	09/17/2024	245.36	10/07/2024	243.41
957	01/24/2024	253.32	06/25/2024	250.17	09/17/2024	248.66	10/07/2024	247.19
958	01/23/2024	266.28	06/26/2024	262.78	09/16/2024	261.88	10/07/2024	261.97
959	01/23/2024	226.94	06/26/2024	224.36	09/17/2024	221.99	10/07/2024	220.78
960	01/23/2024	236.66	06/26/2024	232.83	09/17/2024	231.87	10/07/2024	230.79
963	01/23/2024	260.50	06/26/2024	258.40	09/16/2024	257.95	10/08/2024	257.63
964	01/23/2024	260.10	06/26/2024	258.36	09/16/2024	258.07	10/17/2024	257.29
965	01/23/2024	237.00	06/25/2024	230.57	09/17/2024	227.17	10/09/2024	225.55
966	01/23/2024	237.13	06/25/2024	230.76	09/17/2024	227.36	10/09/2024	225.75
968	01/24/2024	224.75	06/25/2024	218.62	09/18/2024	214.56	10/07/2024	212.85
976	01/22/2024	229.54	06/27/2024	227.71	09/16/2024	226.15	10/08/2024	225.58
980	01/24/2024	249.01	06/26/2024	247.57	09/16/2024	247.30	11/19/2024	246.54
983	01/23/2024	259.82	06/26/2024	252.22	09/16/2024	249.62	10/08/2024	248.19
984	01/23/2024	256.37	06/26/2024	250.98	09/16/2024	248.70	10/08/2024	247.41
985	01/23/2024	273.06	06/26/2024	263.58	09/16/2024	257.69	10/08/2024	256.15
986	01/23/2024	267.39	06/26/2024	256.96	09/16/2024	253.60	10/08/2024	252.04
987	01/23/2024	257.85	06/26/2024	255.60	09/16/2024	255.32	10/08/2024	255.02
988	01/23/2024	FLOW	06/26/2024	259.31	09/16/2024	257.26	10/08/2024	257.02
989	01/23/2024	FLOW	06/26/2024	FLOW	09/16/2024	259.27	10/08/2024	257.04
990	01/25/2024	257.45	06/26/2024	255.63	09/16/2024	255.36	10/08/2024	254.96
991	01/23/2024	FLOW	06/26/2024	259.95	09/16/2024	257.65	10/08/2024	255.80
992	01/23/2024	FLOW	06/26/2024	258.68	09/16/2024	257.28	10/08/2024	256.11
993	01/23/2024	238.73	06/26/2024	234.89	09/16/2024	233.91	10/07/2024	233.62
994	01/23/2024	254.19	06/26/2024	249.23	09/16/2024	249.93	10/07/2024	249.91
997	01/23/2024	249.77	06/25/2024	248.37	09/16/2024	246.98	10/07/2024	246.63
998	01/23/2024	249.70	06/25/2024	248.24	09/16/2024	246.98	10/07/2024	246.28
999	01/23/2024	248.36	06/25/2024	246.27	09/16/2024	244.66	10/07/2024	244.09

Key:
FLOW: Flowing Water
NA: Not Accessible - Construction
All Elevations are in feet above mean sea level

Appendix E

2024 Sampling Field Log Database (on CD): SAMP24a.xlsx
2024 Field Parameters Database (on CD): FIELD24a.xlsx
Table of Meteorological Data (January – December 2024)

Field Parameters Database

WELL	QC_ID	DATE	START SAMPLE	END SAMPLE	TEMP (Deg. C)	PH	SPEC_COND (umhos/cm)	TURBIDITY (NTU)	COMMENTS
007	310	4/22/2024	1246	1250	10.50	7.40	1996	4.46	QC DUPLICATE 310
010		4/26/2024	1023	1027	11.40	7.62	1692	197	
010		10/18/2024	1150	1153	11.10	7.71	3237	>1000	
012		11/7/2024	1245	1247	13.20	7.23	1720	139	1,4 DIOXANE
015		4/24/2024	1324	1328	12.20	7.57	1389	26.9	
015		10/24/2024	1308	1311	14.90	7.46	1992	32.4	
016		4/22/2024	1610	1611	11.20	7.18	2497	9.62	
016		10/31/2024	1308	1309	13.10	7.33	2751	1.57	
032B		1/17/2024	1236	1237	8.40	7.29	1450	0.72	
032B		4/30/2024	0846	0847	9.10	7.31	1475	1.79	
032B		7/8/2024	1303	1304	16.00	7.60	1552	1.32	
032B		11/6/2024	0900	0902	14.60	7.46	1921	1.42	1,4 DIOXANE
046		1/17/2024	0943	0946	7.10	6.96	950	3.85	
046		4/12/2024	0947	0950	7.70	7.09	860	11.6	
046		7/9/2024	1130	1133	10.80	7.15	891	16.4	
046		10/11/2024	0929	0932	9.10	7.26	936	78.3	
048		1/15/2024	1310	1311	7.00	7.06	898	2.8	
048		4/11/2024	1059	1100	6.70	7.14	787	5.52	
048		7/9/2024	0954	0956	13.20	6.99	1192	18.2	
048		10/15/2024	1034	1035	10.80	7.04	1296	29.1	
053		4/25/2024	1300	1301	12.50	7.06	1760	197	
053		11/8/2024	0944	0947	11.10	7.17	1916	56.6	
053	317	12/5/2024	1219	1222	9.60	7.19	1537	117	QC DUPLICATE 317
054		4/25/2024	1223	1226	11.00	7.03	1919	6.76	
054	321	5/28/2024	1109	1112	13.30	7.04	1859	23.7	QC DUPLICATE 321
054		10/16/2024	1225	1228	11.40	7.23	1884	7.47	
059		4/22/2024	1900	1901	9.70	7.11	1025	34.8	
060		4/22/2024	1937	1938	10.40	7.29	1191	83.9	
061		4/5/2024	1138	1139	5.50	7.26	770	2.3	
064		1/15/2024	0940	0941	9.30	7.14	1227	1.47	
064		4/15/2024	0922	0923	9.70	7.32	1177	7.63	
064		7/8/2024	0933	0935	10.50	7.23	1349	3.83	
064		10/14/2024	0904	0905	10.90	7.29	1638	14.6	
065	310	1/15/2024	1013	1015	9.00	7.37	1188	3.27	QC DUPLICATE 310
065		4/15/2024	0958	0959	10.80	7.29	1143	5.56	
065		7/8/2024	0912	0914	10.70	7.41	1316	4.27	
065		10/14/2024	0935	0936	9.80	7.44	1322	7.92	
066		1/18/2024	0853	0854	4.40	7.20	2603	5.49	
066		4/5/2024	1234	1235	5.20	6.98	2189	6.09	
066		7/8/2024	1218	1219	18.70	7.09	2825	5.3	
066		10/14/2024	1051	1052	14.00	7.05	2700	4.39	
067		1/17/2024	1305	1307	5.00	7.50	772	97.5	
067		4/5/2024	1314	1316	4.60	7.66	551	44.6	
067	310	7/9/2024	0907	0909	14.00	7.42	1137	21	QC DUPLICATE 310
067		10/14/2024	1123	1125	13.90	7.56	1037	45.4	
068		1/18/2024	0937	0938	9.70	7.00	1736	4.79	
068		5/6/2024	1347	1350	10.70	7.02	1740	17.6	
068		7/9/2024	0835	0836	10.70	6.99	1733	3.06	
068		10/14/2024	1155	1156	9.70	7.17	1765	8.07	
069		4/23/2024	1105	1107	8.40	7.38	986	2.81	
085	311	4/16/2024	1108	1109	9.50	7.11	2379	189	QC DUPLICATE 311
085		11/6/2024	0824	0826	8.80	7.29	2933	63.9	1,4 DIOXANE
087		4/25/2024	1530	1536	13.30	7.48	1071	0	
087		10/3/2024	1329	1330	9.90	7.42	1291	1.76	
103		4/26/2024	1116	1118	9.60	7.06	1567	50.1	

Field Parameters Database

WELL	QC_ID	DATE	START SAMPLE	END SAMPLE	TEMP (Deg. C)	PH	SPEC_COND (umhos/cm)	TURBIDITY (NTU)	COMMENTS
103		10/18/2024	1112	1115	13.90	7.44	2441	74.8	
104		4/26/2024	1058	1104	11.30	7.37	2995	46.1	
104		5/28/2024	1334	1337	12.00	7.59	2960	15.1	
104		10/22/2024	1042	1045	11.70	7.23	3239	21.5	
105		4/25/2024	1635	1636	16.20	7.13	1661	18.2	
105		10/30/2024	1126	1127	11.00	7.30	1832	1.44	
106		4/23/2024	1121	1123	11.50	7.27	1407	46.3	
109		4/11/2024	0858	0859	10.60	7.34	1379	4.18	
109		10/15/2024	0856	0857	9.70	7.38	1567	2.95	
113		4/25/2024	1430	1436	14.50	7.40	1025	9.47	
113		10/30/2024	1120	1121	8.90	7.41	1301	10.9	
118		4/24/2024	1255	1257	13.10	7.02	2042	13.3	
143		4/24/2024	1042	1044	11.30	7.49	3072	6.77	
146		4/11/2024	1221	1222	8.40	7.53	788	6.57	
151		4/9/2024	0921	0923	9.00	6.98	1503	121	
151		10/4/2024	1307	1310	14.80	7.05	1758	22.9	
156		4/22/2024	1800	1801	11.60	7.43	1411	56.9	
156		10/4/2024	1028	1029	7.90	7.50	1513	17.7	
167		4/22/2024	1032	1035	9.30	7.27	701	3.25	
167		10/24/2024	1047	1049	9.50	7.30	764	12.7	
178		4/26/2024	1221	1224	12.40	7.06	5340	184	
181		4/24/2024	1300	1301	16.70	8.54	9352	75.6	
181		11/1/2024	1224	1225	17.70	9.05	6405	158	
204		4/10/2024	1047	1050	9.30	7.48	3021	595	
210		1/2/2024	1029	1030	8.30	7.41	1359	4.8	
210		4/2/2024	1006	1007	8.50	7.36	1270	0.25	
210		7/2/2024	0835	0836	12.10	7.43	1379	0.32	
210		10/2/2024	0906	0907	8.50	7.49	1439	0.1	
210A		1/2/2024	1010	1011	9.50	7.23	1346	0.15	
210A		2/29/2024	0940	0941	9.00	7.47	1367	0.33	
210A		3/5/2024	0830	0831	9.10	7.32	1414	0.12	
210A		4/2/2024	0940	0941	9.00	7.34	1269	0.12	
210A		5/1/2024	0957	0958	9.40	7.22	1357	0.76	
210A		6/6/2024	1113	1114	9.10	7.35	1401	1.1	
210A		7/2/2024	0821	0822	11.90	7.39	1386	0.32	
210A		8/14/2024	0906	0907	8.70	7.39	1455	0.1	
210A		9/6/2024	0817	0818	8.40	7.56	1472	0.13	
210A		10/2/2024	0838	0839	8.20	7.46	1448	0.14	
210A		11/4/2024	0956	0957	7.80	7.26	1539	0.31	
210A		12/2/2024	0927	0928	7.50	7.45	1245	0.38	
210C		1/2/2024	1004	1005	9.50	7.23	1343	0.16	
210C		2/29/2024	0933	0934	9.10	7.47	1374	0.23	
210C		3/5/2024	0823	0824	9.10	7.32	1426	0.2	
210C		4/2/2024	0934	0935	9.30	7.32	1267	0.19	
210C		5/1/2024	0951	0952	9.30	7.20	1353	0.16	
210C		6/6/2024	1107	1108	9.50	7.32	731	0.17	
210E		7/2/2024	0813	0814	12.10	7.34	1396	0.43	
210E		8/14/2024	0859	0900	8.70	7.39	1452	0.08	
210E		9/6/2024	0810	0811	8.40	7.56	1450	0.12	
210E		10/2/2024	0831	0832	8.10	7.41	1447	0.1	
210E		11/4/2024	0949	0950	7.80	7.29	1544	0.34	
210E		12/2/2024	0921	0922	7.50	7.42	1263	0.29	
210F		1/2/2024	0958	0959	9.70	7.19	1342	0.17	
210F		2/29/2024	0927	0928	9.40	7.35	1364	0.29	
210F		3/5/2024	0816	0817	9.40	7.40	1429	0.14	

Field Parameters Database

WELL	QC_ID	DATE	START SAMPLE	END SAMPLE	TEMP (Deg. C)	PH	SPEC_COND (umhos/cm)	TURBIDITY (NTU)	COMMENTS
210F		4/2/2024	0928	0929	9.50	7.33	1279	0.23	
210F		5/1/2024	0944	0945	9.50	7.16	1363	0.24	
210F		6/6/2024	1058	1059	9.90	7.31	1414	0.16	
210F		7/2/2024	0807	0808	12.50	7.34	1399	0.23	
210F		8/14/2024	0853	0854	9.20	7.43	1467	0.12	
210F		9/6/2024	0803	0804	8.70	7.57	1446	0.2	
210F		10/2/2024	0824	0825	8.50	7.45	1459	0.17	
210F		11/4/2024	0942	0943	8.00	7.24	1548	0.4	
210F		12/2/2024	0915	0916	7.60	7.44	1246	0.51	
220R		1/3/2024	1036	1038	10.80	7.17	1937	0.36	
220R		4/2/2024	1109	1111	10.90	7.35	1818	0.37	
220R		7/2/2024	1059	1102	15.70	7.35	1982	0.29	
220R		10/1/2024	1036	1039	11.00	7.48	2071	0.32	
220RA		1/3/2024	1021	1022	11.60	7.09	1928	0.27	
220RA		2/1/2024	1018	1019	11.50	7.22	1977	0.19	
220RA		3/5/2024	1014	1015	11.50	7.23	2017	0.13	
220RA		4/2/2024	1055	1056	11.40	7.28	1826	0.16	
220RA		5/2/2024	1016	1017	11.60	7.19	1967	0.39	
220RA		6/5/2024	1054	1055	11.80	7.30	1999	0.2	
220RA		7/2/2024	1043	1044	14.90	7.21	2004	0.39	
220RA		8/1/2024	1019	1020	11.70	7.33	2035	1.22	
220RA		9/6/2024	1102	1103	11.00	7.37	2082	0.12	
220RA		10/1/2024	1023	1024	10.90	7.37	2074	0.14	
220RA		11/4/2024	1048	1049	10.40	7.34	2196	0.29	
220RA		12/3/2024	1000	1001	10.20	7.23	1790	0.44	
220RC		1/3/2024	1014	1015	15.30	6.94	1910	0.22	
220RC		2/1/2024	1010	1011	15.20	6.91	1987	0.37	
220RC		3/5/2024	1007	1008	15.60	6.99	2027	0.15	
220RC		4/2/2024	1109	1110	15.90	7.06	1811	0.51	
220RC		5/2/2024	1010	1011	16.00	7.06	1958	0.11	
220RC		6/5/2024	1046	1047	16.40	7.14	1995	0.54	
220RC		7/2/2024	1037	1038	19.90	7.02	2011	0.37	
220RC		8/1/2024	1012	1013	15.40	7.16	2032	0.45	
220RC		9/6/2024	1056	1057	16.20	7.22	2063	0.1	
220RC		10/25/2024	1003	1004	14.80	7.32	1953	0.54	
220RC		11/4/2024	1040	1041	15.20	7.16	2196	0.4	
220RC		12/3/2024	0954	0955	15.40	7.13	1761	0.34	
220RE		1/3/2024	1007	1008	15.20	6.92	1934	0.29	
220RE		2/1/2024	1004	1005	15.40	7.00	1983	0.17	
220RE		3/5/2024	1000	1001	15.90	7.06	2006	0.16	
220RE		4/2/2024	1041	1042	16.10	7.10	1822	0.35	
220RE		5/2/2024	1003	1004	16.10	7.03	1959	0.13	
220RE		6/5/2024	1039	1040	16.40	7.09	1981	0.5	
220RE		7/2/2024	1030	1031	20.10	7.01	2033	0.21	
220RE		8/1/2024	1006	1007	15.30	7.16	2033	0.09	
220RE		9/6/2024	1049	1050	16.30	7.24	2074	0.11	
220RE		10/1/2024	1011	1012	16.10	7.09	2070	0.08	
220RE		11/4/2024	1033	1034	15.20	7.12	2162	0.26	
220RE		12/3/2024	0949	0950	15.60	7.08	1772	0.47	
220RI		1/3/2024	1002	1003	15.30	6.97	1934	0.34	
220RI		2/1/2024	0958	0959	15.30	7.01	1984	0.29	
220RI		3/5/2024	0953	0954	16.00	7.05	2024	0.21	
220RI		4/2/2024	1034	1035	16.10	7.07	1832	0.24	
220RI		5/2/2024	0957	0958	16.10	7.03	2962	0.07	
220RI		6/5/2024	1032	1033	16.40	7.13	1993	0.19	

Field Parameters Database

WELL	QC_ID	DATE	START SAMPLE	END SAMPLE	TEMP (Deg. C)	PH	SPEC_COND (umhos/cm)	TURBIDITY (NTU)	COMMENTS
220RI		7/2/2024	1023	1024	20.10	7.00	2009	0.34	
220RI		8/1/2024	0959	1000	15.30	7.11	2034	0.22	
220RI		9/6/2024	1043	1044	16.30	7.17	2070	0.17	
220RI		10/1/2024	1006	1007	16.10	7.07	2036	0.19	
220RI		11/4/2024	1027	1028	15.30	7.09	2190	0.24	
220RI		12/3/2024	0943	0944	15.70	7.08	1760	0.48	
220RJ		1/3/2024	0956	0957	15.50	6.85	1930	0.41	
220RJ		2/1/2024	0951	0952	15.40	7.01	1976	0.47	
220RJ		3/5/2024	0947	0948	16.00	7.12	2014	0.15	
220RJ		4/2/2024	1028	1029	16.00	7.10	1819	0.17	
220RJ		5/2/2024	0951	0952	16.30	7.06	1960	0.16	
220RJ		6/5/2024	1020	1021	16.60	7.13	1985	0.61	
220RJ		7/2/2024	1004	1005	20.20	7.06	2016	0.46	
220RJ		8/1/2024	0952	0953	15.80	7.16	2040	0.54	
220RJ		9/6/2024	1035	1036	16.40	7.28	2063	0.11	
220RJ		10/1/2024	1000	1001	16.20	7.13	2074	0.31	
220RJ		11/4/2024	1020	1021	16.00	7.06	2206	0.61	
220RJ		12/3/2024	0937	0938	16.20	7.06	1766	0.64	
300		1/2/2024							TRIP BLANK
300		1/15/2024							TRIP BLANK
300		1/17/2024							TRIP BLANK
300		2/1/2024							TRIP BLANK
300		2/6/2024							TRIP BLANK
300		2/29/2024							TRIP BLANK
300		3/4/2024							TRIP BLANK
300		4/1/2024							TRIP BLANK
300		4/5/2024							TRIP BLANK
300		4/8/2024							TRIP BLANK
300		4/10/2024							TRIP BLANK
300		4/12/2024							TRIP BLANK
300		4/15/2024							TRIP BLANK
300		4/17/2024							TRIP BLANK
300		4/19/2024							TRIP BLANK
300		4/22/2024							TRIP BLANK
300		4/24/2024							TRIP BLANK
300		4/26/2024							TRIP BLANK
300		4/29/2024							TRIP BLANK
300		5/1/2024							TRIP BLANK
300		5/6/2024							TRIP BLANK
300		5/8/2024							TRIP BLANK
300		5/10/2024							TRIP BLANK
300		5/28/2024							TRIP BLANK
300		5/30/2024							TRIP BLANK
300		6/5/2024							TRIP BLANK
300		7/1/2024							TRIP BLANK
300		7/8/2024							TRIP BLANK
300		8/1/2024							TRIP BLANK
300		8/14/2024							TRIP BLANK
300		9/5/2024							TRIP BLANK
300		10/1/2024							TRIP BLANK
300		10/2/2024							TRIP BLANK
300		10/3/2024							TRIP BLANK
300		10/11/2024							TRIP BLANK
300		10/14/2024							TRIP BLANK
300		10/16/2024							TRIP BLANK

Field Parameters Database

WELL	QC_ID	DATE	START SAMPLE	END SAMPLE	TEMP (Deg. C)	PH	SPEC_COND (umhos/cm)	TURBIDITY (NTU)	COMMENTS
300		10/18/2024							TRIP BLANK
300		10/21/2024							TRIP BLANK
300		10/23/2024							TRIP BLANK
300		10/25/2024							TRIP BLANK
300		10/29/2024							TRIP BLANK
300		10/31/2024							TRIP BLANK
300		11/4/2024							TRIP BLANK
300		11/6/2024							TRIP BLANK
300		11/8/2024							TRIP BLANK
300		11/12/2024							TRIP BLANK
300		11/14/2024							TRIP BLANK
300		12/2/2024							TRIP BLANK
300		12/5/2024							TRIP BLANK
301		1/3/2024							TRIP BLANK
301		2/1/2024							TRIP BLANK
301		3/5/2024							TRIP BLANK
301		4/2/2024							TRIP BLANK
301		4/22/2024							TRIP BLANK
301		4/23/2024							TRIP BLANK
301		4/23/2024							TRIP BLANK
301		4/24/2024							TRIP BLANK
301		4/25/2024							TRIP BLANK
301		4/25/2024							TRIP BLANK
301		4/29/2024							TRIP BLANK
301		5/2/2024							TRIP BLANK
301		6/5/2024							TRIP BLANK
301		7/2/2024							TRIP BLANK
301		8/1/2024							TRIP BLANK
301		9/6/2024							TRIP BLANK
301		10/25/2024							TRIP BLANK
301		11/4/2024							TRIP BLANK
301		12/3/2024							TRIP BLANK
303		1/15/2024	0739	0739					EQUIPMENT BLANK/WLID
303		1/17/2024	0743	0743					EQUIPMENT BLANK/WLID
303		1/18/2024	0739	0739					EQUIPMENT BLANK/WLID
303		4/5/2024	0711	0711					EQUIPMENT BLANK/WLID
303		4/8/2024	0724	0724					EQUIPMENT BLANK/WLID
303		4/9/2024	0716	0716					EQUIPMENT BLANK/WLID
303		4/10/2024	0741	0741					EQUIPMENT BLANK/WLID
303		4/11/2024	0737	0737					EQUIPMENT BLANK/WLID
303		4/12/2024	0803	0803					EQUIPMENT BLANK/WLID
303		4/15/2024	0706	0706					EQUIPMENT BLANK/WLID
303		4/16/2024	0717	0717					EQUIPMENT BLANK/WLID
303		4/17/2024	0736	0736					EQUIPMENT BLANK/WLID
303		4/19/2024	0729	0729					EQUIPMENT BLANK/WLID
303		4/22/2024	0713	0713					EQUIPMENT BLANK/WLID
303		4/23/2024	0935	0935					EQUIPMENT BLANK/WLID
303		4/24/2024	0812	0812					EQUIPMENT BLANK/WLID
303		4/25/2024	0902	0902					EQUIPMENT BLANK/WLID
303		4/30/2024	0710	0710					EQUIPMENT BLANK/WLID
303		5/6/2024	0727	0727					EQUIPMENT BLANK/WLID
303		5/7/2024	1044	1044					EQUIPMENT BLANK/WLID
303		5/8/2024	0743	0743					EQUIPMENT BLANK/WLID
303		5/28/2024	0741	0741					EQUIPMENT BLANK/WLID
303		7/8/2024	0707	0707					EQUIPMENT BLANK/WLID

Field Parameters Database

WELL	QC_ID	DATE	START SAMPLE	END SAMPLE	TEMP (Deg. C)	PH	SPEC_COND (umhos/cm)	TURBIDITY (NTU)	COMMENTS
303		7/9/2024	0721	0721					EQUIPMENT BLANK/WLID
303		10/3/2024	0716	0716					EQUIPMENT BLANK/WLID
303		10/4/2024	0738	0738					EQUIPMENT BLANK/WLID
303		10/11/2024	0758	0758					EQUIPMENT BLANK/WLID
303		10/14/2024	0712	0712					EQUIPMENT BLANK/WLID
303		10/15/2024	0741	0741					EQUIPMENT BLANK/WLID
303		10/16/2024	0736	0736					EQUIPMENT BLANK/WLID
303		10/17/2024	0748	0748					EQUIPMENT BLANK/WLID
303		10/18/2024	0720	0720					EQUIPMENT BLANK/WLID
303		10/21/2024	0751	0751					EQUIPMENT BLANK/WLID
303		10/22/2024	0729	0729					EQUIPMENT BLANK/WLID
303		10/23/2024	0710	0710					EQUIPMENT BLANK/WLID
303		10/24/2024	0758	0758					EQUIPMENT BLANK/WLID
303		10/29/2024	0731	0731					EQUIPMENT BLANK/WLID
304		4/29/2024	0600	0600					EQUIPMENT BLANK ND PUMP A
304		5/9/2024	0711	0711					EQUIPMENT BLANK ND PUMP B
304		5/10/2024	0713	0713					EQUIPMENT BLANK ND PUMP B
304		5/29/2024	0713	0713					EQUIPMENT BLANK ND PUMP A
304		5/30/2024	0747	0747					EQUIPMENT BLANK ND PUMP B
304		5/31/2024	0718	0718					EQUIPMENT BLANK ND PUMP A
304		10/25/2024	0744	0744					EQUIPMENT BLANK ND PUMP A
304		10/30/2024	0747	0747					EQUIPMENT BLANK ND PUMP B
304		10/31/2024	0735	0735					EQUIPMENT BLANK ND PUMP B
304		11/1/2024	0749	0749					EQUIPMENT BLANK ND PUMP A
304		11/6/2024	0731	0731					EQUIPMENT BLANK ND PUMP B
304		11/7/2024	0720	0720					EQUIPMENT BLANK ND PUMP A
304		11/8/2024	0711	0711					EQUIPMENT BLANK ND PUMP B
304		11/12/2024	0728	0728					EQUIPMENT BLANK ND PUMP A
304		11/14/2024	0757	0757					EQUIPMENT BLANK ND PUMP B
304		12/5/2024	0738	0738					EQUIPMENT BLANK ND PUMP B
305		4/26/2024	0730	0730					EQUIPMENT BLANK ND PUMP A
323		1/15/2024	1236	1237	8.60	7.03	891	23.9	
323		4/11/2024	1134	1135	8.60	7.10	781	9.27	
323		7/8/2024	1153	1154	9.70	7.60	876	13.1	
323		10/15/2024	1002	1003	8.30	7.33	896	5.05	
325		1/2/2024	1116	1117	8.90	7.32	1753	5.27	
325		4/1/2024	1218	1219	9.40	7.44	1662	0.27	
325		7/1/2024	1145	1146	13.80	7.38	1812	0.46	
325		10/2/2024	0957	0958	9.50	7.55	1873	0.13	
325A		1/2/2024	1059	1100	9.80	7.27	1756	0.33	
325A		2/1/2024	1101	1102	9.60	7.31	1802	0.22	
325A		3/4/2024	1015	1016	9.60	7.27	1827	0.17	
325A		4/1/2024	1205	1206	9.60	7.47	1660	0.16	
325A		5/1/2024	1036	1037	9.50	7.31	1737	0.13	
325A		6/5/2024	1201	1202	8.40	7.44	1832	0.36	
325A		7/1/2024	1114	1115	13.00	7.35	1806	0.26	
325A		8/1/2024	1111	1112	9.20	7.45	1891	0.23	
325A		9/5/2024	1146	1147	8.90	7.50	1899	0.15	
325A		10/2/2024	0941	0942	8.80	7.53	1870	0.1	
325A		11/4/2024	1155	1156	8.50	7.47	1989	0.15	
325A		12/2/2024	1252	1253	8.60	7.40	1620	0.58	
325C		1/2/2024	1053	1054	9.80	7.23	1739	0.24	
325C		2/1/2024	1054	1055	9.70	7.29	1800	0.49	
325C		3/4/2024	1009	1010	9.60	7.25	1824	0.15	
325C		4/1/2024	1158	1159	9.60	7.47	1638	0.22	

Field Parameters Database

WELL	QC_ID	DATE	START SAMPLE	END SAMPLE	TEMP (Deg. C)	PH	SPEC_COND (umhos/cm)	TURBIDITY (NTU)	COMMENTS
325C		5/1/2024	1030	1031	9.50	7.27	1737	0.1	
325C		6/5/2024	1154	1155	9.50	7.40	1829	0.42	
325C		11/4/2024	1149	1150	8.60	7.45	1985	0.22	
325C		12/2/2024	1246	1247	8.60	7.51	1620	0.28	
325E		7/1/2024	1106	1107	12.70	7.33	1827	0.43	
325E		8/1/2024	1105	1106	9.30	7.45	1884	0.19	
325E		9/5/2024	1139	1140	9.00	7.46	1894	0.15	
325E		10/2/2024	0934	0935	8.80	7.45	1884	0.12	
325F		1/2/2024	1047	1048	10.10	7.22	1723	0.45	
325F		2/1/2024	1048	1049	9.80	7.26	1787	0.44	
325F		3/4/2024	1003	1004	9.70	7.22	1831	0.24	
325F		4/1/2024	1151	1152	9.90	7.46	1666	0.21	
325F		5/1/2024	1024	1025	9.80	7.29	1742	0.29	
325F		6/5/2024	1148	1149	9.60	7.47	1826	0.44	
325F		7/1/2024	1059	1100	12.60	7.36	1816	0.34	
325F		8/1/2024	1057	1058	9.70	7.47	1910	0.51	
325F		9/5/2024	1133	1134	9.60	7.49	1909	0.08	
325F		10/2/2024	0929	0930	9.00	7.47	1875	0.1	
325F		11/4/2024	1143	1144	8.80	7.47	1967	0.17	
325F		12/2/2024	1239	1240	8.80	7.38	1610	0.32	
384A		1/3/2024	1117	1120	13.90	7.47	579	0.24	
384A		2/6/2024	0951	0953	12.00	7.37	776	0.24	
384A		3/4/2024	1116	1119	12.80	7.27	1064	0.19	
384A		4/1/2024	1058	1101	11.70	7.44	691	0.21	
384A		5/2/2024	1114	1117	12.30	7.43	831	0.14	
384A		6/6/2024	1229	1232	15.40	7.63	1232	0.98	
384A		7/1/2024	0933	0936	19.10	7.52	538	1.47	
384A		8/2/2024	1010	1013	19.50	7.58	1186	0.48	
384A		9/5/2024	1016	1019	18.90	7.18	996	0.4	
384A		10/1/2024	1127	1130	20.40	7.96	1213	0.83	
384A		11/5/2024	0909	0912	21.10	7.84	1214	0.61	
384A		12/2/2024	1036	1038	18.20	7.74	788	0.53	
384B		1/3/2024	1111	1112	14.20	7.71	581	0.4	
384B		2/6/2024	0941	0942	12.40	7.47	768	0.24	
384B		3/4/2024	1110	1111	13.90	7.61	1060	0.2	
384B		4/1/2024	1051	1052	13.00	7.75	688	0.28	
384B		5/2/2024	1107	1108	13.90	7.79	825	0.18	
384B		6/6/2024	1222	1223	16.70	7.97	1222	0.78	
384B		7/1/2024	0925	0926	19.10	7.76	517	2.2	
384B		8/2/2024	1002	1003	20.40	7.83	1164	0.54	
384B		9/5/2024	1008	1009	19.00	7.49	972	0.44	
384B		10/1/2024	1119	1120	19.80	7.97	1190	1.09	
384B		11/5/2024	0901	0902	16.60	7.97	1297	1.42	
384B		12/2/2024	1029	1030	16.30	7.92	781	0.79	
384C		1/3/2024	1104	1105	12.10	8.06	578	0.41	
384C		2/6/2024	0930	0931	11.00	7.84	744	0.3	
384C		3/4/2024	1103	1104	13.40	8.26	1037	0.28	
384C		4/1/2024	1043	1044	12.30	8.34	682	0.29	
384C		5/2/2024	1101	1102	14.50	8.20	817	0.33	
384C		6/6/2024	1213	1214	20.40	8.44	1204	0.71	
384C		7/1/2024	0916	0917	19.20	8.36	502	2.81	
384C		8/2/2024	0947	0948	22.20	8.38	1172	0.45	
384C		9/5/2024	1001	1002	16.80	8.29	986	0.38	
384C		10/1/2024	1114	1115	18.60	8.45	1163	1.01	
384C		11/5/2024	0853	0854	14.50	8.19	1333	2.24	

Field Parameters Database

WELL	QC_ID	DATE	START SAMPLE	END SAMPLE	TEMP (Deg. C)	PH	SPEC_COND (umhos/cm)	TURBIDITY (NTU)	COMMENTS
384C		12/2/2024	1021	1022	7.70	8.25	836	0.57	
384J		1/3/2024	1059	1100	12.60	7.61	562	0.36	
384J		2/6/2024	0925	0926	10.50	8.61	741	0.17	
384J		3/4/2024	1056	1057	14.00	7.80	1057	0.22	
384J		4/1/2024	1037	1038	13.00	7.86	669	0.42	
384J		5/2/2024	1055	1056	14.10	7.73	822	0.21	
384J		6/6/2024	1205	1206	19.40	7.62	1187	0.39	
384J		7/1/2024	0910	0911	19.80	7.93	521	0.5	
384J		8/2/2024	0932	0933	21.70	7.61	1178	0.35	
384J		9/5/2024	0954	0955	17.80	7.95	954	0.29	
384J		10/1/2024	1108	1109	18.20	7.78	1205	0.29	
384J		11/5/2024	0844	0845	14.80	7.70	1376	0.81	
384J		12/2/2024	1014	1015	13.20	7.88	807	0.5	
384L		1/3/2024	1053	1054	12.30	7.50	587	0.21	
384L		2/6/2024	0917	0919	10.60	7.59	746	0.29	
384L		3/4/2024	1043	1044	13.90	8.08	1053	0.18	
384L		4/1/2024	1030	1032	13.50	8.02	685	0.25	
384L		5/2/2024	1047	1049	14.10	7.70	827	0.28	
384L		6/6/2024	1158	1200	19.40	7.54	1219	0.39	
384L		7/1/2024	0903	0905	19.80	7.60	519	0.37	
384L		8/2/2024	0917	0919	22.30	7.69	1182	0.21	
384L		9/5/2024	0946	0948	19.00	7.82	972	0.34	
384L		10/1/2024	1100	1102	19.00	8.01	1203	0.35	
384L		11/5/2024	0837	0839	14.00	7.59	1459	0.59	
384L		12/2/2024	1006	1008	13.80	7.84	799	0.87	
395		1/3/2024	1128	1130	NA	NA	NA	NA	NO FIELD PARAMS, HIGH LEVEL
395		4/1/2024	1112	1113	NA	NA	NA	NA	NO FIELD PARAMS, HIGH LEVEL
395		7/1/2024	0946	0948	NA	NA	NA	NA	NO FIELD PARAMS, HIGH LEVEL
395		12/2/2024	1122	1124	NA	NA	NA	NA	NO FIELD PARAMS, HIGH LEVEL
502		4/23/2024	0847	0849	8.10	6.94	1741	18.1	
520		4/16/2024	0926	0929	9.10	7.37	874	315	
520		10/3/2024	1104	1107	10.00	7.40	1463	172	
521		4/16/2024	1005	1008	7.60	7.37	1200	730	
521		10/3/2024	1204	1207	10.30	7.37	1581	>1000	
545		4/22/2024	1400	1402	8.10	7.12	670	4.45	
545		10/24/2024	1226	1228	8.40	7.13	1434	1.65	
559	312	4/25/2024	1231	1238	12.20	7.23	1482	50.8	QC DUPLICATE 312
559		11/6/2024	1246	1249	10.30	7.18	1989	29.2	1,4 DIOXANE
561		4/25/2024	1207	1212	11.20	7.32	999	17.6	
561		10/16/2024	0925	0928	6.70	7.00	1488	49.2	
563		4/25/2024	1220	1225	11.05	7.18	943	0.63	
563		10/16/2024	0937	0938	6.40	7.29	1282	0.97	
564		5/6/2024	1118	1120	11.90	7.66	754	24	
564		10/15/2024	1116	1118	6.90	7.70	821	78.9	
571		4/8/2024	1032	1036	NR	NR	NR	NR	
572		4/30/2024	1130	1134	17.10	7.55	1409	7.1	
574		4/30/2024	1023	1026	14.00	7.25	2451	20.9	
576	313	4/29/2024	1157	1159	17.30	7.16	2588	4.51	QC DUPLICATE 313
576		10/21/2024	1333	1336	16.40	6.93	3945	>1000	
577		4/23/2024	0850	0900	14.47	7.26	2685	736	
577		10/30/2024	0929	0930	10.20	7.12	3690	28.7	
579		4/29/2024	1120	1127	16.70	7.94	2104	7	
580		4/29/2024	1052	1057	10.40	6.95	2364	24.9	
581		4/10/2024	0939	0942	9.10	7.22	962	318	
600		4/10/2024	1311	1313	9.10	7.11	1282	396	

Field Parameters Database

WELL	QC_ID	DATE	START SAMPLE	END SAMPLE	TEMP (Deg. C)	PH	SPEC_COND (umhos/cm)	TURBIDITY (NTU)	COMMENTS
601		4/16/2024	1224	1225	10.20	7.30	2495	7.56	
601		10/14/2024	1330	1331	9.10	7.47	2904	1.32	
602		4/8/2024	1219	1221	10.30	8.03	243	>1000	
603		4/8/2024	1133	1135	11.00	7.80	743	>1000	
604		4/16/2024	1305	1306	11.10	7.56	811	215	
607		4/25/2024	0830	0831	14.60	7.17	1818	4.76	
607		10/29/2024	1152	1153	11.80	7.43	1887	3.82	
609		4/25/2024	1135	1136	13.40	6.94	2968	39	
609		10/31/2024	1152	1153	11.50	7.24	3414	27.4	
610		4/25/2024	0945	0946	12.70	7.18	2874	10.9	
610		5/30/2024	1215	1217	12.70	7.21	3064	13.9	
610	310	10/29/2024	1039	1040	10.10	7.29	3319	5.66	QC DUPLICATE 310
611		5/8/2024	0913	0914	11.80	7.24	2290	2.9	
612		1/17/2024	1134	1137	10.70	6.96	3290	3.14	
612		4/25/2024	1013	1016	10.10	7.16	3763	8.4	
612		7/9/2024	1238	1241	14.80	7.34	3674	27.3	
612		10/16/2024	1125	1128	14.30	7.18	4024	31.2	
622	314	5/7/2024	1015	1017	12.50	7.29	1343	50.5	QC DUPLICATE 314
622		10/17/2024	1200	1202	11.00	7.45	1398	73.8	
623		4/30/2024	0650	0657	14.10	7.15	2329	3.65	
623		11/1/2024	1108	1109	11.10	7.43	2590	4.06	
624		4/26/2024	0743	0750	NR	NR	NR	NR	
624		11/1/2024	0927	0928	10.80	7.47	1297	12.1	
627		4/29/2024	0845	0850	12.10	5.74	1145	38	
628		1/17/2024	1010	1011	6.30	6.99	952	1.51	
628		4/12/2024	1015	1016	8.10	7.22	833	5.45	
628		7/9/2024	1058	1059	11.80	7.18	896	2.9	
628		10/11/2024	1005	1006	9.70	7.31	956	0.5	
634		1/3/2024	1136	1138	NA	NA	NA	NA	NO FIELD PARAMS, HIGH LEVEL
634		4/1/2024	1119	1120	NA	NA	NA	NA	NO FIELD PARAMS, HIGH LEVEL
634		7/1/2024	0955	0957	NA	NA	NA	NA	NO FIELD PARAMS, HIGH LEVEL
634		12/2/2024	1130	1132	NA	NA	NA	NA	NO FIELD PARAMS, HIGH LEVEL
640		4/25/2024	1321	1324	10.50	7.38	2150	218	
640		5/28/2024	1201	1204	12.80	7.49	822	270	
640		10/18/2024	1048	1051	14.20	7.42	806	298	
701		4/9/2024	1054	1057	7.90	7.19	1682	186	
702		4/8/2024	0924	0926	6.00	7.08	1544	>1000	
702		10/11/2024	1134	1137	14.60	7.37	1766	6.43	
706		4/25/2024	0852	0855	11.70	6.91	3546	69.4	
706		5/28/2024	0935	0937	14.40	6.94	3725	34.3	
706		10/22/2024	1235	1238	13.80	7.10	4153	19.3	
711		4/12/2024	1145	1146	12.00	7.15	1622	14.5	
714		4/12/2024	1302	1305	11.90	7.29	1583	34.6	
714		5/7/2024	1148	1150	11.20	7.25	1718	50	
714		11/6/2024	1204	1208	11.30	7.49	1925	30.1	1,4 DIOXANE
716		4/23/2024	1145	1151	11.22	7.37	5152	263	
716		10/25/2024	1126	1127	11.90	7.27	5990	23.2	
720		4/22/2024	1703	1704	13.90	7.39	2154	86.9	
720		10/16/2024	1332	1333	10.10	7.37	2019	47.9	
722		5/7/2024	1309	1310	11.90	7.24	1432	7.46	
732		4/29/2024	1530	1538	18.50	8.22	1075	12.2	
732		5/31/2024	1133	1136	14.60	7.33	1384	9.64	
732	311	11/7/2024	1147	1150	12.50	7.38	1548	3.04	1,4 DIOXANE, QC DUPLICATE 311
734	315	4/5/2024	0948	0949	10.70	7.21	2220	70.6	QC DUPLICATE 315
734	312	10/30/2024	1300	1302	12.90	7.28	2661	249	QC DUPLICATE 312

Field Parameters Database

WELL	QC_ID	DATE	START SAMPLE	END SAMPLE	TEMP (Deg. C)	PH	SPEC_COND (umhos/cm)	TURBIDITY (NTU)	COMMENTS
735		4/19/2024	0941	0946	10.40	6.54	7542	33.7	
735		10/18/2024	0951	0954	11.90	6.18	3681	31.5	
737		4/24/2024	0720	0726	14.50	7.04	1063	235	
737	320	5/9/2024	1234	1238	12.20	7.48	1192	215	QC DUPLICATE 320
737	313	10/25/2024	1242	1243	11.60	7.44	1366	224	QC DUPLICATE 313
739		4/25/2024	0801	0806	13.50	6.80	2092	53.4	
740		4/29/2024	0941	0946	13.80	7.14	5461	718	
742	316	4/24/2024	1035	1042	14.90	7.43	1886	115	QC DUPLICATE 316
742	321	5/10/2024	1116	1119	11.40	7.02	2192	102	QC DUPLICATE 321
742	314	11/12/2024	1139	1141	10.40	7.31	2474	38.1	QC DUPLICATE 314
742	318	12/5/2024	1102	1104	8.40	7.28	2031	15.9	QC DUPLICATE 318
743		4/24/2024	1150	1156	13.80	7.79	6208	353	
744		4/8/2024	1346	1348	9.90	7.03	1599	72.2	
744		10/11/2024	1045	1048	9.10	7.23	1870	14.9	
745		4/9/2024	1151	1153	10.00	6.97	2625	>1000	
751		5/6/2024	1221	1224	10.70	7.31	679	168	
753		4/29/2024	1339	1342	13.10	7.28	747	7.1	
754		4/25/2024	1054	1058	9.00	7.40	1877	31.2	
755		4/12/2024	1105	1108	7.00	7.19	785	34.2	
755		10/16/2024	1036	1039	11.40	7.17	1090	>1000	
756		4/5/2024	1206	1209	8.00	7.76	1709	170	
757		4/8/2024	0854	0856	7.90	7.45	1324	>1000	
757		10/15/2024	1236	1239	14.40	7.48	2277	>1000	
761		4/9/2024	1302	1305	12.60	7.24	1462	85	
763		4/10/2024	1004	1007	12.20	7.60	1811	417	
766	317	4/17/2024	0924	0929	11.40	7.11	1404	249	QC DUPLICATE 317
766		10/18/2024	0845	0848	12.70	7.30	1605	453	
767	318	4/19/2024	1009	1014	11.00	6.69	3113	493	QC DUPLICATE 318
767		10/18/2024	1021	1024	14.20	6.70	3416	84.1	
768		4/17/2024	1033	1038	12.10	7.23	4519	>1000	
768		10/18/2024	1248	1251	13.80	7.69	3729	749	
769		4/17/2024	1202	1206	13.40	7.27	4799	12.7	
769		10/21/2024	1213	1217	14.70	7.17	5178	>1000	
771		4/19/2024	0914	0917	10.20	7.29	5123	551	
772		4/17/2024	0847	0852	10.20	6.92	4450	437	
772		10/15/2024	1158	1201	15.80	7.05	3681	>1000	
773		4/9/2024	0828	0830	11.60	7.18	2883	184	
774		4/23/2024	1305	1309	11.40	6.80	5514	5.83	
774		10/22/2024	1147	1149	15.30	6.97	6313	7.39	
775		4/23/2024	1223	1227	10.50	6.67	9234	29.6	
777		4/25/2024	1028	1036	11.35	7.25	881	0.17	
777		10/29/2024	0928	0929	7.90	7.25	2277	27.7	
779		4/25/2024	0945	0951	10.50	7.49	2058	15.4	
779		10/29/2024	0857	0859	6.90	7.46	2570	317	
789		4/9/2024	1124	1127	9.30	6.59	4527	>1000	
791		4/10/2024	1122	1125	8.70	7.04	1791	798	
792		4/19/2024	1215	1219	9.00	6.89	6412	550	
793		4/19/2024	1136	1141	9.50	7.15	2373	63.6	
793		10/23/2024	1308	1311	14.60	7.26	2922	195	
832		5/6/2024	1019	1022	7.70	7.25	723	4.47	
857		4/23/2024	1350	1351	13.90	6.78	1034	12.4	
857		10/3/2024	1128	1129	8.80	7.20	1121	13.3	
858		4/23/2024	1335	1336	13.70	6.97	879	31.8	
858		10/3/2024	1116	1117	8.10	7.45	1013	37.4	
921		4/23/2024	1615	1621	15.10	7.85	2115	330.5	

Field Parameters Database

WELL	QC_ID	DATE	START SAMPLE	END SAMPLE	TEMP (Deg. C)	PH	SPEC_COND (umhos/cm)	TURBIDITY (NTU)	COMMENTS
921		10/22/2024	1018	1019	11.70	7.09	2429	>1000	
922		4/23/2024	1545	1547	15.10	6.94	1989	>1000	
922		10/23/2024	1214	1215	11.10	7.24	2724	627	
923		4/23/2024	1035	1036	15.20	6.86	2186	14	
923		10/23/2024	1158	1159	10.90	7.26	2612	4.81	
929		4/29/2024	0833	0839	15.10	7.39	2906	67.7	
929		10/29/2024	1251	1252	10.50	7.33	3564	4.82	
931		4/24/2024	1620	1621	15.30	7.34	3464	14.4	
931		11/6/2024	1048	1050	11.40	7.36	3929	1.46	1,4 DIOXANE
932		5/9/2024	1107	1109	12.70	7.10	1310	53.3	
932		11/8/2024	1114	1115	11.20	7.20	1701	10.7	
941		4/25/2024	1714	1720	16.20	7.63	1319	2.52	
941		11/12/2024	1310	1311	10.90	7.51	1577	4.41	
943		4/23/2024	1410	1416	13.60	7.89	1268	61.6	
943		10/21/2024	0943	0944	7.60	7.26	1594	11.8	
944		4/23/2024	1350	1356	14.70	8.09	1515	118	
944		10/17/2024	1308	1309	8.30	7.38	1981	210	
952	319	5/8/2024	1218	1221	10.10	7.34	1256	144	QC DUPLICATE 319
952		10/17/2024	1017	1018	7.10	7.43	1351	297	
953		4/26/2024	1030	1031	13.90	7.04	2003	48.5	
953		5/30/2024	1014	1016	11.30	7.20	2183	26	
953		11/14/2024	1210	1211	11.10	7.74	2385	10.2	
954		4/29/2024	0946	0954	15.30	7.87	2528	222	
954		11/14/2024	1044	1045	9.00	7.25	3325	583	
954		12/5/2024	1146	1147	8.40	7.41	2638	223	
956		4/23/2024	1540	1548	15.00	7.63	2372	373	
956		10/21/2024	1059	1100	11.70	7.24	3141	93.4	
958		4/11/2024	1021	1022	9.20	7.54	864	4.87	
958		10/4/2024	1156	1157	9.70	7.44	990	11.2	
959		4/26/2024	1130	1137	14.30	7.39	1970	3160	
959	322	5/29/2024	1127	1129	12.90	7.15	2187	422	QC DUPLICATE 322
959	315	10/31/2024	1039	1041	11.90	7.25	2623	746	QC DUPLICATE 315
960		4/29/2024	0715	0721	15.50	7.50	1916	1788	
960		5/29/2024	1312	1314	12.10	7.30	2356	>1000	
960		11/6/2024	1409	1412	11.10	7.43	2642	>1000	1,4 DIOXANE
963		4/15/2024	1328	1329	9.20	7.53	640	1.95	
963		10/4/2024	0848	0849	8.30	7.58	913	3.92	
964		4/15/2024	1401	1402	9.50	7.44	1799	1.12	
964		10/4/2024	0919	0920	8.30	7.40	2169	1.34	
965		4/24/2024	0955	0956	14.20	7.14	1435	50.9	
966		4/24/2024	1135	1136	16.40	6.99	2050	7.55	
966		10/23/2024	0936	0937	10.60	7.24	2344	1.59	
987		1/15/2024	1119	1120	8.90	7.05	813	11.2	
987		4/15/2024	1113	1114	11.00	7.16	704	14.9	
987		7/8/2024	1031	1033	10.20	7.52	2421	1.45	
987		10/3/2024	0912	0913	9.00	7.31	2535	1.73	
990		1/15/2024	1140	1141	8.70	7.10	886	4.97	
990		4/15/2024	1145	1146	8.90	7.30	746	1.79	
990		7/8/2024	1050	1052	9.30	7.47	829	0.36	
990		10/14/2024	1015	1016	9.10	7.22	851	3.01	
998		4/8/2024	0949	0951	8.30	7.18	846	202	

Sampling Field Log Database

WELL	BOOK NO	PAGE NO	DATE	SAMPLE ID	QC_ORG	QC_373_KIT	EQUIP ID	DTW BP	DTW AP	START PURGE	END PURGE	RATE	VOL PURGE	SAMPLER ID	GW VOA	PW VOA	F METALS	U METALS	FLUORIDE	OTHER	PUMPED DRY	COMMENTS
007	458	166498	4/22/2024	GW240422007		NR240422310	BP/LINE	9.37	@PUMP	1047	1105	1GPM	14.0	DFB	3	0	1	1	0	0	Y	QC DUPLICATE 310
010	459	166515	4/26/2024	GW240426010			B/B	20.83	21.56	0945	1017	NA	16.0	DFB	3	0	1	1	0	0	N	
010	462	166826	10/18/2024	GW241018010			B/B	33.16	33.73	1133	1145	NA	9.9	DFB	3	0	0	0	0	0	N	
012	462	166899	11/7/2024	GW241107012			ND 2"SP/LINE	32.78	57.24	1230	1242	3GPM	36.0	DFB	3	0	0	0	0	1	N	1,4 DIOXANE
015	459	166507	4/24/2024	GW240424015			BP/LINE	13.90	14.09	1308	1322	2M/G	7.0	DFB	3	0	1	1	1	0	N	
015	462	166842	10/24/2024	GW241024015			BP/LINE	18.92	22.80	1252	1306	3M/G	4.5	DFB	3	0	0	0	0	0	N	
016	460	166605	4/22/2024	GW240422016			2"SP/LINE	13.94	17.72	1535	1608	2GPM	73.0	TJP	3	0	0	0	0	0	N	
016	462	166871	10/31/2024	GW241031016			ND 2"SP/LINE	21.10	32.85	1235	1305	2GPM	59.0	DFB	3	0	0	0	0	0	N	
032B	457	166384	1/17/2024	GW240117032B			SP/TAP	3.68	9.98	1228	1241	7GPM	70.0	DFB	3	0	0	0	0	0	N	
032B	459	166522	4/30/2024	GW240430032B			SP/TAP	4.12	8.49	0836	0849	7GPM	90.0	DFB	3	0	0	0	0	0	N	
032B	460	166638	7/8/2024	GW240708032B			SP/TAP	4.63	8.43	1256	1306	8GPM	80.0	DFB	3	0	0	0	0	0	N	
032B	462	166893	11/6/2024	GW241106032B			SP/TAP	6.65	9.90	0854	0904	8GPM	80.0	DFB	3	0	0	0	0	1	N	1,4 DIOXANE
046	457	166381	1/17/2024	GW240117046			PP/B	3.41	3.68	0924	0940	2GPM	31.0	DFB	3	0	0	0	0	0	N	
046	458	166473	4/12/2024	GW240412046			PP/B	4.01	4.10	0914	0944	1GPM	30.0	DFB	3	0	0	0	0	0	N	
046	460	166643	7/9/2024	GW240709046			PP/B	11.04	11.19	1111	1127	1GPM	16.0	DFB	3	0	0	0	0	0	N	
046	460	166692	10/11/2024	GW241011046			PP/B	16.84	16.97	0907	0913	1.2M/G	4.6	DFB	3	0	0	0	0	0	N	
048	457	166380	1/15/2024	GW240115048			2"SP/LINE	4.66	8.05	1246	1308	1GPM	22.0	DFB	3	0	0	0	0	0	N	
048	458	166468	4/11/2024	GW240411048			2"SP/LINE	4.94	9.52	1036	1057	1GPM	21.0	DFB	3	0	0	0	0	0	N	
048	460	166641	7/9/2024	GW240709048			2"SP/LINE	5.88	10.97	0932	0951	1GPM	19.0	DFB	3	0	0	0	0	0	N	
048	462	166808	10/15/2024	GW241015048			2"SP/LINE	7.08	11.27	1014	1031	1GPM	17.0	DFB	3	0	0	0	0	0	N	
053	460	166624	4/25/2024	GW240425053			B/B	12.68	12.70	1235	1254	NA	12.5	TJP	3	0	0	0	0	0	N	
053	461	166747	11/8/2024	GW241108053			B/B	20.68	20.74	0927	0939	NA	8.6	DFB	3	0	0	0	0	0	N	
053	461	166773	12/5/2024	GW241205053	NR241205317		B/B	18.78	18.91	1159	1214	NA	9.6	DFB	6	0	0	0	0	0	N	QC DUPLICATE 317
054	459	166512	4/25/2024	GW240425054			PP/B	11.45	14.53	1147	1220	1GPM	33.0	DFB	3	0	0	0	0	0	N	
054	459	166559	5/28/2024	GW240528054	NR240528321		PP/B	13.00	15.52	1036	1106	1GPM	30.0	DFB	6	0	0	0	0	0	N	QC DUPLICATE 321
054	462	166815	10/16/2024	GW241016054			PP/B	16.98	19.82	1200	1222	1GPM	22.0	DFB	3	0	0	0	0	0	N	
059	460	166608	4/22/2024	GW240422059			2"SP/LINE	4.42	4.58	1840	1858	1GPM	26.0	TJP	3	0	0	0	0	0	N	
060	460	166609	4/22/2024	GW240422060			2"SP/LINE	5.93	12.32	1907	1934	3GPM	80.0	TJP	3	0	0	0	0	0	N	
061	458	166445	4/5/2024	GW240405061			2"SP/LINE	8.02	8.25	1123	1137	3GPM	42.0	DFB	3	0	0	0	0	0	N	
064	457	166375	1/15/2024	GW240115064			2"SP/LINE	3.32	4.87	0924	0939	2GPM	29.0	DFB	3	0	0	0	0	0	N	
064	458	166477	4/15/2024	GW240415064			2"SP/LINE	3.37	5.13	0906	0921	2GPM	29.0	DFB	3	0	0	0	0	0	N	
064	460	166633	7/8/2024	GW240708064			2"SP/LINE	4.16	6.54	0918	0932	2GPM	27.0	DFB	3	0	0	0	0	0	N	
064	460	166697	10/14/2024	GW241014064			2"SP/LINE	8.27	9.88	0853	0903	2GPM	19.0	DFB	3	0	0	0	0	0	N	
065	457	166376	1/15/2024	GW240115065	NR240115310		2"SP/LINE	2.92	5.81	0946	1012	3GPM	79.0	DFB	6	0	0	0	0	0	N	QC DUPLICATE 310
065	458	166478	4/15/2024	GW240415065			2"SP/LINE	2.93	7.88	0931	0957	3GPM	79.0	DFB	3	0	0	0	0	0	N	
065	460	166632	7/8/2024	GW240708065			2"SP/LINE	3.78	10.64	0846	0912	3GPM	77.0	DFB	3	0	0	0	0	0	N	
065	460	166698	10/14/2024	GW241014065			2"SP/LINE	7.38	13.75	0911	0934	3GPM	69.0	DFB	3	0	0	0	0	0	N	
066	457	166386	1/18/2024	GW240118066			2"SP/LINE	4.43	5.88	0839	0852	1GPM	13.0	DFB	3	0	0	0	0	0	N	
066	458	166446	4/5/2024	GW240405066			2"SP/LINE	3.91	4.43	1223	1233	1GPM	14.0	DFB	3	0	0	0	0	0	N	
066	460	166637	7/8/2024	GW240708066			2"SP/LINE	4.63	6.41	1211	1217	2GPM	12.4	DFB	3	0	0	0	0	0	N	
066	460	166700	10/14/2024	GW241014066			2"SP/LINE	6.28	7.02	1041	1050	1GPM	9.2	DFB	3	0	0	0	0	0	N	
067	457	166385	1/17/2024	GW240117067			B/B	7.01	7.58	1250	1257	NA	3.7	DFB	3	0	0	0	0	0	N	
067	458	166447	4/5/2024	GW240405067			B/B	6.71	7.24	1304	1309	NA	3.8	DFB	3	0	0	0	0	0	N	
067	460	166640	7/9/2024	GW240709067	NR240709310		B/B	7.53	7.89	0857	0902	NA	3.4	DFB	6	0	0	0	0	0	N	QC DUPLICATE 310
067	462	166801	10/14/2024	GW241014067			B/B	7.28	7.66	1114	1118	NA	3.6	DFB	3	0	0	0	0	0	N	
068	457	166387	1/18/2024	GW240118068			2"SP/LINE	2.04	5.97	0915	0936	2GPM	41.0	DFB	3	0	0	0	0	0	N	
068	459	166548	5/6/2024	GW240506068			2"SP/LINE	2.41	5.03	1326	1346	2GPM	40.0	DFB	3	0	1	1	0	0	N	
068	460	166639	7/9/2024	GW240709068			2"SP/LINE	3.22	6.62	0821	0834	3GPM	39.0	DFB	3	0	0	0	0	0	N	
068	462	166802	10/14/2024	GW241014068			2"SP/LINE	4.26	5.86	1135	1154	2GPM	37.0	DFB	3	0	0	0	0	0	N	
069	459	166502	4/23/2024	GW240423069			BP/LINE	2.84	3.53	1034	1104	1GPM	25.0	DFB	3	0	0	0	0	0	N	
085	458	166485	4/16/2024	GW240416085	NR240416311		2"SP/LINE	20.21	73.98	1042	1107	2GPM	49.0	DFB	6	0	0	0	0	0	N	QC DUPLICATE 311
085	462	166892	11/6/2024	GW241106085			2"SP/LINE	28.62	74.93	0800	0823	2GPM	45.0	DFB	3	0	0	0	0	1	N	1,4 DIOXANE
087	461	166717	4/25/2024	GW240425087			2"SP/LINE	6.91	30.62	1502	1525	2.2GPM	51.0	CJS	3	0	0	0	0	0	N	
087	460	166686	10/3/2024	GW241003087			2"SP/LINE	9.74	36.44	1304	1328	2GPM	48.0	DFB	3	0	0	0	0	0	N	
103	459	166514	4/26/2024	GW240426103			B/B	9.32	14.38	0927	0930	NA	0.9	DFB	3	0	0	0	0	0	Y	
103	462	166824	10/18/2024	GW241018103			B/B	12.45	14.44	0928	0931	NA	0.4	DFB	3	0	0	0	0	0	Y	
104	459	166513	4/26/2024	GW240426104			PP/B	14.21	@PUMP	0848	0922	8M/G	4.5	DFB	3	0	1	1	0	0	Y	

Sampling Field Log Database

WELL	BOOK NO	PAGE NO	DATE	SAMPLE ID	QC_ORG	QC_373_KIT	EQUIP ID	DTW BP	DTW AP	START PURGE	END PURGE	RATE	VOL PURGE	SAMPLER ID	GW VOA	PW VOA	F METALS	U METALS	FLUORIDE	OTHER	PUMPED DRY	COMMENTS
104	459	166560	5/28/2024	GW240528104			PP/B	15.56	DRY	1123	1148	7M/G	3.5	DFB	3	0	0	0	0	0	Y	
104	462	166832	10/22/2024	GW241022104			PP/B	20.87	DRY	0832	0906	10.5M/G	3.2	DFB	3	0	0	0	0	0	Y	
105	460	166626	4/25/2024	GW240425105			ND 2"SP/LINE	15.95	@PUMP	1511	1541	1GPM	30.0	TJP	3	0	0	0	0	0	Y	
105	462	166866	10/30/2024	GW241030105			ND 2"SP/LINE	22.97	101.74	1005	1015	2GPM	20.0	DFB	3	0	0	0	0	0	Y	
106	459	166501	4/23/2024	GW240423106			BP/LINE	17.53	@PUMP	0911	1018	3M/G	25.0	DFB	3	0	0	0	0	0	Y	
109	458	166466	4/11/2024	GW240411109			2"SP/LINE	15.84	130.62	0822	0857	2GPM	70.0	DFB	3	0	0	0	0	0	N	
109	462	166805	10/15/2024	GW241015109			2"SP/LINE	22.68	151.92	0821	0855	2GPM	67.0	DFB	3	0	0	0	0	0	N	
113	461	166716	4/25/2024	GW240425113			ND 2"SP/LINE	0.00	78.61	1333	1425	1.1GPM	55.0	CJS	3	0	0	0	0	0	N	
113	462	166867	10/30/2024	GW241030113			ND 2"SP/LINE	4.92	91.45	1027	1118	1GPM	51.0	DFB	3	0	0	0	0	0	N	
118	459	166506	4/24/2024	GW240424118			BP/LINE	22.72	58.78	1118	1253	2M/G	63.0	DFB	3	0	0	0	0	0	N	
143	459	166505	4/24/2024	GW240424143			BP/LINE	28.68	29.48	0859	1040	2M/G	56.0	DFB	3	0	0	0	0	0	N	
146	458	166470	4/11/2024	GW240411146			ND 2"SP/LINE	25.92	39.38	1151	1220	2GPM	58.0	DFB	3	0	0	0	0	0	N	
151	458	166456	4/9/2024	GW240409151			PP/B	8.82	9.58	0849	0919	7M/G	4.6	DFB	3	0	0	0	0	0	N	
151	460	166691	10/4/2024	GW241004151			PP/B	11.6	11.92	1239	1304	7.5M/G	3.3	DFB	3	0	0	0	0	0	N	
156	460	166607	4/22/2024	GW240422156			2"SP/LINE	13.94	61.36	1727	1758	1GPM	37.0	TJP	3	0	0	0	0	0	N	
156	460	166689	10/4/2024	GW241004156			2"SP/LINE	16.48	@PUMP	0956	1006	2GPM	20.0	DFB	3	0	0	0	0	0	Y	
167	458	166497	4/22/2024	GW240422167			BP/LINE	1.46	137.24	0855	1011	3M/G	26.0	DFB	3	0	0	0	0	0	Y	
167	462	166840	10/24/2024	GW241024167			BP/LINE	7.39	134.98	0855	1024	3M/G	30.0	DFB	3	0	0	0	0	0	Y	
178	459	166516	4/26/2024	GW240426178			B/B	14.61	21.73	1204	1215	NA	5.6	DFB	3	0	0	0	0	0	N	
181	460	166618	4/24/2024	GW240424181			2"SP/LINE	1.68	@PUMP	1230	1249	1GPM	20.0	TJP	3	0	0	0	0	0	Y	
181	462	166874	11/1/2024	GW241101181			2"SP/LINE	4.24	16.50	1155	1222	1GPM	21.0	DFB	3	0	0	0	0	0	N	
204	458	166463	4/10/2024	GW240410204			B/B	6.84	9.38	1036	1041	NA	2.9	DFB	3	0	1	1	0	0	N	
210	457	166357	1/2/2024	PW240102210			SP/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
210	458	166436	4/2/2024	PW240402210			SP/TAP	NA	NA	NA	NA	NA	1.0	DFB	3	0	0	0	0	0	N	
210	459	166597	7/2/2024	PW240702210			SP/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
210	460	166675	10/2/2024	PW241002210			SP/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
210A	457	166356	1/2/2024	PW240102210A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210A	458	166404	2/29/2024	PW240229210A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210A	458	166415	3/5/2024	PW240305210A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210A	458	166435	4/2/2024	PW240402210A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210A	459	166530	5/1/2024	PW240501210A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210A	459	166577	6/6/2024	PW240606210A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210A	459	166596	7/2/2024	PW240702210A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210A	461	166729	8/14/2024	PW240814210A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210A	461	166740	9/6/2024	PW240906210A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210A	460	166674	10/2/2024	PW241002210A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210A	462	166877	11/4/2024	PW241104210A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210A	461	166754	12/2/2024	PW241202210A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210C	457	166355	1/2/2024	PW240102210C			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210C	458	166403	2/29/2024	PW240229210C			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210C	458	166414	3/5/2024	PW240305210C			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210C	458	166434	4/2/2024	PW240402210C			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210C	459	166529	5/1/2024	PW240501210C			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210C	459	166576	6/6/2024	PW240606210C			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210E	459	166595	7/2/2024	PW240702210E			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210E	461	166728	8/14/2024	PW240814210E			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210E	461	166739	9/6/2024	PW240906210E			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210E	460	166673	10/2/2024	PW241002210E			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210E	462	166876	11/4/2024	PW241104210E			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210E	461	166753	12/2/2024	PW241202210E			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210F	457	166354	1/2/2024	PW240102210F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210F	458	166402	2/29/2024	PW240229210F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210F	458	166413	3/5/2024	PW240305210F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210F	458	166433	4/2/2024	PW240402210F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210F	459	166528	5/1/2024	PW240501210F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210F	459	166575	6/6/2024	PW240606210F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210F	459	166594	7/2/2024	PW240702210F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	

Sampling Field Log Database

WELL	BOOK NO	PAGE NO	DATE	SAMPLE ID	QC_ORG	QC_373_KIT	EQUIP ID	DTW BP	DTW AP	START PURGE	END PURGE	RATE	VOL PURGE	SAMPLER ID	GW VOA	PW VOA	F METALS	U METALS	FLUORIDE	OTHER	PUMPED DRY	COMMENTS
210F	461	166727	8/14/2024	PW240814210F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210F	461	166738	9/6/2024	PW240906210F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210F	460	166672	10/2/2024	PW241002210F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210F	462	166875	11/4/2024	PW241104210F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
210F	461	166752	12/2/2024	PW241202210F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220R	457	166367	1/3/2024	PW240103220R			SP/TAP	NA	NA	NA	NA	NA	4.0	DFB	3	0	0	0	0	2	N	
220R	458	166442	4/2/2024	PW240402220R			SP/TAP	NA	NA	NA	NA	NA	4.0	DFB	3	0	0	0	0	2	N	
220R	460	166631	7/2/2024	PW240702220R			SP/TAP	NA	NA	NA	NA	NA	4.0	DFB	3	0	0	0	0	2	N	
220R	460	166664	10/1/2024	PW241001220R			SP/TAP	NA	NA	NA	NA	NA	4.0	DFB	3	0	0	0	0	2	N	
220RA	457	166366	1/3/2024	P240103220RA			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RA	457	166392	2/1/2024	P240201220RA			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RA	458	166420	3/5/2024	P240305220RA			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RA	458	166441	4/2/2024	P240402220RA			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RA	459	166538	5/2/2024	P240502220RA			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RA	459	166570	6/5/2024	P240605220RA			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RA	460	166630	7/2/2024	P240702220RA			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RA	460	166649	8/1/2024	P240801220RA			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RA	461	166745	9/6/2024	P240906220RA			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RA	460	166663	10/1/2024	P241001220RA			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RA	462	166882	11/4/2024	P241104220RA			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RA	461	166769	12/3/2024	P241203220RA			SP/TAP	NA	NA	NA	NA	NA	5.0	JLL	3	0	0	0	0	0	N	
220RC	457	166365	1/3/2024	P240103220RC			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RC	457	166391	2/1/2024	P240201220RC			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RC	458	166419	3/5/2024	P240305220RC			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RC	458	166440	4/2/2024	P240402220RC			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RC	459	166537	5/2/2024	P240502220RC			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RC	459	166569	6/5/2024	P240605220RC			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RC	460	166629	7/2/2024	P240702220RC			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RC	460	166648	8/1/2024	P240801220RC			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RC	461	166744	9/6/2024	P240906220RC			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RC	462	166844	10/25/2024	P241025220RC			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RC	462	166881	11/4/2024	P241104220RC			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RC	461	166768	12/3/2024	P241203220RC			SP/TAP	NA	NA	NA	NA	NA	5.0	JLL	3	0	0	0	0	0	N	
220RE	457	166364	1/3/2024	P240103220RE			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RE	457	166390	2/1/2024	P240201220RE			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RE	458	166418	3/5/2024	P240305220RE			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RE	458	166439	4/2/2024	P240402220RE			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RE	459	166536	5/2/2024	P240502220RE			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RE	459	166568	6/5/2024	P240605220RE			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RE	459	166600	7/2/2024	P240702220RE			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RE	460	166647	8/1/2024	P240801220RE			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RE	461	166743	9/6/2024	P240906220RE			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RE	460	166661	10/1/2024	P241001220RE			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RE	462	166880	11/4/2024	P241104220RE			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RE	461	166767	12/3/2024	P241203220RE			SP/TAP	NA	NA	NA	NA	NA	5.0	JLL	3	0	0	0	0	0	N	
220RI	457	166363	1/3/2024	P240103220RI			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RI	457	166389	2/1/2024	P240201220RI			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RI	458	166417	3/5/2024	P240305220RI			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RI	458	166438	4/2/2024	P240402220RI			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RI	459	166535	5/2/2024	P240502220RI			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RI	459	166567	6/5/2024	P240605220RI			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RI	459	166599	7/2/2024	P240702220RI			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RI	460	166646	8/1/2024	P240801220RI			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RI	461	166742	9/6/2024	P240906220RI			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RI	460	166660	10/1/2024	P241001220RI			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RI	462	166879	11/4/2024	P241104220RI			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RI	461	166766	12/3/2024	P241203220RI			SP/TAP	NA	NA	NA	NA	NA	5.0	JLL	3	0	0	0	0	0	N	

Sampling Field Log Database

WELL	BOOK NO	PAGE NO	DATE	SAMPLE ID	QC_ORG	QC_373_KIT	EQUIP ID	DTW BP	DTW AP	START PURGE	END PURGE	RATE	VOL PURGE	SAMPLER ID	GW VOA	PW VOA	F METALS	U METALS	FLUORIDE	OTHER	PUMPED DRY	COMMENTS
220RJ	457	166362	1/3/2024	P240103220RJ			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RJ	457	166388	2/1/2024	P240201220RJ			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RJ	458	166416	3/5/2024	P240305220RJ			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RJ	458	166437	4/2/2024	P240402220RJ			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RJ	459	166534	5/2/2024	P240502220RJ			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RJ	459	166566	6/5/2024	P240605220RJ			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RJ	459	166598	7/2/2024	P240702220RJ			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RJ	460	166645	8/1/2024	P240801220RJ			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RJ	461	166741	9/6/2024	P240906220RJ			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RJ	460	166659	10/1/2024	P241001220RJ			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RJ	462	166878	11/4/2024	P241104220RJ			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
220RJ	461	166765	12/3/2024	P241203220RJ			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
300	457		1/2/2024	ETB401020103										DFB	3	0	0	0	0	0		TRIP BLANK
300	457		1/15/2024	ETB401150115										DFB	3	0	0	0	0	0		TRIP BLANK
300	457		1/17/2024	ETB401170118										DFB	3	0	0	0	0	0		TRIP BLANK
300	457		2/1/2024	ETB402010201										DFB	3	0	0	0	0	0		TRIP BLANK
300	457		2/6/2024	ETB402060206										DFB	3	0	0	0	0	0		TRIP BLANK
300	458		2/29/2024	ETB402290229										DFB	3	0	0	0	0	0		TRIP BLANK
300	458		3/4/2024	ETB403040305										DFB	3	0	0	0	0	0		TRIP BLANK
300	458		4/1/2024	ETB404010402										DFB	3	0	0	0	0	0		TRIP BLANK
300	458		4/5/2024	ETB404050405										DFB	3	0	0	0	0	0		TRIP BLANK
300	458		4/8/2024	ETB404080409										DFB	3	0	0	0	0	0		TRIP BLANK
300	458		4/10/2024	ETB404100411										DFB	3	0	0	0	0	0		TRIP BLANK
300	458		4/12/2024	ETB404120412										DFB	3	0	0	0	0	0		TRIP BLANK
300	458		4/15/2024	ETB404150416										DFB	3	0	0	0	0	0		TRIP BLANK
300	458		4/17/2024	ETB404170417										DFB	3	0	0	0	0	0		TRIP BLANK
300	458		4/19/2024	ETB404190419										DFB	3	0	0	0	0	0		TRIP BLANK
300	458		4/22/2024	ETB404220423										DFB	3	0	0	0	0	0		TRIP BLANK
300	459		4/24/2024	ETB404240425										DFB	3	0	0	0	0	0		TRIP BLANK
300	459		4/26/2024	ETB404260426										DFB	3	0	0	0	0	0		TRIP BLANK
300	459		4/29/2024	ETB404290430										DFB	3	0	0	0	0	0		TRIP BLANK
300	459		5/1/2024	ETB405010502										DFB	3	0	0	0	0	0		TRIP BLANK
300	459		5/6/2024	ETB405060507										DFB	3	0	0	0	0	0		TRIP BLANK
300	459		5/8/2024	ETB405080509										DFB	3	0	0	0	0	0		TRIP BLANK
300	459		5/10/2024	ETB405100510										DFB	3	0	0	0	0	0		TRIP BLANK
300	459		5/28/2024	ETB405280529										DFB	3	0	0	0	0	0		TRIP BLANK
300	459		5/30/2024	ETB405300531										DFB	3	0	0	0	0	0		TRIP BLANK
300	459		6/5/2024	ETB406050606										DFB	3	0	0	0	0	0		TRIP BLANK
300	459		7/1/2024	ETB407010702										DFB	3	0	0	0	0	0		TRIP BLANK
300	460		7/8/2024	ETB407080709										DFB	3	0	0	0	0	0		TRIP BLANK
300	460		8/1/2024	ETB408010802										DFB	3	0	0	0	0	0		TRIP BLANK
300	461		8/14/2024	ETB408140814										DFB	3	0	0	0	0	0		TRIP BLANK
300	461		9/5/2024	ETB409050906										DFB	3	0	0	0	0	0		TRIP BLANK
300	460		10/1/2024	ETB410011001										DFB	3	0	0	0	0	0		TRIP BLANK
300	460		10/2/2024	ETB410021002										DFB	3	0	0	0	0	0		TRIP BLANK
300	460		10/3/2024	ETB410031004										DFB	3	0	0	0	0	0		TRIP BLANK
300	460		10/11/2024	ETB410111011										DFB	3	0	0	0	0	0		TRIP BLANK
300	462		10/14/2024	ETB410141015										DFB	3	0	0	0	0	0		TRIP BLANK
300	462		10/16/2024	ETB410161017										DFB	3	0	0	0	0	0		TRIP BLANK
300	462		10/18/2024	ETB410181018										DFB	3	0	0	0	0	0		TRIP BLANK
300	462		10/21/2024	ETB410211022										DFB	3	0	0	0	0	0		TRIP BLANK
300	462		10/23/2024	ETB410231024										DFB	3	0	0	0	0	0		TRIP BLANK
300	462		10/25/2024	ETB410251025										DFB	3	0	0	0	0	0		TRIP BLANK
300	462		10/29/2024	ETB410291030										DFB	3	0	0	0	0	0		TRIP BLANK
300	462		10/31/2024	ETB410311101										DFB	3	0	0	0	0	0		TRIP BLANK
300	462		11/4/2024	ETB411041105										DFB	3	0	0	0	0	0		TRIP BLANK
300	462		11/6/2024	ETB411061107										DFB	3	0	0	0	0	0		TRIP BLANK

Sampling Field Log Database

WELL	BOOK NO	PAGE NO	DATE	SAMPLE ID	QC_ORG	QC_373_KIT	EQUIP ID	DTW BP	DTW AP	START PURGE	END PURGE	RATE	VOL PURGE	SAMPLER ID	GW VOA	PW VOA	F METALS	U METALS	FLUORIDE	OTHER	PUMPED DRY	COMMENTS
300	462		11/8/2024	ETB411081108										DFB	3	0	0	0	0	0		TRIP BLANK
300	461		11/12/2024	ETB411121112										DFB	3	0	0	0	0	0		TRIP BLANK
300	461		11/14/2024	ETB411141114										DFB	3	0	0	0	0	0		TRIP BLANK
300	461		12/2/2024	ETB412021203										DFB	3	0	0	0	0	0		TRIP BLANK
300	461		12/5/2024	ETB412051205										DFB	3	0	0	0	0	0		TRIP BLANK
301	457		1/3/2024	TB240103301										DFB	3	0	0	0	0	0		TRIP BLANK
301	457		2/1/2024	TB240201301										DFB	3	0	0	0	0	0		TRIP BLANK
301	458		3/5/2024	TB240305301										DFB	3	0	0	0	0	0		TRIP BLANK
301	458		4/2/2024	TB240402301										DFB	3	0	0	0	0	0		TRIP BLANK
301	460		4/22/2024	ETP404220423										TJP	3	0	0	0	0	0	N	TRIP BLANK
301	460		4/23/2024	ETB404230424										TJP	3	0	0	0	0	0	N	TRIP BLANK
301	461		4/23/2024	ETS404230424										CJS	3	0	0	0	0	0		TRIP BLANK
301	460		4/24/2024	ETP404240425										TJP	3	0	0	0	0	0	N	TRIP BLANK
301	460		4/25/2024	ETS404250426										TJP	3	0	0	0	0	0	N	TRIP BLANK
301	461		4/25/2024	ETB404250426										CJS	3	0	0	0	0	0		TRIP BLANK
301	461		4/29/2024	ETS404290430										CJS	3	0	0	0	0	0		TRIP BLANK
301	459		5/2/2024	TB240502301										DFB	3	0	0	0	0	0		TRIP BLANK
301	459		6/5/2024	TB240605301										DFB	3	0	0	0	0	0		TRIP BLANK
301	459		7/2/2024	TB240702301										DFB	3	0	0	0	0	0		TRIP BLANK
301	460		8/1/2024	TB240801301										DFB	3	0	0	0	0	0		TRIP BLANK
301	461		9/6/2024	TB240906301										DFB	3	0	0	0	0	0		TRIP BLANK
301	462		10/25/2024	TB241025301										DFB	3	0	0	0	0	0		TRIP BLANK
301	462		11/4/2024	TB241104301										DFB	3	0	0	0	0	0		TRIP BLANK
301	461		12/3/2024	TB241203301										DFB	3	0	0	0	0	0		TRIP BLANK
303	457		1/15/2024	EB240115303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	457		1/17/2024	EB240117303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	457		1/18/2024	EB240118303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	458		4/5/2024	EB240405303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	458		4/8/2024	EB240408303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	458		4/9/2024	EB240409303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	458		4/10/2024	EB240410303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	458		4/11/2024	EB240411303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	458		4/12/2024	EB240412303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	458		4/15/2024	EB240415303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	458		4/16/2024	EB240416303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	458		4/17/2024	EB240417303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	458		4/19/2024	EB240419303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	458		4/22/2024	EB240422303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	461		4/23/2024	EB240423303										CJS	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	459		4/24/2024	EB240424303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	461		4/25/2024	EB240425303										CJS	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	459		4/30/2024	EB240430303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	459		5/6/2024	EB240506303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	459		5/7/2024	EB240507303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	459		5/8/2024	EB240508303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	459		5/28/2024	EB240528303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	460		7/8/2024	EB240708303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	460		7/9/2024	EB240709303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	460		10/3/2024	EB241003303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	460		10/4/2024	EB241004303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	460		10/11/2024	EB241011303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	460		10/14/2024	EB241014303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	462		10/15/2024	EB241015303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	462		10/16/2024	EB241016303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	462		10/17/2024	EB241017303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	462		10/18/2024	EB241018303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	462		10/21/2024	EB241021303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID

Sampling Field Log Database

WELL	BOOK NO	PAGE NO	DATE	SAMPLE ID	QC_ORG	QC_373_KIT	EQUIP ID	DTW BP	DTW AP	START PURGE	END PURGE	RATE	VOL PURGE	SAMPLER ID	GW VOA	PW VOA	F METALS	U METALS	FLUORIDE	OTHER	PUMPED DRY	COMMENTS
303	462		10/22/2024	EB241022303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	462		10/23/2024	EB241023303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	462		10/24/2024	EB241024303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
303	462		10/29/2024	EB241029303										DFB	3	0	0	0	0	0		EQUIPMENT BLANK/WLID
304	461		4/29/2024	EB240429304										CJS	3	0	0	0	0	0		EQUIPMENT BLANK ND PUMP A
304	459		5/9/2024	EB240509304										DFB	3	0	0	0	0	0		EQUIPMENT BLANK ND PUMP B
304	459		5/10/2024	EB240510304										DFB	3	0	0	0	0	0		EQUIPMENT BLANK ND PUMP B
304	459		5/29/2024	EB240529304										DFB	3	0	0	0	0	0		EQUIPMENT BLANK ND PUMP A
304	459		5/30/2024	EB240530304										DFB	3	0	0	0	0	0		EQUIPMENT BLANK ND PUMP B
304	459		5/31/2024	EB240531304										DFB	3	0	0	0	0	0		EQUIPMENT BLANK ND PUMP A
304	462		10/25/2024	EB241025304										DFB	3	0	0	0	0	0		EQUIPMENT BLANK ND PUMP A
304	462		10/30/2024	EB241030304										DFB	3	0	0	0	0	0		EQUIPMENT BLANK ND PUMP B
304	462		10/31/2024	EB241031304										DFB	3	0	0	0	0	0		EQUIPMENT BLANK ND PUMP B
304	462		11/1/2024	EB241101304										JJL	3	0	0	0	0	0		EQUIPMENT BLANK ND PUMP A
304	462		11/6/2024	EB241106304										JJL	3	0	0	0	0	0		EQUIPMENT BLANK ND PUMP B
304	462		11/7/2024	EB241107304										JJL	3	0	0	0	0	0		EQUIPMENT BLANK ND PUMP A
304	462		11/8/2024	EB241108304										DFB	3	0	0	0	0	0		EQUIPMENT BLANK ND PUMP B
304	461		11/12/2024	EB241112304										DFB	3	0	0	0	0	0		EQUIPMENT BLANK ND PUMP A
304	461		11/14/2024	EB241114304										DFB	3	0	0	0	0	0		EQUIPMENT BLANK ND PUMP B
304	461		12/5/2024	EB241205304										DFB	3	0	0	0	0	0		EQUIPMENT BLANK ND PUMP B
305	460		4/26/2024	EB240426305										TJP	3	0	0	0	0	0	N	EQUIPMENT BLANK ND PUMP A
323	457	166379	1/15/2024	PW240115323			2"SP/LINE	5.97	10.03	1212	1235	7GPM	161.0	DFB	3	0	0	0	0	0	N	
323	458	166469	4/11/2024	PW240411323			2"SP/LINE	6.84	10.62	1108	1133	8GPM	186.0	DFB	3	0	0	0	0	0	N	
323	460	166636	7/8/2024	PW240708323			2"SP/LINE	8.48	12.27	1131	1152	9GPM	178.0	DFB	3	0	0	0	0	0	N	
323	462	166807	10/15/2024	PW241015323			2"SP/LINE	9.56	12.60	0932	1001	6GPM	173.0	DFB	3	0	0	0	0	0	N	
325	457	166361	1/2/2024	PW240102325			SP/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
325	458	166432	4/1/2024	PW240401325			SP/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
325	459	166593	7/1/2024	PW240701325			SP/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
325	460	166679	10/2/2024	PW241002325			SP/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
325A	457	166360	1/2/2024	PW240102325A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325A	457	166396	2/1/2024	PW240201325A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325A	458	166407	3/4/2024	PW240304325A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325A	458	166431	4/1/2024	PW240401325A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325A	459	166533	5/1/2024	PW240501325A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325A	459	166574	6/5/2024	PW240605325A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325A	459	166592	7/1/2024	PW240701325A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325A	460	166653	8/1/2024	PW240801325A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325A	461	166737	9/5/2024	PW240905325A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325A	460	166678	10/2/2024	PW241002325A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325A	462	166886	11/4/2024	PW241104325A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325A	461	166764	12/2/2024	PW241202325A			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325C	457	166359	1/2/2024	PW240102325C			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325C	457	166395	2/1/2024	PW240201325C			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325C	458	166406	3/4/2024	PW240304325C			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325C	458	166430	4/1/2024	PW240401325C			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325C	459	166532	5/1/2024	PW240501325C			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325C	459	166573	6/5/2024	PW240605325C			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325C	462	166885	11/4/2024	PW241104325C			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325C	461	166763	12/2/2024	PW241202325C			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325E	459	166591	7/1/2024	PW240701325E			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325E	460	166652	8/1/2024	PW240801325E			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325E	461	166736	9/5/2024	PW240905325E			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325E	460	166677	10/2/2024	PW241002325E			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325F	457	166358	1/2/2024	PW240102325F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325F	457	166394	2/1/2024	PW240201325F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325F	458	166405	3/4/2024	PW240304325F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325F	458	166429	4/1/2024	PW240401325F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	

Sampling Field Log Database

WELL	BOOK NO	PAGE NO	DATE	SAMPLE ID	QC_ORG	QC_373_KIT	EQUIP ID	DTW BP	DTW AP	START PURGE	END PURGE	RATE	VOL PURGE	SAMPLER ID	GW VOA	PW VOA	F METALS	U METALS	FLUORIDE	OTHER	PUMPED DRY	COMMENTS
325F	459	166531	5/1/2024	PW240501325F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325F	459	166572	6/5/2024	PW240605325F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325F	459	166590	7/1/2024	PW240701325F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325F	460	166651	8/1/2024	PW240801325F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325F	461	166735	9/5/2024	PW240905325F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325F	460	166676	10/2/2024	PW241002325F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325F	462	166884	11/4/2024	PW241104325F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
325F	461	166762	12/2/2024	PW241202325F			SP/TAP	NA	NA	NA	NA	NA	5.0	DFB	3	0	0	0	0	0	N	
384A	457	166372	1/3/2024	SW240103384A			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	1	1	0	0	N	
384A	458	166401	2/6/2024	SW240206384A			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	1	1	1	0	N	
384A	458	166412	3/4/2024	SW240304384A			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	1	1	1	0	N	
384A	458	166426	4/1/2024	SW240401384A			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	1	1	1	0	N	
384A	459	166544	5/2/2024	SW240502384A			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	1	1	1	0	N	
384A	459	166582	6/6/2024	SW240606384A			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	1	1	1	0	N	
384A	459	166587	7/1/2024	SW240701384A			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	1	1	1	0	N	
384A	460	166658	8/2/2024	SW240802384A			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	1	1	0	0	N	
384A	461	166734	9/5/2024	SW240905384A			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	1	1	1	0	N	
384A	460	166669	10/1/2024	SW241001384A			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	1	1	1	0	N	
384A	462	166891	11/5/2024	SW241105384A			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	1	1	1	0	N	
384A	461	166759	12/2/2024	SW241202384A			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	1	1	1	0	N	
384B	457	166371	1/3/2024	SW240103384B			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384B	457	166400	2/6/2024	SW240206384B			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384B	458	166411	3/4/2024	SW240304384B			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384B	458	166425	4/1/2024	SW240401384B			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384B	459	166543	5/2/2024	SW240502384B			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384B	459	166581	6/6/2024	SW240606384B			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384B	459	166586	7/1/2024	SW240701384B			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384B	460	166657	8/2/2024	SW240802384B			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384B	461	166733	9/5/2024	SW240905384B			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384B	460	166668	10/1/2024	SW241001384B			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384B	462	166890	11/5/2024	SW241105384B			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384B	461	166758	12/2/2024	SW241202384B			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384C	457	166370	1/3/2024	SW240103384C			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384C	457	166399	2/6/2024	SW240206384C			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384C	458	166410	3/4/2024	SW240304384C			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384C	458	166424	4/1/2024	SW240401384C			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384C	459	166542	5/2/2024	SW240502384C			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384C	459	166580	6/6/2024	SW240606384C			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384C	459	166585	7/1/2024	SW240701384C			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384C	460	166656	8/2/2024	SW240802384C			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384C	461	166732	9/5/2024	SW240905384C			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384C	460	166667	10/1/2024	SW241001384C			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384C	462	166889	11/5/2024	SW241105384C			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384C	461	166757	12/2/2024	SW241202384C			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384J	457	166369	1/3/2024	SW240103384J			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384J	457	166398	2/6/2024	SW240206384J			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384J	458	166409	3/4/2024	SW240304384J			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384J	458	166423	4/1/2024	SW240401384J			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384J	459	166541	5/2/2024	SW240502384J			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384J	459	166579	6/6/2024	SW240606384J			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384J	459	166584	7/1/2024	SW240701384J			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384J	460	166655	8/2/2024	SW240802384J			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384J	461	166731	9/5/2024	SW240905384J			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384J	460	166666	10/1/2024	SW241001384J			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384J	462	166888	11/5/2024	SW241105384J			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384J	461	166756	12/2/2024	SW241202384J			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384L	457	166368	1/3/2024	SW240103384L			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	

Sampling Field Log Database

WELL	BOOK NO	PAGE NO	DATE	SAMPLE ID	QC_ORG	QC_373_KIT	EQUIP ID	DTW BP	DTW AP	START PURGE	END PURGE	RATE	VOL PURGE	SAMPLER ID	GW VOA	PW VOA	F METALS	U METALS	FLUORIDE	OTHER	PUMPED DRY	COMMENTS
384L	457	166397	2/6/2024	SW240206384L			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384L	458	166408	3/4/2024	SW240304384L			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384L	458	166422	4/1/2024	SW240401384L			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384L	459	166540	5/2/2024	SW240502384L			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384L	459	166578	6/6/2024	SW240606384L			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384L	459	166583	7/1/2024	SW240701384L			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384L	460	166654	8/2/2024	SW240802384L			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384L	461	166730	9/5/2024	SW240905384L			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384L	460	166665	10/1/2024	SW241001384L			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384L	462	166887	11/5/2024	SW241105384L			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
384L	461	166755	12/2/2024	SW241202384L			TANK/TAP	NA	NA	NA	NA	NA	0.3	DFB	3	0	0	0	0	0	N	
395	457	166373	1/3/2024	SW240103395			SP/B	NA	NA	NA	NA	NA	NA	DFB	3	0	0	0	0	0	N	
395	458	166427	4/1/2024	SW240401395			SP/B	NA	NA	NA	NA	NA	NA	DFB	3	0	0	0	0	0	N	
395	459	166588	7/1/2024	SW240701395			SP/B	NA	NA	NA	NA	NA	NA	DFB	3	0	0	0	0	0	N	
395	461	166760	12/2/2024	SW241202395			SP/B	NA	NA	NA	NA	NA	NA	DFB	3	0	0	0	0	0	N	
502	458	166500	4/23/2024	GW240423502			BP/LINE	0.62	7.36	0817	0846	2M/G	17.0	DFB	3	0	0	0	0	0	N	
520	458	166483	4/16/2024	GW240416520			B/B	4.36	18.82	0909	0921	NA	9.8	DFB	3	0	0	0	0	0	N	
520	460	166683	10/3/2024	GW241003520			B/B	6.98	19.63	1047	1057	NA	8.6	DFB	3	0	0	0	0	0	N	
521	458	166484	4/16/2024	GW240416521			B/B	1.77	2.24	0943	0959	NA	16.0	DFB	3	0	0	0	0	0	N	
521	460	166684	10/3/2024	GW241003521			B/B	6.95	8.10	1145	1158	NA	13.4	DFB	3	0	0	0	0	0	N	
545	458	166499	4/22/2024	GW240422545			BP/LINE	5.04	6.45	1335	1358	2M/G	12.0	DFB	3	0	0	0	0	0	N	
545	462	166841	10/24/2024	GW241024545			BP/LINE	9.30	9.51	1207	1225	1.8M/G	10.0	DFB	3	0	0	0	0	0	N	
559	461	166713	4/25/2024	GW240425559	NR240425312		WATERRA/LINE	25.00	80.78	1051	1106	0.8GPM	11.3	CJS	6	0	0	0	0	0	Y	QC DUPLICATE 312
559	462	166895	11/6/2024	GW241106559			WATERRA/LINE	35.13	78.76	1123	1134	1GPM	11.0	DFB	3	0	0	0	0	1	Y	1,4 DIOXANE
561	461	166715	4/25/2024	GW240425561			B/B	24.64	28.92	1143	1204	NA	6.8	CJS	3	0	0	0	0	0	N	
561	462	166812	10/16/2024	GW241016561			B/B	34.56	36.72	0910	0916	NA	1.8	DFB	3	0	0	0	0	0	N	
563	461	166714	4/25/2024	GW240425563			2"SP/LINE	31.20	110.40	1125	1133	2.5GPM	20.0	CJS	3	0	0	0	0	0	Y	
563	462	166811	10/16/2024	GW241016563			2"SP/LINE	40.49	@PUMP	0849	0858	2GPM	18.0	DFB	3	0	0	0	0	0	Y	
564	459	166545	5/6/2024	GW240506564			2"SP/LINE	22.17	@PUMP	0917	0924	2GPM	14.0	DFB	3	0	0	0	0	0	Y	
564	462	166806	10/15/2024	GW241015564			2"SP/LINE	34.91	@PUMP	0915	0921	2GPM	12.0	DFB	3	0	0	0	0	0	Y	
571	458	166451	4/8/2024	GW240408571			B/B	13.39	13.62	1017	1024	NA	0.8	DFB	3	0	0	0	0	0	N	
572	459	166524	4/30/2024	GW240430572			PP/B	4.00	4.08	1045	1127	7M/G	6.0	DFB	3	0	0	0	0	0	N	
574	459	166523	4/30/2024	GW240430574			B/B	15.72	16.22	0959	1019	NA	8.1	DFB	3	0	0	0	0	0	N	
576	459	166520	4/29/2024	GW240429576	NR240429313		PP/B	13.19	13.34	1130	1154	8M/G	3.2	DFB	6	0	0	0	0	0	N	QC DUPLICATE 313
576	462	166831	10/21/2024	GW241021576			PP/B	16.68	19.05	1300	1312	8M/G	1.5	DFB	3	0	0	0	0	0	N	
577	461	166701	4/23/2024	GW240423577			ND 2"SP/LINE	6.53	156.25	0652	0845	1GPM	110.0	CJS	3	0	0	0	0	0	N	
577	462	166865	10/30/2024	GW241030577			ND 2"SP/LINE	9.44	206.90	0812	0926	1.4GPM	103.0	DFB	3	0	0	0	0	0	N	
579	461	166724	4/29/2024	GW240429579			2"SP/LINE	19.20	22.11	1020	1115	2.0GPM	115.0	CJS	3	0	0	0	0	0	N	
580	459	166519	4/29/2024	GW240429580			PP/B	13.06	13.23	1031	1046	7M/G	2.1	DFB	3	0	1	1	1	0	N	
581	458	166462	4/10/2024	GW240410581			B/B	9.94	10.17	0922	0933	NA	9.1	DFB	3	0	1	1	0	0	N	
600	458	166465	4/10/2024	GW240410600			B/B	13.43	14.78	1256	1304	NA	3.1	DFB	3	0	0	0	0	0	N	
601	458	166486	4/16/2024	GW240416601			2"SP/LINE	22.23	26.41	1155	1223	2GPM	55.0	DFB	3	0	0	0	0	0	N	
601	462	166804	10/14/2024	GW241014601			2"SP/LINE	33.83	38.48	1304	1329	2GPM	50.0	DFB	3	0	0	0	0	0	N	
602	458	166453	4/8/2024	GW240408602			B/B	5.02	21.18	1156	1212	NA	8.4	DFB	3	0	0	0	0	0	N	
603	458	166452	4/8/2024	GW240408603			B/B	5.98	24.46	1111	1128	NA	9.6	DFB	3	0	0	0	0	0	N	
604	458	166487	4/16/2024	GW240416604			2"SP/LINE	38.84	56.88	1240	1304	2GPM	48.0	DFB	3	0	0	0	0	0	N	
607	460	166621	4/25/2024	GW240425607			ND 2"SP/LINE	30.00	33.03	0752	0827	1GPM	45.0	TJP	3	0	0	0	0	0	N	
607	462	166863	10/29/2024	GW241029607			ND 2"SP/LINE	43.68	50.82	1131	1149	2GPM	36.0	DFB	3	0	0	0	0	0	N	
609	460	166623	4/25/2024	GW240425609			ND 2"SP/LINE	27.16	43.54	1030	1130	2GPM	100.0	TJP	3	0	0	0	0	0	N	
609	462	166870	10/31/2024	GW241031609			ND 2"SP/LINE	42.76	65.74	1107	1149	2.2GPM	92.0	DFB	3	0	0	0	0	0	N	
610	460	166622	4/25/2024	GW240425610			ND 2"SP/LINE	28.12	36.07	0906	0938	2GPM	75.0	TJP	3	0	0	0	0	0	N	
610	459	166564	5/30/2024	GW240530610			ND 2"SP/LINE	43.61	47.24	1140	1213	2GPM	66.0	DFB	6	0	0	0	0	0	N	
610	462	166862	10/29/2024	GW241029610	NR241029310		ND 2"SP/LINE	48.36	52.05	1004	1036	2GPM	63.0	DFB	6	0	0	0	0	0	N	QC DUPLICATE 310
611	459	166552	5/8/2024	GW240508611			2"SP/LINE	23.28	69.18	0824	0911	2GPM	93.0	DFB	3	0	0	0	0	0	N	
612	457	166383	1/17/2024	GW240117612			PP/B	14.84	18.48	1037	1113	2M/G	36.0	DFB	3	0	0	0	0	0	N	
612	459	166509	4/25/2024	GW240425612			PP/B	14.74	19.26	0934	1010	1GPM	36.0	DFB	3	0	0	0	0	0	N	
612	460	166644	7/9/2024	GW240709612			PP/B	16.00	21.11	1150	1234	1.3M/G	34.0	DFB	3	0	0	0	0	0	N	

Sampling Field Log Database

WELL	BOOK NO	PAGE NO	DATE	SAMPLE ID	QC_ORG	QC_373_KIT	EQUIP ID	DTW BP	DTW AP	START PURGE	END PURGE	RATE	VOL PURGE	SAMPLER ID	GW VOA	PW VOA	F METALS	U METALS	FLUORIDE	OTHER	PUMPED DRY	COMMENTS
612	462	166814	10/16/2024	GW241016612			PP/B	17.23	23.05	1050	1122	1GPM	32.0	DFB	3	0	0	0	0	0	N	
622	459	166550	5/7/2024	GW240507622	NR240507314		2"SP/LINE	31.46	184.32	0843	1013	1GPM	90.0	DFB	6	0	0	0	0	0	N	QC DUPLICATE 314
622	462	166819	10/17/2024	GW241017622			2"SP/LINE	43.26	177.59	1033	1157	1GPM	84.0	DFB	3	0	0	0	0	0	N	
623	461	166726	4/30/2024	GW240430623			ND 2"SP/LINE	34.35	40.50	0544	0645	2.5GPM	150.0	CJS	3	0	0	0	0	0	N	
623	462	166873	11/1/2024	GW241101623			ND 2"SP/LINE	37.71	51.65	1010	1105	2.6GPM	144.0	DFB	3	0	0	0	0	0	N	
624	461	166719	4/26/2024	GW240426624			ND 2"SP/LINE	18.35	57.90	0617	0739	2.4GPM	170.0	CJS	3	0	0	0	0	0	N	
624	462	166872	11/1/2024	GW241101624			ND 2"SP/LINE	29.92	81.15	0814	0924	2.3GPM	160.0	DFB	3	0	0	0	0	0	N	
627	459	166517	4/29/2024	GW240429627			PP/B	16.71	18.94	0826	0838	8M/G	1.4	DFB	3	0	1	1	1	0	N	
628	457	166382	1/17/2024	GW240117628			SP/TAP	2.92	3.98	0957	1013	11GPM	160.0	DFB	3	0	0	0	0	0	N	
628	458	166474	4/12/2024	GW240412628			SP/TAP	3.53	4.58	1001	1018	11GPM	180.0	DFB	3	0	0	0	0	0	N	
628	460	166642	7/9/2024	GW240709628			2"SP/LINE	10.75	11.68	1041	1102	11GPM	220.0	DFB	3	0	0	0	0	0	N	
628	460	166693	10/11/2024	GW241011628			SP/TAP	16.44	17.41	0951	1007	10GPM	180.0	DFB	3	0	0	0	0	0	N	
634	457	166374	1/3/2024	GW240103634			SP/B	NA	NA	NA	NA	NA	NA	DFB	3	0	0	0	0	0	N	
634	458	166428	4/1/2024	GW240401634			SP/B	NA	NA	NA	NA	NA	NA	DFB	3	0	0	0	0	0	N	
634	459	166589	7/1/2024	GW240701634			SP/B	NA	NA	NA	NA	NA	NA	DFB	3	0	0	0	0	0	N	
634	461	166761	12/2/2024	GW241202634			SP/B	NA	NA	NA	NA	NA	NA	DFB	3	0	0	0	0	0	N	
640	459	166511	4/25/2024	GW240425640			B/B	12.29	19.78	1130	1135	NA	2.6	DFB	3	0	0	0	0	0	Y	
640	459	166558	5/28/2024	GW240528640			B/B	12.79	19.91	1004	1008	NA	2.1	DFB	3	0	0	0	0	0	Y	
640	462	166823	10/18/2024	GW241018640			B/B	14.13	19.94	0911	0914	NA	1.6	DFB	3	0	0	0	0	0	Y	
701	458	166458	4/9/2024	GW240409701			B/B	7.94	7.98	1041	1048	NA	5.8	DFB	3	0	1	1	0	0	N	
702	458	166449	4/8/2024	GW240408702			B/B	9.38	9.92	0912	0918	NA	4.0	DFB	3	0	0	0	0	0	N	
702	460	166695	10/11/2024	GW241011702			B/B	10.63	15.64	1116	1128	NA	3.4	DFB	3	0	0	0	0	0	N	
706	459	166508	4/25/2024	GW240425706			BP/LINE	12.68	16.64	0820	0850	2M/G	16.0	DFB	3	0	0	0	1	0	N	
706	459	166557	5/28/2024	GW240528706			BP/LINE	13.91	17.24	0900	0933	2M/G	15.1	DFB	3	0	0	0	0	0	N	
706	462	166835	10/22/2024	GW241022706			BP/LINE	18.93	20.48	1205	1232	2.1GPM	13.0	DFB	3	0	0	0	0	0	N	
711	458	166472	4/12/2024	GW240412711			2"SP/LINE	11.59	45.98	0731	1144	6GPM	1520.0	DFB	3	0	0	0	0	0	N	
714	458	166476	4/12/2024	GW240412714			B/B	15.04	18.96	1235	1253	NA	10.7	DFB	3	0	0	0	0	0	N	
714	459	166551	5/7/2024	GW240507714			B/B	17.32	20.36	1123	1142	NA	9.6	DFB	3	0	0	0	0	0	N	
714	462	166896	11/6/2024	GW241106714			B/B	29.04	33.21	1149	1158	NA	4.0	DFB	3	0	0	0	0	1	N	1,4 DIOXANE
716	461	166702	4/23/2024	GW240423716			2"SP/LINE	26.33	33.25	0945	1140	2.5GPM	285.0	CJS	3	0	0	0	0	0	N	
716	462	166843	10/25/2024	GW241025716			2"SP/LINE	37.00	44.25	0911	1122	2GPM	262.0	DFB	3	0	0	0	0	0	N	
720	460	166606	4/22/2024	GW240422720			2"SP/LINE	25.65	25.67	1653	1700	2GPM	14.0	TJP	3	0	0	0	0	0	N	
720	462	166817	10/16/2024	GW241016720			2"SP/LINE	29.12	30.25	1319	1331	1GPM	12.0	DFB	3	0	0	0	0	0	N	
722	459	166549	5/7/2024	GW240507722			2"SP/LINE	7.78	15.61	0759	1308	5GPM	1543.0	DFB	3	0	0	0	0	0	N	
732	461	166725	4/29/2024	GW240429732			ND 2"SP/LINE	30.82	41.40	1156	1521	2.1GPM	430.0	CJS	3	0	0	0	0	0	N	
732	459	166565	5/31/2024	GW240531732			ND 2"SP/LINE	36.20	40.58	0822	1130	2GPM	413.0	DFB	6	0	0	0	0	0	N	
732	462	166898	11/7/2024	GW241107732	NR241107311		ND 2"SP/LINE	43.22	46.97	0813	1145	1.9GPM	400.0	DFB	6	0	0	0	0	2	N	1,4 DIOXANE, QC DUPLICATE 311
734	458	166443	4/5/2024	GW240405734	NR240405315		ND 2"SP/LINE	35.41	42.12	0902	0946	2GPM	88.0	DFB	6	0	0	0	0	0	N	QC DUPLICATE 315
734	462	166868	10/30/2024	GW241030734	NR241030312		ND 2"SP/LINE	41.60	48.51	1219	1256	2.3GPM	85.0	DFB	6	0	0	0	0	0	N	QC DUPLICATE 312
735	458	166492	4/19/2024	GW240419735			B/B	13.77	22.97	0845	0851	NA	2.2	DFB	3	0	1	1	1	0	Y	
735	462	166821	10/18/2024	GW241018735			B/B	15.82	22.93	0818	0822	NA	1.8	DFB	3	0	0	0	0	0	Y	
737	461	166707	4/24/2024	GW240424737			ND 2"SP/LINE	30.74	41.40	0635	0718	1.9GPM	80.0	CJS	3	0	0	0	0	0	N	
737	459	166555	5/9/2024	GW240509737	NR240509320		ND 2"SP/LINE	32.05	39.32	1152	1230	2GPM	76.0	DFB	9	0	0	0	0	0	N	QC DUPLICATE 320
737	462	166845	10/25/2024	GW241025737	NR241025313		ND 2"SP/LINE	37.20	44.00	1202	1239	2GPM	73.0	DFB	6	0	0	0	0	0	N	QC DUPLICATE 313
739	461	166710	4/25/2024	GW240425739			2"SP/LINE	28.45	33.80	0626	0758	4.0GPM	365.0	CJS	3	0	0	0	0	0	N	
740	459	166518	4/29/2024	GW240429740			B/B	15.08	15.53	0924	0933	NA	3.0	DFB	3	0	1	1	1	0	N	
742	461	166708	4/24/2024	GW240424742	NR240424316		ND 2"SP/LINE	28.60	34.10	0806	1030	2.6GPM	375.0	CJS	6	0	0	0	0	0	N	QC DUPLICATE 316
742	459	166556	5/10/2024	GW240510742	NR240510321		ND 2"SP/LINE	30.08	36.18	0834	1113	2GPM	366.0	DFB	9	0	0	0	0	0	N	QC DUPLICATE 321
742	461	166748	11/12/2024	GW241112742	NR241112314		ND 2"SP/LINE	36.80	42.30	0820	1136	1.8GPM	353.0	DFB	6	0	0	0	0	0	N	QC DUPLICATE 314
742	461	166771	12/5/2024	GW241205742	NR241205318		ND 2"SP/LINE	36.54	42.30	0804	1055	2.1 GPM	354.0	DFB	6	0	0	0	0	0	N	QC DUPLICATE 318
743	461	166709	4/24/2024	GW240424743			PP/B	12.95	15.80	1118	1145	0.1GPM	3.5	CJS	3	0	0	0	0	0	N	
744	458	166454	4/8/2024	GW240408744			B/B	5.54	5.94	1316	1333	NA	11.1	DFB	3	0	0	0	0	0	N	
744	460	166694	10/11/2024	GW241011744			B/B	8.75	9.92	1028	1039	NA	9.6	DFB	3	0	0	0	0	0	N	
745	458	166457	4/9/2024	GW240409745			PP/B	6.01	@PUMP	0946	1007	7M/G	3.2	DFB	3	0	0	0	0	0	Y	
751	459	166547	5/6/2024	GW240506751			PP/B	12.69	DRY	1139	1147	8M/G	1.0	DFB	3	0	0	0	0	0	Y	
753	459	166521	4/29/2024	GW240429753			PP/B	10.50	@PUMP	1226	1243	5M/G	3.5	DFB	3	0	0	0	0	0	Y	
754	459	166510	4/25/2024	GW240425754			PP/B	12.49	16.09	1031	1051	1GPM	20.0	DFB	3	0	1	1	0	0	N	

Sampling Field Log Database

WELL	BOOK NO	PAGE NO	DATE	SAMPLE ID	QC_ORG	QC_373_KIT	EQUIP ID	DTW BP	DTW AP	START PURGE	END PURGE	RATE	VOL PURGE	SAMPLER ID	GW VOA	PW VOA	F METALS	U METALS	FLUORIDE	OTHER	PUMPED DRY	COMMENTS
755	458	166475	4/12/2024	GW240412755			PP/B	2.83	11.77	1035	1102	2GPM	40.0	DFB	3	0	0	0	0	0	N	
755	462	166813	10/16/2024	GW241016755			PP/B	8.97	21.11	1005	1033	1GPM	28.0	DFB	3	0	0	0	0	0	N	
756	458	166444	4/5/2024	GW240405756			PP/B	1.38	@PUMP	1025	1050	1GPM	25.0	DFB	3	0	0	0	0	0	Y	
757	458	166448	4/8/2024	GW240408757			B/B	5.11	5.22	0841	0849	NA	7.3	DFB	3	0	0	0	0	0	N	
757	462	166810	10/15/2024	GW241015757			B/B	7.90	7.96	1222	1229	NA	6.0	DFB	3	0	0	0	0	0	N	
761	458	166460	4/9/2024	GW240409761			B/B	10.12	23.76	1240	1254	NA	10.8	DFB	3	0	1	1	0	0	N	
763	458	166461	4/10/2024	GW240410763			B/B	14.21	48.18	0858	0914	NA	6.8	DFB	3	0	1	1	0	0	Y	
766	458	166489	4/17/2024	GW240417766		NR240417317	B/B	18.02	18.24	0912	0919	NA	3.5	DFB	6	0	2	2	2	0	N	QC DUPLICATE 317
766	462	166822	10/18/2024	GW241018766			B/B	20.28	20.34	0834	0840	NA	2.5	DFB	3	0	0	0	0	0	N	
767	458	166494	4/19/2024	GW240419767		NR240419318	B/B	11.68	11.84	0957	1003	NA	3.2	DFB	6	0	2	2	2	0	N	QC DUPLICATE 318
767	462	166825	10/18/2024	GW241018767			B/B	13.91	13.98	1010	1015	NA	2.2	DFB	3	0	0	0	0	0	N	
768	458	166490	4/17/2024	GW240417768			B/B	13.81	13.98	1018	1027	NA	4.3	DFB	3	0	1	1	1	0	N	
768	462	166827	10/18/2024	GW241018768			B/B	16.09	16.23	1236	1243	NA	3.2	DFB	3	0	0	0	0	0	N	
769	458	166491	4/17/2024	GW240417769			PP/B	17.14	18.22	1127	1158	7M/G	4.7	DFB	3	0	1	1	1	0	N	
769	462	166830	10/21/2024	GW241021769			PP/B	20.21	21.34	1144	1210	8.1M/G	3.2	DFB	3	0	0	0	0	0	N	
771	458	166493	4/19/2024	GW240419771			B/B	13.16	17.05	0902	0908	NA	2.7	DFB	3	0	1	1	0	0	N	
772	458	166488	4/17/2024	GW240417772			B/B	8.36	9.11	0836	0841	NA	3.0	DFB	3	0	1	1	0	0	N	
772	462	166809	10/15/2024	GW241015772			B/B	9.98	10.54	1144	1149	NA	4.2	DFB	3	0	0	0	0	0	N	
773	458	166455	4/9/2024	GW240409773			B/B	13.38	14.61	0812	0822	NA	7.4	DFB	3	0	1	1	0	0	N	
774	459	166504	4/23/2024	GW240423774			BP/LINE	12.60	22.78	1249	1304	2M/G	8.4	DFB	3	0	1	1	0	0	N	
774	462	166834	10/22/2024	GW241022774			BP/LINE	14.58	22.41	1133	1144	1.5M/G	7.4	DFB	3	0	0	0	0	0	N	
775	459	166503	4/23/2024	GW240423775			BP/LINE	13.69	14.23	1207	1222	2M/G	8.0	DFB	3	0	1	1	0	0	N	
777	461	166712	4/25/2024	GW240425777			2"SP/LINE	10.10	16.71	1010	1025	4.0GPM	60.0	CJS	3	0	0	0	0	0	N	
777	462	166861	10/29/2024	GW241029777			2"SP/LINE	29.76	35.95	0915	0927	4GPM	48.0	DFB	3	0	0	0	0	0	N	
779	461	166711	4/25/2024	GW240425779			WATERRA/LINE	28.13	30.78	0852	0940	2.1GPM	101.0	CJS	3	0	0	0	0	0	N	
779	462	166860	10/29/2024	GW241029779			WATERRA/LINE	42.77	43.93	0810	0856	2GPM	91.0	DFB	3	0	0	0	0	0	N	
789	458	166459	4/9/2024	GW240409789			B/B	9.43	13.71	1111	1118	NA	5.7	DFB	3	0	1	1	0	0	N	
791	458	166464	4/10/2024	GW240410791			B/B	12.76	13.87	1108	1116	NA	4.7	DFB	3	0	1	1	0	0	N	
792	458	166496	4/19/2024	GW240419792			B/B	10.46	11.09	1201	1209	NA	5.0	DFB	3	0	1	1	0	0	N	
793	458	166495	4/19/2024	GW240419793			B/B	17.82	26.18	1119	1128	NA	5.6	DFB	3	0	1	1	1	0	N	
793	462	166839	10/23/2024	GW241023793			B/B	20.38	26.31	1256	1303	NA	4.4	DFB	3	0	0	0	0	0	N	
832	459	166546	5/6/2024	GW240506832			PP/B	19.51	20.39	0938	1017	8M/G	5.2	DFB	3	0	0	0	0	0	N	
857	460	166614	4/23/2024	GW240423857			2"SP/LINE	0.00	@PUMP	1315	1327	5GPM	55.0	TJP	3	0	0	0	0	0	Y	
857	460	166682	10/3/2024	GW241003857			2"SP/LINE	0.00	104.96	1017	1038	4GPM	84.0	DFB	3	0	0	0	0	0	Y	
858	460	166613	4/23/2024	GW240423858			2"SP/LINE	0.00	@PUMP	1219	1310	4GPM	200.0	TJP	3	0	0	0	0	0	Y	
858	460	166681	10/3/2024	GW241003858			2"SP/LINE	4.96	151.32	0928	1006	4GPM	152.0	DFB	3	0	0	0	0	0	Y	
921	461	166706	4/23/2024	GW240423921			2"SP/LINE	10.30	85.87	1553	1608	3.7GPM	55.0	CJS	3	0	0	0	0	0	Y	
921	462	166833	10/22/2024	GW241022921			2"SP/LINE	18.34	82.69	0941	0956	3.6GPM	54.0	DFB	3	0	0	0	0	0	Y	
922	460	166611	4/23/2024	GW240423922			2"SP/LINE	11.04	@PUMP	1510	1537	2GPM	50.0	TJP	3	0	0	0	0	0	Y	
922	462	166838	10/23/2024	GW241023922			2"SP/LINE	20.23	111.98	1059	1140	1.6GPM	66.0	DFB	3	0	0	0	0	0	Y	
923	460	166610	4/23/2024	GW240423923			2"SP/LINE	18.53	61.73	0823	1028	1GPM	150.0	TJP	3	0	0	0	0	0	N	
923	462	166837	10/23/2024	GW241023923			2"SP/LINE	29.68	@PUMP	1021	1049	2GPM	55.0	DFB	3	0	0	0	0	0	Y	
929	461	166722	4/29/2024	GW240429929			ND 2"SP/LINE	24.94	28.00	0805	0829	2.7GPM	65.0	CJS	3	0	0	0	0	0	N	
929	462	166864	10/29/2024	GW241029929			ND 2"SP/LINE	44.35	46.54	1222	1248	2GPM	52.0	DFB	3	0	0	0	0	0	N	
931	460	166620	4/24/2024	GW240424931			ND 2"SP/LINE	26.22	27.64	1435	1618	2GPM	250.0	TJP	3	0	0	0	0	0	N	
931	462	166894	11/6/2024	GW241106931			ND 2"SP/LINE	40.97	44.31	0929	1046	2.8GPM	215.0	DFB	3	0	0	0	0	1	N	1,4 DIOXANE
932	459	166554	5/9/2024	GW240509932			ND 2"SP/LINE	13.36	121.04	0821	1105	2GPM	311.0	DFB	3	0	0	0	0	0	N	
932	462	166900	11/8/2024	GW241108932			ND 2"SP/LINE	21.25	122.56	0828	1112	1.8GPM	296.0	DFB	3	0	0	0	0	0	N	
941	461	166718	4/25/2024	GW240425941			ND 2"SP/LINE	29.20	32.10	1554	1710	2.8GPM	210.0	CJS	3	0	0	0	0	0	N	
941	461	166749	11/12/2024	GW241112941			ND 2"SP/LINE	52.64	55.38	1202	1308	2.4GPM	159.0	DFB	3	0	0	0	0	0	N	
943	461	166704	4/23/2024	GW240423943			2"SP/LINE	3.20	22.97	1305	1406	4.6GPM	280.0	CJS	3	0	0	0	0	0	N	
943	462	166828	10/21/2024	GW241021943			2"SP/LINE	11.22	35.97	0858	0941	6GPM	259.0	DFB	3	0	0	0	0	0	N	
944	461	166703	4/23/2024	GW240423944			2"SP/LINE	2.48	36.61	1256	1345	2.8GPM	136.0	CJS	3	0	0	0	0	0	N	
944	462	166820	10/17/2024	GW241017944			2"SP/LINE	9.32	53.59	1227	1307	3GPM	120.0	DFB	3	0	0	0	0	0	N	
952	459	166553	5/8/2024	GW240508952		NR240508319	2"SP/LINE	17.72	34.32	1020	1217	3GPM	352.0	DFB	6	0	2	2	0	0	N	QC DUPLICATE 319
952	462	166818	10/17/2024	GW241017952			2"SP/LINE	23.49	40.72	0823	1016	3GPM	340.0	DFB	3	0	0	0	0	0	N	
953	460	166628	4/26/2024	GW240426953			ND 2"SP/LINE	26.56	37.52	0858	1020	3GPM	250.0	TJP	3	0	0	0	0	0	N	

Sampling Field Log Database

WELL	BOOK NO	PAGE NO	DATE	SAMPLE ID	QC_ORG	QC_373_KIT	EQUIP ID	DTW BP	DTW AP	START PURGE	END PURGE	RATE	VOL PURGE	SAMPLER ID	GW VOA	PW VOA	F METALS	U METALS	FLUORIDE	OTHER	PUMPED DRY	COMMENTS
953	459	166563	5/30/2024	GW240530953			ND 2"SP/LINE	45.61	58.19	0841	1012	2GPM	210.0	DFB	3	0	0	0	0	0	N	
953	461	166751	11/14/2024	GW241114953			ND 2"SP/LINE	54.40	67.54	1058	1207	2.8GPM	192.0	DFB	3	0	0	0	0	0	N	
954	461	166723	4/29/2024	GW240429954			ND 2"SP/LINE	21.30	161.21	0900	0939	2.6GPM	100.0	CJS	3	0	0	0	0	0	Y	
954	461	166750	11/14/2024	GW241114954			ND 2"SP/LINE	34.52	162.84	0845	0959	1.2GPM	130.0	DFB	3	0	0	0	0	0	Y	
954	461	166772	12/5/2024	GW241205954			ND 2"SP/LINE	34.11	163.41	0927	1042	1.7GPM	128.0	DFB	3	0	0	0	0	0	Y	
956	461	166705	4/23/2024	GW240423956			2"SP/LINE	17.63	96.45	1500	1521	2.6GPM	55.0	CJS	3	0	0	0	0	0	Y	
956	462	166829	10/21/2024	GW241021956			2"SP/LINE	26.08	@PUMP	1014	1039	2.5GPM	65.0	DFB	3	0	0	0	0	0	Y	
958	458	166467	4/11/2024	GW240411958			2"SP/LINE	0.00	95.42	0926	0954	4GPM	112.0	DFB	3	0	0	0	0	0	Y	
958	460	166690	10/4/2024	GW241004958			2"SP/LINE	5.57	97.42	1109	1132	4GPM	92.0	DFB	3	0	0	0	0	0	Y	
959	461	166720	4/26/2024	GW240426959			ND 2"SP/LINE	22.40	152.27	0915	1107	2.1GPM	240.0	CJS	3	0	1	1	0	0	Y	
959	459	166561	5/29/2024	GW240529959	NR240529322		ND 2"SP/LINE	25.47	135.49	0843	1124	2GPM	257.0	DFB	6	0	0	0	0	0	N	QC DUPLICATE 322
959	462	166869	10/31/2024	GW241031959	NR241031315		ND 2"SP/LINE	30.71	140.65	0826	1036	1.9GPM	247.0	DFB	6	0	0	0	0	0	N	QC DUPLICATE 315
960	461	166721	4/29/2024	GW240429960			ND 2"SP/LINE	15.49	84.78	0610	0656	1.5GPM	70.0	CJS	0	0	1	1	0	0	Y	
960	459	166562	5/29/2024	GW240529960			ND 2"SP/LINE	19.48	85.92	1206	1247	2GPM	82.0	DFB	3	0	0	0	0	0	Y	
960	462	166897	11/6/2024	GW241106960			ND 2"SP/LINE	21.85	84.74	1304	1336	2.3GPM	72.0	DFB	3	0	0	0	0	1	Y	1,4 DIOXANE
963	458	166481	4/15/2024	GW240415963			2"SP/LINE	3.66	62.86	1248	1327	2GPM	78.0	DFB	3	0	0	0	0	0	N	
963	460	166687	10/4/2024	GW241004963			2"SP/LINE	6.89	68.39	0809	0847	2GPM	76.0	DFB	3	0	0	0	0	0	N	
964	458	166482	4/15/2024	GW240415964			2"SP/LINE	3.92	19.72	1338	1400	2GPM	44.0	DFB	3	0	0	0	0	0	N	
964	460	166688	10/4/2024	GW241004964			2"SP/LINE	6.71	23.27	0856	0918	2GPM	43.0	DFB	3	0	0	0	0	0	N	
965	460	166616	4/24/2024	GW240424965			2"SP/LINE	17.22	17.42	0827	0945	3GPM	250.0	TJP	3	0	0	0	0	0	N	
966	460	166617	4/24/2024	GW240424966			2"SP/LINE	17.04	23.72	1032	1129	4GPM	215.0	TJP	3	0	0	0	0	0	N	
966	462	166836	10/23/2024	GW241023966			2"SP/LINE	29.18	45.43	0856	0934	5GPM	189.0	DFB	3	0	0	0	0	0	N	
987	457	166377	1/15/2024	GW240115987			2"SP/LINE	0.93	1.38	1029	1118	4GPM	197.0	DFB	3	0	0	0	0	0	N	
987	458	166479	4/15/2024	GW240415987			2"SP/LINE	1.60	1.98	1023	1112	4GPM	194.0	DFB	3	0	0	0	0	0	N	
987	460	166634	7/8/2024	GW240708987			2"SP/LINE	4.05	4.37	0944	1030	4GPM	183.0	DFB	3	0	0	0	0	0	N	
987	460	166680	10/3/2024	GW241003987			2"SP/LINE	4.97	5.29	0826	0911	4GPM	179.0	DFB	3	0	0	0	0	0	N	
990	457	166378	1/15/2024	GW240115990			2"SP/LINE	2.27	4.96	1127	1139	3GPM	36.0	DFB	3	0	0	0	0	0	N	
990	458	166480	4/15/2024	GW240415990			2"SP/LINE	2.54	5.36	1126	1144	2GPM	35.0	DFB	3	0	0	0	0	0	N	
990	460	166635	7/8/2024	GW240708990			2"SP/LINE	4.18	6.59	1038	1049	3GPM	32.0	DFB	3	0	0	0	0	0	N	
990	460	166699	10/14/2024	GW241014990			2"SP/LINE	5.17	7.76	1004	1014	3GPM	30.0	DFB	3	0	0	0	0	0	N	
998	458	166450	4/8/2024	GW240408998			B/B	8.07	18.52	0935	0944	NA	6.6	DFB	3	0	0	0	0	0	N	

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data v2
Daily Summary
January 2024

Generated on 01/23/2025

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 166 ft. Lat: 41.6257° N Lon: 73.8816° W

Station: **POUGHKEEPSIE AIRPORT, NY US GHCNH:USW00014757 (ICAO:N/A)**

Date	Temperature (F)							Degree Days (base 65F)		Sun (LST)		Weather	Precipitation (in)			Pressure (inHg)		Wind	Maximum Wind Speed = MPH / Direction = Degrees			
	Max	Min	Avg	Dep	ARH	ADP	AWB	Heat	Cool	Rise	Set	Weather Type	TLC	Snow Fall	Snow Depth	Avg Stn	Avg SL	Avg Speed	Peak Speed	Peak Dir	Sust. Speed	Sust. Dir
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	42	26	34	5.5				31	0	0722	1635	BR	0.00					2.0	12	320	9	310
02	41	20	31	2.0				34	0	0723	1636		0.00					0.7	10	330	8	250
03	39	21	30	1.8				35	0	0723	1637		0.00					2.0	12	240	9	240
04	44	21	33	4.6				32	0	0723	1638	SN	T					6.0	29	310	18	330
05	38	16	27	-0.9				38	0	0723	1639		0.00					1.8	16	250	12	270
06	33	18	26	-2.3				39	0	0723	1640	BR FG FZFG SN	0.41					3.6	19	110	10	060
07	34	22	28	0.3				37	0	0723	1641	BR FG FZFG SN	0.33					6.5	18	330	12	360
08	41	17	29	1.5				36	0	0722	1642	BR	0.00					2.0	16	280	12	290
09	51	14	33	5.2				32	0	0722	1643	BR FG HZ RA	1.72					5.8	32	120	21	120
10	56	42	49	21.7				16	0	0722	1644	BR RA	0.33					11.9	40	260	25	240
11	43	34	38	11.2				26	0	0722	1645		0.00					5.8	24	250	16	240
12	49	27	38	11.0				27	0	0722	1646	RA	0.03					5.6	32	110	22	110
13	59*	34	47	19.5				18	0	0721	1647	BR RA	0.34					14.5	47	110	31	120
14	39	23	31	4.1				34	0	0721	1648		T					12.1	55	240	31	260
15	29	17	23	-3.7				42	0	0721	1649	BR SN	T					4.7	18	250	12	210
16	25	18	22	-5.1				43	0	0720	1650	BR FG FZFG BLSN SN UP	0.12					5.4	22	340	15	320
17	23	9	16	-10.6				49	0	0720	1651		0.00					8.3	28	250	20	260
18	27	14	21	-6.0				44	0	0719	1653	SN	T					4.7	19	210	14	260
19	26	15	21	-5.8				44	0	0719	1654	BR FG HZ FZFG SN	0.02					3.8	19	350	14	350
20	22	11	17	-10.0				48	0	0718	1655	HZ	0.00					6.7	27	290	17	290
21	29	1*	15	-11.3				50	0	0718	1656		0.00					3.1	22	340	14	330
22	36	4	20	-6.4				45	0	0717	1657		0.00					4.0	19	240	13	230
23	38	32	35	8.5				30	0	0716	1659	BR UP SN RA	0.05					2.0	22	220	14	220
24	37	33	35	8.5				30	0	0716	1700	BR FG UP RA	0.52					0.2	11	170	6	160
25	52	35	44	17.0				21	0	0715	1701	BR FG UP RA	0.11					1.8	14	220	9	230
26	43	39	41	14.4				24	0	0714	1702	BR FG RA	0.38					1.8	18	120	13	110
27	44	37	41	14.1				24	0	0713	1704	BR	0.00					2.5	14	010	10	010
28	40	33	36	9.8				28	0	0712	1705	BR SN UP RA	0.92					6.0	19	350	13	010
29	36	32	34	7.3				31	0	0712	1706	BR SN	T					9.2	25	360	16	360
30	36	31	34	6.9				31	0	0711	1707		0.00					2.0	12	140	8	160
31	36	32	34	7.1				31	0	0710	1709		0.00					3.1	12	190	8	190
	38.4	23.6	31.0							Monthly Averages | Totals			5.28					4.9				
	2.3	5.4	3.8	Departure from Normal (1991-2020)									2.46									

Degree Days

	Monthly		Season-to-date	
	Total	Departure	Total	Departure
Heating	1055	-120	3000	
Cooling	0	0	0	

Number of days with...

Temperature				Precipitation		Snow	Weather	
Max		Min						
>=90°	<=32°	<=32°	<=0°	>=0.01"	>=0.1"	>=1"	T-Storms	Heavy Fog
0	7	23	0	13	10			5

Date of 5-sec to 3-sec wind equipment change

09/12/2006

Sea Level Pressure

		Date	Time
Maximum	30.55	22	0927
Minimum	28.93	10	0440

Greatest...

24-Hr...		Snow Depth
Precip	Snowfall	
2.05		
Date		
09-10		

Station Augmentation

Name:N/A Lat: N/A Lon: N/A Elevation: N/A Distance: N/A Elements: N/A Equipment: N/A

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data v2
Daily Summary
February 2024

Generated on 01/23/2025

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 166 ft. Lat: 41.6257° N Lon: 73.8816° W

Station: **POUGHKEEPSIE AIRPORT, NY US GHCNH:USW00014757 (ICAO:N/A)**

Date	Temperature (F)							Degree Days (base 65F)		Sun (LST)		Weather	Precipitation (in)			Pressure (inHg)		Wind	Maximum Wind Speed = MPH / Direction = Degrees			
	Max	Min	Avg	Dep	ARH	ADP	AWB	Heat	Cool	Rise	Set	Weather Type	TLC	Snow Fall	Snow Depth	Avg Stn	Avg SL	Avg Speed	Peak Speed	Peak Dir	Sust. Speed	Sust. Dir
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	43	27	35	8.1				30	0	0709	1710		0.00					2.7	16	240	10	250
02	41	34	38	10.6				27	0	0708	1711	BR UP RA	0.07					6.7	25	010	17	010
03	40	29	35	7.5				30	0	0707	1712		0.00					10.5	30	010	21	020
04	44	23	34	6.4				31	0	0706	1714		0.00					4.9	20	020	13	020
05	41	23	32	4.8				33	0	0705	1715		0.00					9.6	32	020	22	010
06	41	22	32	4.2				33	0	0704	1716		0.00					4.9	18	030	13	010
07	47	20	34	6.0				31	0	0703	1717		0.00					1.3	11	340	7	340
08	53	25	39	11.4				26	0	0701	1719		0.00					1.3	12	160	9	170
09	56	33	45	16.6				20	0	0700	1720		0.00					4.5	20	140	12	160
10	59	29	44	15.9				21	0	0659	1721	BR FG RA	0.03					3.6	28	330	18	310
11	49	28	39	10.4				26	0	0658	1723	BR FG	0.00					2.7	16	360	12	350
12	40	22	31	2.6				34	0	0657	1724		0.00					0.9	12	020	7	330
13	39	20	30	1.0				35	0	0655	1725	BR FG FZFG SN	0.42					4.9	31	340	17	350
14	34	24	29	0.3				36	0	0654	1726		0.00					11.9	34	290	22	290
15	38	13	26	-3.6				39	0	0653	1728	BR SN	T					4.0	19	190	13	230
16	39	28	34	4.3				31	0	0651	1729	SN	T					13.0	47	310	30	270
17	35	22	29	-1.0				36	0	0650	1730	BR SN	0.06					4.9	30	280	21	270
18	37	16	27	-3.2				38	0	0649	1731		0.00					7.8	29	250	20	240
19	38	20	29	-0.9				36	0	0647	1733		0.00					6.7	21	320	15	340
20	38	12*	25	-5.1				40	0	0646	1734		0.00					1.1	12	260	9	260
21	38	14	26	-4.5				39	0	0644	1735		0.00					2.2	19	170	12	140
22	45	24	35	3.8				30	0	0643	1736	BR UP RA	0.10					3.8	18	190	13	190
23	49	31	40	9.0				25	0	0641	1737	BR UP RA	0.18					1.8	10	360	7	360
24	37	22	30	-1.7				35	0	0640	1739	BR FG FZFG	0.00					7.2	24	020	18	020
25	40	14	27	-4.5				38	0	0638	1740		0.00					4.3	17	010	13	010
26	59	31	45	13.2				20	0	0637	1741		0.00					4.5	21	220	10	220
27	62*	28	45	12.9				20	0	0635	1742	BR RA	0.16					4.3	21	170	10	170
28	60	38	49	16.6				16	0	0634	1743	BR RA	0.41					8.5	43	290	29	270
29	38	27	33	-0.1				32	0	0632	1745		0.00					15.0	44	290	23	300
	44.1	24.2	34.2							Monthly Averages | Totals			1.43					5.6				
	5.2	4.7	4.9	Departure from Normal (1991-2020)									-0.78									

Degree Days

	Monthly		Season-to-date	
	Total	Departure	Total	Departure
Heating	894	-109	3894	
Cooling	0	0	0	

Number of days with...

	Temperature				Precipitation		Snow	Weather	
	Max		Min						
	>=90°	<=32°	<=32°	<=0°	>=0.01"	>=0.1"	>=1"	T-Storms	Heavy Fog
Heating									
Cooling	0	0	26	0	8	5			4

Date of 5-sec to 3-sec wind equipment change	Sea Level Pressure			Greatest...		
		Date	Time	24-Hr...		Snow Depth
09/12/2006	Maximum 30.51	21	0813	Precip	Snowfall	
	Minimum 29.37	28	1755	0.45		
				Date		
				27-28		

Station Augmentation

Name:N/A Lat: N/A Lon: N/A Elevation: N/A Distance: N/A Elements: N/A Equipment: N/A

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data v2
Daily Summary
March 2024

Generated on 01/23/2025

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 166 ft. Lat: 41.6257° N Lon: 73.8816° W

Station: **POUGHKEEPSIE AIRPORT, NY US GHCNH:USW00014757 (ICAO:N/A)**

Date	Temperature (F)							Degree Days (base 65F)		Sun (LST)		Weather	Precipitation (in)			Pressure (inHg)		Wind	Maximum Wind Speed = MPH / Direction = Degrees			
	Max	Min	Avg	Dep	ARH	ADP	AWB	Heat	Cool	Rise	Set	Weather Type	TLC	Snow Fall	Snow Depth	Avg Stn	Avg SL	Avg Speed	Peak Speed	Peak Dir	Sust. Speed	Sust. Dir
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	48	20	34	1.4				31	0	0631	1746		0.00					5.1	21	260	15	260
02	46	37	42	8.5				23	0	0629	1747	BR RA	0.60					4.5	17	350	12	350
03	62	39	51	17.2				14	0	0628	1748		0.00					5.1	22	010	15	020
04	59	35	47	13.5				18	0	0626	1749	BR	0.00					3.6	20	130	13	130
05	47	44	45	11.4				19	0	0624	1750	BR RA	0.32					3.4	13	070	9	090
06	53	45	49	14.7				16	0	0623	1752	BR RA	1.35					3.8	16	020	13	020
07	50	41	45	10.8				19	0	0621	1753	BR RA	0.12					12.3	34	040	22	020
08	57	29	43	8.2				22	0	0620	1754		0.00					3.8	18	020	14	010
09	43	39	41	5.7				24	0	0618	1755	BR HZ RA	1.04					6.7	25	140	16	130
10	49	34	42	6.0				23	0	0616	1756	BR RA	0.04					10.1	36	260	24	270
11	51	34	43	6.7				22	0	0615	1757		0.00					14.8	46	290	30	290
12	64	30	47	10.9				18	0	0613	1759		0.00					5.6	26	280	17	280
13	70	31	51	14.0				14	0	0611	1800		0.00					3.4	20	170	13	240
14	72*	36	54	17.0				11	0	0610	1801		0.00					2.5	16	130	12	140
15	66	43	54	17.2				10	0	0608	1802		T					6.9	26	020	17	010
16	59	32	45	7.9				19	0	0606	1803		0.00					4.3	21	220	16	250
17	57	33	45	7.2				20	0	0604	1804		0.01					7.8	30	280	22	260
18	49	32	40	2.2				24	0	0603	1805		0.00					9.2	26	300	18	280
19	44	32	38	-0.5				27	0	0601	1806		0.00					10.7	29	280	20	260
20	46	30	38	-0.8				27	0	0559	1807	BR RA TS	0.04					6.9	33	300	22	310
21	39	26	33	-6.6				32	0	0558	1809		0.00					13.6	40	290	26	270
22	41	18*	30	-10.0				35	0	0556	1810		0.00					3.4	14	090	9	020
23	37	31	34	-5.9				31	0	0554	1811	BR UP RA	2.05					8.9	37	020	24	010
24	43	25	34	-6.3				31	0	0553	1812		0.00					8.7	25	020	16	030
25	54	25	40	-1.2				25	0	0551	1813		0.00					4.7	16	010	14	010
26	57	33	45	4.0				20	0	0549	1814		0.00					5.4	20	100	13	110
27	50	41	45	3.9				19	0	0548	1815	BR RA	0.23					1.6	16	280	14	270
28	48	42	45	3.3				20	0	0546	1816	BR RA	0.21					5.1	18	020	13	010
29	55	37	46	3.8				19	0	0544	1817		0.00					9.4	39	300	25	310
30	60	38	49	6.4				16	0	0542	1818		0.00					8.1	31	280	20	260
31	61	33	47	4.1				18	0	0541	1820		0.00					3.6	22	280	14	330
	52.8	33.8	43.3							Monthly Averages | Totals			6.01					6.5				
	4.9	6.3	5.6	Departure from Normal (1991-2020)									2.92									

Degree Days

	Monthly		Season-to-date	
	Total	Departure	Total	Departure
Heating	673	-175	4567	
Cooling	0	0	0	

Number of days with...

	Temperature				Precipitation		Snow	Weather	
	Max		Min						
	>=90°	<=32°	<=32°	<=0°	>=0.01"	>=0.1"	>=1"	T-Storms	Heavy Fog
Heating	0	0	13	0	11	8		1	
Cooling									

Date of 5-sec to 3-sec wind equipment change	Sea Level Pressure			Greatest...		
		Date	Time	24-Hr...		Snow Depth
09/12/2006	Maximum 30.61	01	0946	Precip	Snowfall	
	Minimum 29.32	10	1523	2.05		
				Date		
				23-23		

Station Augmentation

Name:N/A Lat: N/A Lon: N/A Elevation: N/A Distance: N/A Elements: N/A Equipment: N/A

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data v2
Daily Summary
April 2024

Generated on 01/23/2025

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 166 ft. Lat: 41.6257° N Lon: 73.8816° W

Station: **POUGHKEEPSIE AIRPORT, NY US GHCNH:USW00014757 (ICAO:N/A)**

Date	Temperature (F)							Degree Days (base 65F)		Sun (LST)		Weather	Precipitation (in)			Pressure (inHg)		Wind	Maximum Wind Speed = MPH / Direction = Degrees			
	Max	Min	Avg	Dep	ARH	ADP	AWB	Heat	Cool	Rise	Set	Weather Type	TLC	Snow Fall	Snow Depth	Avg Stn	Avg SL	Avg Speed	Peak Speed	Peak Dir	Sust. Speed	Sust. Dir
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	54	37	45	2.0				19	0	0539	1821		0.00					0.7	9	220	7	230
02	46	37	42	-2.2				23	0	0537	1822	BR RA	0.39					5.4	15	360	13	360
03	43	38	40	-3.7				24	0	0536	1823	BR RA	1.00					10.1	33	060	22	090
04	44	33	39	-5.9				26	0	0534	1824	BR UP SN RA	0.28					8.3	26	340	17	020
05	46	31	39	-6.3				26	0	0532	1825		T					7.4	30	290	22	290
06	52	37	45	-0.8				20	0	0531	1826		T					11.2	33	010	23	340
07	58	34	46	0.3				19	0	0529	1827		0.00					8.7	36	020	21	010
08	65	28*	47	0.4				18	0	0527	1828		0.00					1.1	13	240	9	230
09	77	42	60	13.0				5	0	0526	1829		0.00					1.8	20	170	12	170
10	61	51	56	9.2				9	0	0524	1830	RA	0.01					4.5	19	140	12	140
11	64	50	57	9.7				8	0	0522	1832	BR RA	0.23					5.4	27	140	18	130
12	66	54	60	12.3				5	0	0521	1833	BR RA TS	0.56					9.4	42	170	21	170
13	55	47	51	2.9				14	0	0519	1834		0.01					12.8	43	290	26	270
14	65	41	53	4.5				12	0	0518	1835	BR TS RA	0.09					5.6	26	240	20	250
15	75	43	59	10.0				6	0	0516	1836	BR FG	0.00					6.0	26	300	20	290
16	70	36	53	3.7				12	0	0514	1837		0.00					4.3	25	260	17	290
17	63	37	50	0.2				15	0	0513	1838	BR RA	0.19					4.3	19	130	13	130
18	48	44	46	-4.1				19	0	0511	1839	BR HZ RA	0.13					3.8	14	060	10	060
19	59	44	52	1.1				13	0	0510	1840		0.00					4.7	20	150	15	130
20	65	42	54	2.6				11	0	0508	1841	BR HZ RA	0.12					6.5	30	290	21	300
21	51	32	42	-9.8				23	0	0507	1842		0.00					6.0	23	250	16	270
22	60	30	45	-6.5				20	0	0505	1844		0.00					2.2	24	330	16	340
23	66	30	48	-3.9				17	0	0504	1845		0.00					5.4	27	140	16	180
24	68	42	55	2.6				10	0	0502	1846		T					8.5	31	020	21	020
25	58	34	46	-6.8				19	0	0501	1847		0.00					5.6	25	010	16	010
26	63	30	47	-6.6				18	0	0459	1848		0.00					2.7	14	250	10	260
27	64	35	50	-3.9				15	0	0458	1849		T					6.7	30	150	15	180
28	74	48	61	7.1				4	0	0457	1850		0.01					3.1	16	240	10	240
29	81*	54	67	13.2				0	2	0455	1851	BR	0.00					4.0	22	020	16	010
30	68	55	62	7.0				3	0	0454	1852	BR RA	0.21					6.3	17	100	13	120
	61.0	39.9	50.4							Monthly Averages | Totals			3.23					5.8				
	0.3	2.4	1.4	Departure from Normal (1991-2020)									-0.39									

Degree Days

	Monthly		Season-to-date	
	Total	Departure	Total	Departure
Heating	439	-45	5006	
Cooling	2	-3	2	

Number of days with...

	Temperature				Precipitation		Snow	Weather	
	Max		Min						
	>=90°	<=32°	<=32°	<=0°	>=0.01"	>=0.1"	>=1"	T-Storms	Heavy Fog
Heating									
Cooling	0	0	6	0	13	9		2	1

Date of 5-sec to 3-sec wind equipment change

09/12/2006

Sea Level Pressure

		Date	Time
Maximum	30.51	27	0558
Minimum	29.22	12	1218

Greatest...

24-Hr...		Snow Depth
Precip	Snowfall	
1.22		
Date		
03-04		

Station Augmentation

Name:N/A Lat: N/A Lon: N/A Elevation: N/A Distance: N/A Elements: N/A Equipment: N/A

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data v2
Daily Summary
May 2024

Generated on 01/23/2025

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 166 ft. Lat: 41.6257° N Lon: 73.8816° W

Station: **POUGHKEEPSIE AIRPORT, NY US GHCNH:USW00014757 (ICAO:N/A)**

Date	Temperature (F)							Degree Days (base 65F)		Sun (LST)		Weather	Precipitation (in)			Pressure (inHg)		Wind	Maximum Wind Speed = MPH / Direction = Degrees			
	Max	Min	Avg	Dep	ARH	ADP	AWB	Heat	Cool	Rise	Set	Weather Type	TLC	Snow Fall	Snow Depth	Avg Stn	Avg SL	Avg Speed	Peak Speed	Peak Dir	Sust. Speed	Sust. Dir
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	78	55	67	11.6				0	2	0453	1853	BR RA	0.01					2.9	21	150	14	140
02	83	54	69	13.3				0	4	0451	1854	BR	0.00					8.1	27	280	21	270
03	68	46	57	1.4				8	0	0450	1855		0.00					3.8	18	150	12	130
04	67	46	56	0.5				8	0	0449	1857	BR RA	0.04					4.5	19	180	13	160
05	52	49	51	-5.7				14	0	0447	1858	BR RA	0.99					3.1	15	170	10	140
06	73	51	62	5.5				3	0	0446	1859	BR	0.00					0.7	10	240	7	250
07	79	46	63	5.7				2	0	0445	1900	BR FG	0.00					1.6	13	010	8	270
08	86	52	69	11.8				0	4	0444	1901	BR RA TS	0.28					6.3	30	240	20	280
09	66	52	59	1.4				6	0	0443	1902	RA	0.02					5.4	24	360	17	010
10	56	44	50	-7.9				15	0	0442	1903	BR RA	0.51					2.9	18	100	13	110
11	64	43	54	-4.6				11	0	0440	1904	BR FG	0.00					3.8	19	140	12	150
12	55	47	51	-7.4				14	0	0439	1905	BR	0.07					2.9	12	260	9	250
13	69	40*	54	-4.3				10	0	0438	1906		0.00					4.0	24	250	16	250
14	78	49	63	4.4				1	0	0437	1907	BR RA	0.02					5.6	28	220	18	210
15	68	59	63	4.1				1	0	0436	1908	BR RA	0.65					4.3	20	020	15	030
16	63	54	58	-1.2				6	0	0435	1909	BR FG RA	0.21					7.2	23	030	15	030
17	73	51	62	2.2				3	0	0434	1910	BR FG	0.00					2.2	13	030	9	010
18	73	53	63	3.0				2	0	0433	1911		0.00					1.6	13	100	10	100
19	77	55	66	5.6				0	1	0433	1912		0.00					4.3	20	360	13	100
20	82	51	67	5.8				0	2	0432	1913		0.00					2.5	17	180	10	180
21	88	57	72	11.4				0	7	0431	1914		0.00					4.3	23	230	15	240
22	89*	58	74	12.2				0	9	0430	1915	RA	T					4.7	21	180	14	170
23	81	59	70	8.3				0	5	0429	1916	BR RA	0.31					2.0	17	260	12	260
24	84	54	69	7.1				0	4	0429	1917	BR HZ	0.00					4.3	24	250	17	270
25	81	52	67	4.3				0	2	0428	1917		0.00					3.1	18	180	12	160
26	85	62	74	11.1				0	9	0427	1918	HZ	0.00					3.1	19	130	10	160
27	78	67	72	9.7				0	7	0427	1919	BR RA	0.75					7.2	42	180	21	170
28	80	60	70	7.1				0	5	0426	1920	BR FG	0.00					7.6	28	260	21	250
29	75	53	64	0.7				1	0	0425	1921	BR RA	0.05					2.7	18	240	14	240
30	71	53	62	-1.6				3	0	0425	1922	BR RA	0.46					6.7	24	350	16	020
31	76	46	61	-3.0				4	0	0424	1922		0.00					5.1	21	350	15	350
	74.1	52.2	63.2							Monthly Averages | Totals			1.66					4.0				
	2.8	4.4	3.6	Departure from Normal (1991-2020)									-1.81									

Degree Days

	Monthly		Season-to-date	
	Total	Departure	Total	Departure
Heating	116	-90	5122	
Cooling	59	24	61	

Number of days with...

	Temperature				Precipitation		Snow	Weather	
	Max		Min						
	>=90°	<=32°	<=32°	<=0°	>=0.01"	>=0.1"	>=1"	T-Storms	Heavy Fog
Heating	0	0	0	0	14	8		1	5

Date of 5-sec to 3-sec wind equipment change	Sea Level Pressure			Greatest...		
		Date	Time	24-Hr...		Snow Depth
09/12/2006	Maximum 30.30	04	2353	Precip	Snowfall	
	Minimum 29.43	08	1705	0.64		
				Date		
				04-05		

Station Augmentation

Name:N/A Lat: N/A Lon: N/A Elevation: N/A Distance: N/A Elements: N/A Equipment: N/A

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data v2
Daily Summary
June 2024

Generated on 01/23/2025

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 166 ft. Lat: 41.6257° N Lon: 73.8816° W

Station: **POUGHKEEPSIE AIRPORT, NY US GHCNH:USW00014757 (ICAO:N/A)**

Date	Temperature (F)							Degree Days (base 65F)		Sun (LST)		Weather	Precipitation (in)			Pressure (inHg)		Wind	Maximum Wind Speed = MPH / Direction = Degrees			
	Max	Min	Avg	Dep	ARH	ADP	AWB	Heat	Cool	Rise	Set	Weather Type	TLC	Snow Fall	Snow Depth	Avg Stn	Avg SL	Avg Speed	Peak Speed	Peak Dir	Sust. Speed	Sust. Dir
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	83	46*	65	0.3				0	0	0424	1923		0.00					1.3	14	310	9	240
02	84	49	67	2.0				0	2	0423	1924		0.00					3.4	16	240	12	250
03	86	61	74	8.7				0	9	0423	1925		0.00					2.0	16	340	12	360
04	87	58	72	7.3				0	7	0423	1925		0.00					3.1	16	170	13	240
05	83	58	71	5.1				0	6	0422	1926	BR	0.00					4.9	19	150	13	150
06	82	68	75	9.3				0	10	0422	1927	BR HZ RA TS	0.87					3.4	29	230	21	230
07	80	59	70	3.6				0	5	0422	1927	BR RA	0.29					3.8	36	290	24	270
08	77	55	66	-0.3				0	1	0421	1928	HZ	0.00					7.8	27	270	18	280
09	74	56	65	-1.7				0	0	0421	1928	BR RA	0.14					4.3	26	340	15	300
10	74	54	64	-3.0				1	0	0421	1929		0.00					6.7	20	290	14	280
11	70	50	60	-7.3				5	0	0421	1930	HZ	0.00									
12	75	51	63	-4.5				2	0	0421	1930		0.00					2.9	14	270	9	300
13	87	50	69	0.6				0	4	0421	1931		0.00					4.5	22	230	15	240
14	80	62	71	2.9				0	6	0421	1931	BR FG RA TS	0.46					3.6	32	240	23	250
15	80	53	67	-1.9				0	2	0421	1931	BR FG HZ	0.00					6.0	30	020	18	010
16	79	50	65	-4.2				0	0	0421	1932		0.00					2.9	16	250	12	260
17	88	58	73	4.0				0	8	0421	1932		0.00					4.5	20	230	14	230
18	93	66	80	10.2				0	15	0421	1932		0.00					4.7	17	180	13	170
19	94	69	81	11.8				0	16	0421	1933		0.00					4.3	17	230	13	230
20	95*	68	81	11.5				0	16	0421	1933		0.00					4.7	20	230	14	240
21	93	71	82	11.9				0	17	0421	1933	BR TS RA	0.39					2.7	36	020	23	030
22	93	70	81	11.0				0	16	0421	1933	BR RA TS	1.21					3.1	25	140	16	230
23	91	71	81	10.5				0	16	0422	1934	BR TS RA	0.03					4.7	26	260	18	230
24	79	59	69	-1.9				0	4	0422	1934	HZ	0.01					10.1	38	320	22	330
25	88	56	72	0.8				0	7	0422	1934		0.00					4.7	24	250	17	250
26	91	65	78	6.7				0	13	0423	1934	BR HZ TS RA	0.36					4.7	38	250	24	240
27	82	56	69	-2.6				0	4	0423	1934	BR RA	0.14					6.5	28	270	20	300
28	77	51	64	-7.8				1	0	0423	1934		0.00					3.4	25	040	15	030
29	81	63	72	-0.1				0	7	0424	1934	RA	0.02					6.3	28	170	16	180
30	84	61	72	0.2				0	7	0424	1934	BR FG TS RA	0.38					4.0	25	350	17	030
	83.7	58.8	71.2							Monthly Averages | Totals			4.30					4.5				
	3.8	1.6	2.8	Departure from Normal (1991-2020)									0.39									

Degree Days

	Monthly		Season-to-date	
	Total	Departure	Total	Departure
Heating	10	-25	5132	
Cooling	197	58	259	

Number of days with...

	Temperature				Precipitation		Snow	Weather	
	Max		Min						
	>=90°	<=32°	<=32°	<=0°	>=0.01"	>=0.1"	>=1"	T-Storms	Heavy Fog
Heating									
Cooling	7	0	0	0	12	9		7	1

Date of 5-sec to 3-sec wind equipment change

09/12/2006

Sea Level Pressure

		Date	Time
Maximum	30.31	19	0832
Minimum	29.43	06	1617

Greatest...

24-Hr...		Snow Depth
Precip	Snowfall	
1.21		
Date		
22-22		

Station Augmentation

Name:N/A Lat: N/A Lon: N/A Elevation: N/A Distance: N/A Elements: N/A Equipment: N/A

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data v2
Daily Summary
July 2024

Generated on 01/23/2025

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 166 ft. Lat: 41.6257° N Lon: 73.8816° W

Station: **POUGHKEEPSIE AIRPORT, NY US GHCNH:USW00014757 (ICAO:N/A)**

Date	Temperature (F)							Degree Days (base 65F)		Sun (LST)		Weather	Precipitation (in)			Pressure (inHg)		Wind	Maximum Wind Speed = MPH / Direction = Degrees			
	Max	Min	Avg	Dep	ARH	ADP	AWB	Heat	Cool	Rise	Set	Weather Type	TLC	Snow Fall	Snow Depth	Avg Stn	Avg SL	Avg Speed	Peak Speed	Peak Dir	Sust. Speed	Sust. Dir
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	78	56	67	-5.4				0	2	0425	1934		0.00					7.2	30	030	20	020
02	83	51*	67	-5.5				0	2	0425	1933		0.00					1.1	15	230	9	190
03	84	58	71	-1.7				0	6	0426	1933		0.00					4.3	22	140	13	140
04	85	64	74	1.6				0	9	0426	1933		T					3.6	14	230	10	230
05	89	71	80	7.0				0	15	0427	1933	BR HZ RA TS	0.49					2.7	21	350	15	350
06	92	74	83	9.8				0	18	0428	1933	BR RA TS	0.80					3.8	19	250	12	240
07	91	70	81	7.3				0	16	0428	1932	BR	0.00					2.0	13	250	8	220
08	92	67	80	6.1				0	15	0429	1932		0.00					2.2	14	250	9	260
09	94	72	83	9.4				0	18	0430	1931	TS	0.00					3.8	22	220	13	210
10	91	75	83	9.6				0	18	0430	1931		0.00					6.7	30	160	18	150
11	86	74	80	6.4				0	15	0431	1931	HZ RA	T					7.4	25	250	17	250
12	87	67	77	3.2				0	12	0432	1930		0.00					2.5	18	240	13	250
13	91	72	81	7.6				0	16	0433	1930	BR RA	0.03					3.1	43	020	30	030
14	92	68	80	6.2				0	15	0433	1929		0.00					2.7	18	230	13	220
15	93	72	83	8.6				0	18	0434	1928	TS RA	0.04					4.5	34	280	23	270
16	96*	67	81	7.5				0	16	0435	1928		0.02					5.4	35	260	22	270
17	93	69	81	7.2				0	16	0436	1927	BR FG RA TS	1.25					3.1	18	290	14	290
18	85	62	74	-0.4				0	9	0437	1926	BR	T					2.9	19	270	14	280
19	82	57	70	-4.3				0	5	0437	1926		0.00					2.0	19	290	13	330
20	86	59	72	-1.5				0	7	0438	1925		T					3.6	25	260	18	250
21	86	67	76	2.5				0	11	0439	1924		0.00					2.2	15	350	10	270
22	83	64	74	-0.4				0	9	0440	1923	RA	0.02					1.8	20	210	14	150
23	76	69	72	-1.5				0	7	0441	1922	BR RA	0.17					1.6	17	130	9	130
24	83	69	76	2.1				0	11	0442	1922		0.01					3.4	16	150	10	130
25	83	59	71	-2.8				0	6	0443	1921		0.00					4.3	25	290	18	280
26	84	56	70	-3.9				0	5	0444	1920		0.00					4.3	24	020	17	020
27	85	56	71	-3.3				0	6	0445	1919		0.00					2.2	14	020	9	350
28	87	58	72	-1.3				0	7	0446	1918		T					2.2	15	120	8	140
29	86	67	76	2.7				0	11	0447	1917	BR RA	0.07					3.8	19	150	13	140
30	90	68	79	5.3				0	14	0448	1916	BR	0.00					6.0	24	140	15	150
31	86	71	79	5.0				0	14	0449	1915	BR RA TS	0.27					3.8	32	290	22	280
	87.1	65.4	76.2							Monthly Averages | Totals			3.17					3.6				
	2.2	3.1	2.6	Departure from Normal (1991-2020)									-0.61									

Degree Days

	Monthly		Season-to-date	
	Total	Departure	Total	Departure
Heating	0	-3	0	
Cooling	349	81	607	

Number of days with...

	Temperature				Precipitation		Snow	Weather	
	Max		Min						
	>=90°	<=32°	<=32°	<=0°	>=0.01"	>=0.1"	>=1"	T-Storms	Heavy Fog
Heating									
Cooling	11	0	0	0	11	5		6	

Date of 5-sec to 3-sec wind equipment change	Sea Level Pressure			Greatest...		
		Date	Time	24-Hr...		Snow Depth
09/12/2006	Maximum 30.27	02	0901	Precip	Snowfall	
	Minimum 29.63	16	1707	1.29		
				Date		
				05-06		

Station Augmentation

Name:N/A Lat: N/A Lon: N/A Elevation: N/A Distance: N/A Elements: N/A Equipment: N/A

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data v2
Daily Summary
August 2024

Generated on 01/23/2025

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 166 ft. Lat: 41.6257° N Lon: 73.8816° W

Station: **POUGHKEEPSIE AIRPORT, NY US GHCNH:USW00014757 (ICAO:N/A)**

Date	Temperature (F)							Degree Days (base 65F)		Sun (LST)		Weather	Precipitation (in)			Pressure (inHg)		Wind	Maximum Wind Speed = MPH / Direction = Degrees			
	Max	Min	Avg	Dep	ARH	ADP	AWB	Heat	Cool	Rise	Set	Weather Type	TLC	Snow Fall	Snow Depth	Avg Stn	Avg SL	Avg Speed	Peak Speed	Peak Dir	Sust. Speed	Sust. Dir
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	93*	68	81	7.0				0	16	0450	1913		0.00					3.4	17	230	13	260
02	91	69	80	6.6				0	15	0451	1912	BR RA TS	0.34					2.0	22	180	15	170
03	89	73	81	7.8				0	16	0452	1911	BR TS RA	0.08					3.6	19	250	13	230
04	86	70	78	4.7				0	13	0453	1910	BR TS RA	0.61					3.1	29	350	21	020
05	90	66	78	4.8				0	13	0454	1909	BR	0.00					3.4	19	230	13	240
06	82	69	76	2.4				0	11	0455	1908	RA	0.33					5.4	21	010	15	020
07	70	63	67	-6.5				0	2	0456	1906	BR RA	0.31					4.0	14	020	10	030
08	71	65	68	-5.0				0	3	0457	1905	BR RA	0.25					2.2	13	110	9	110
09	83	68	76	2.7				0	11	0458	1904	BR RA TS	0.63					5.6	38	160	21	140
10	85	64	74	1.7				0	9	0459	1902	BR FG RA	0.16					4.7	22	270	15	250
11	82	59	71	-2.1				0	6	0500	1901		0.00					4.0	22	290	15	290
12	81	56	69	-4.0				0	4	0501	1900		T					4.5	23	320	16	340
13	81	53	67	-5.4				0	2	0502	1858		0.00					2.7	19	310	13	330
14	87	57	72	-0.2				0	7	0503	1857	BR FG TS	0.00					1.3	22	350	15	020
15	85	57	71	-1.1				0	6	0504	1856		0.00					1.1	18	230	12	240
16	86	62	74	2.1				0	9	0505	1854		0.00					2.2	14	130	9	160
17	81	69	75	3.1				0	10	0506	1853	BR HZ RA	T					6.7	22	210	14	180
18	77	68	72	0.7				0	7	0507	1851	BR RA TS	0.30					4.5	24	110	17	110
19	84	65	74	2.8				0	9	0508	1850	BR FG TS	T					4.0	21	220	14	330
20	71	51	61	-10.3				4	0	0509	1848		0.00					7.6	25	330	16	350
21	73	48*	61	-10.6				4	0	0510	1847	RA	T					3.1	27	280	20	270
22	76	50	63	-8.2				2	0	0511	1845		0.00					3.4	16	320	12	290
23	81	50	65	-5.5				0	0	0512	1844	BR	0.00					1.3	14	200	10	240
24	83	54	69	-2.2				0	4	0513	1842	BR	0.00					1.6	14	260	12	250
25	86	57	72	1.0				0	7	0514	1841	TS RA	0.04					2.2	26	010	16	100
26	86	60	73	2.7				0	8	0515	1839	BR FG	0.01					1.1	16	130	10	110
27	87	57	72	2.0				0	7	0516	1837		0.00					1.3	12	240	9	230
28	90	67	78	8.6				0	13	0517	1836		0.00					4.9	17	230	13	290
29	75	65	70	0.3				0	5	0518	1834	RA	0.09					5.6	19	010	10	070
30	76	62	69	-0.4				0	4	0519	1832	BR RA TS	0.23					2.5	17	120	12	130
31	78	65	72	2.4				0	7	0520	1831	RA	0.01					3.1	17	220	12	190
	82.1	61.5	71.8							Monthly Averages | Totals			3.39					3.4				
	-0.7	0.8	0.1	Departure from Normal (1991-2020)									-0.89									

Degree Days

	Monthly		Season-to-date	
	Total	Departure	Total	Departure
Heating	10	2	10	
Cooling	222	5	829	

Number of days with...

	Temperature				Precipitation		Snow	Weather	
	Max		Min						
	>=90°	<=32°	<=32°	<=0°	>=0.01"	>=0.1"	>=1"	T-Storms	Heavy Fog
Heating									
Cooling	4	0	0	0	14	9		9	4

Date of 5-sec to 3-sec wind equipment change

09/12/2006

Sea Level Pressure

		Date	Time
Maximum	30.30	23	0853
Minimum	29.60	19	1508

Greatest...

24-Hr...		Snow Depth
Precip	Snowfall	
0.79		
Date		
09-10		

Station Augmentation

Name:N/A Lat: N/A Lon: N/A Elevation: N/A Distance: N/A Elements: N/A Equipment: N/A

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data v2
Daily Summary
September 2024

Generated on 01/23/2025

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 166 ft. Lat: 41.6257° N Lon: 73.8816° W

Station: **POUGHKEEPSIE AIRPORT, NY US GHCNH:USW00014757 (ICAO:N/A)**

Date	Temperature (F)							Degree Days (base 65F)		Sun (LST)		Weather	Precipitation (in)			Pressure (inHg)		Wind	Maximum Wind Speed = MPH / Direction = Degrees			
	Max	Min	Avg	Dep	ARH	ADP	AWB	Heat	Cool	Rise	Set	Weather Type	TLC	Snow Fall	Snow Depth	Avg Stn	Avg SL	Avg Speed	Peak Speed	Peak Dir	Sust. Speed	Sust. Dir
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	82	68	75	6.1				0	10	0521	1829		0.01					3.6	17	220	12	250
02	78	54	66	-2.6				0	1	0522	1828		0.00					6.0	27	010	17	360
03	74	46	60	-8.3				5	0	0523	1826		0.00					2.2	21	050	14	040
04	78	46	62	-6.0				3	0	0524	1824		0.00					1.8	14	100	10	090
05	79	49	64	-3.7				1	0	0525	1822	BR	0.00					2.7	20	130	14	130
06	78	49	63	-4.0				1	0	0526	1821		0.00					2.9	12	320	8	070
07	73	53	63	-4.0				2	0	0527	1819	BR FG RA	0.17					3.8	35	260	24	270
08	70	46	58	-8.8				7	0	0528	1817	BR FG	0.00					5.4	27	260	18	270
09	77	42*	60	-6.9				5	0	0529	1816		0.01					4.9	26	260	20	240
10	79	49	64	-2.1				1	0	0530	1814		0.00					2.9	19	360	13	350
11	79	45	62	-3.7				3	0	0531	1812		0.00					1.1	10	060	7	270
12	82	49	65	0.0				0	0	0532	1811		0.00					2.2	20	240	10	250
13	85	52	69	3.5				0	4	0533	1809		0.00					1.1	12	030	7	360
14	86*	54	70	5.2				0	5	0534	1807		0.00					2.0	14	020	10	020
15	83	57	70	5.6				0	5	0536	1805	BR	0.00					2.0	17	070	12	130
16	84	50	67	3.1				0	2	0536	1804	BR	0.00					1.8	12	120	9	110
17	82	50	66	2.5				0	1	0538	1802	BR FG	0.00					1.1	12	120	9	110
18	77	54	65	2.3				0	0	0539	1800		0.00					0.9	8	330	6	300
19	85	51	68	5.2				0	3	0540	1758	BR FG	0.00					2.9	18	350	13	010
20	81	56	69	6.2				0	4	0541	1757	BR	0.00					3.4	21	040	16	030
21	76	53	65	2.6				0	0	0542	1755	BR	0.00					2.9	16	350	10	350
22	76	50	63	1.4				2	0	0543	1753		0.00					3.6	21	110	15	100
23	67	52	60	-1.6				5	0	0544	1751		0.00					2.5	17	060	12	080
24	67	49	58	-2.8				7	0	0545	1750		0.00					3.1	19	120	12	110
25	65	56	60	0.1				4	0	0546	1748	BR RA	0.02					3.1	19	120	13	120
26	70	59	65	4.6				0	0	0547	1746	BR RA	0.26					1.6	19	280	13	280
27	78	62	70	10.6				0	5	0548	1745		0.00					2.9	16	020	13	040
28	76	61	69	9.4				0	4	0549	1743	BR RA	0.04					3.8	20	070	13	100
29	64	60	62	3.3				3	0	0550	1741	BR RA	0.06					1.8	9	040	7	040
30	77	55	66	7.7				0	1	0551	1739	BR FG	0.00					2.7	14	090	10	130
	76.9	52.6	64.7							Monthly Averages | Totals			0.57					2.7				
	1.6	0.0	0.8	Departure from Normal (1991-2020)									-3.76									

Degree Days

	Monthly		Season-to-date	
	Total	Departure	Total	Departure
Heating	52	-55	63	
Cooling	44	-30	874	

Number of days with...

	Temperature				Precipitation		Snow	Weather	
	Max		Min						
	>=90°	<=32°	<=32°	<=0°	>=0.01"	>=0.1"	>=1"	T-Storms	Heavy Fog
Heating									
Cooling	0	0	0	0	7	2			4

Date of 5-sec to 3-sec wind equipment change	Sea Level Pressure			Greatest...		
		Date	Time	24-Hr...		Snow Depth
09/12/2006	Maximum 30.46	04	0912	Precip	Snowfall	
	Minimum 29.72	07	1406	0.27		
				Date		
				25-26		

Station Augmentation

Name:N/A Lat: N/A Lon: N/A Elevation: N/A Distance: N/A Elements: N/A Equipment: N/A

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data v2
Daily Summary
October 2024

Generated on 01/23/2025

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 166 ft. Lat: 41.6257° N Lon: 73.8816° W

Station: **POUGHKEEPSIE AIRPORT, NY US GHCNH:USW00014757 (ICAO:N/A)**

Date	Temperature (F)							Degree Days (base 65F)		Sun (LST)		Weather	Precipitation (in)			Pressure (inHg)		Wind	Maximum Wind Speed = MPH / Direction = Degrees			
	Max	Min	Avg	Dep	ARH	ADP	AWB	Heat	Cool	Rise	Set	Weather Type	TLC	Snow Fall	Snow Depth	Avg Stn	Avg SL	Avg Speed	Peak Speed	Peak Dir	Sust. Speed	Sust. Dir
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	75	49	62	4.1				3	0	0552	1738	BR	0.00					2.2	17	130	13	110
02	68	53	61	3.1				4	0	0553	1736		0.00					2.7	14	100	9	130
03	75	53	64	7.0				1	0	0554	1734		0.00					2.2	17	250	12	240
04	77	49	63	6.2				2	0	0555	1733	BR	0.00					2.0	17	250	13	250
05	75	46	61	4.3				4	0	0556	1731		T					5.1	28	010	18	010
06	73	40	56	0.5				8	0	0557	1729	BR	0.00					3.4	22	250	15	260
07	76	47	62	6.0				3	0	0558	1728		0.00					5.8	25	320	17	320
08	70	39	54	-0.7				10	0	0600	1726		T					2.2	21	290	14	280
09	68	42	55	0.3				10	0	0601	1724	BR RA	0.01					4.9	34	290	22	290
10	64	37	51	-3.8				14	0	0602	1723		0.00					4.7	25	340	17	330
11	71	32	52	-2.3				13	0	0603	1721		0.00					3.4	18	230	13	240
12	75	38	56	2.8				8	0	0604	1719		0.00					7.4	29	310	20	330
13	50	35	43	-10.6				22	0	0605	1718	BR RA	0.18					4.5	23	340	15	340
14	63	38	51	-2.3				14	0	0606	1716	BR	0.01					7.6	36	250	24	250
15	59	30	45	-8.0				20	0	0607	1715		0.00					5.1	32	280	18	280
16	59	35	47	-5.0				18	0	0608	1713		0.00					6.0	29	010	16	350
17	60	28	44	-7.5				21	0	0610	1712		0.00					3.6	24	010	16	010
18	69	29	49	-2.4				16	0	0611	1710		0.00					3.1	27	010	17	020
19	72	31	52	0.6				13	0	0612	1709		0.00					0.4	9	210	6	230
20	76	30	53	2.3				12	0	0613	1707		0.00					1.6	15	220	9	240
21	82	37	60	9.2				5	0	0614	1706		0.00					2.0	19	250	13	250
22	84*	46	65	15.1				0	0	0615	1704		0.00					1.1	15	170	12	250
23	80	45	63	12.9				2	0	0617	1703		0.00					3.8	25	190	15	200
24	67	47	57	7.7				8	0	0618	1701		T					6.9	30	010	21	020
25	61	33	47	-1.8				18	0	0619	1700		0.00					1.3	13	030	9	260
26	66	37	52	3.0				13	0	0620	1658		0.00					6.0	30	290	20	330
27	57	28*	43	-5.7				22	0	0621	1657		0.00					2.0	20	230	14	240
28	59	29	44	-3.9				21	0	0622	1656		0.00					1.1	9	010	7	360
29	60	33	47	-1.1				18	0	0624	1654	BR RA	0.04					2.2	23	140	16	140
30	78	48	63	15.9				2	0	0625	1653	BR FG	0.00					2.9	16	230	10	220
31	82	45	63	16.5				1	0	0626	1652	BR	0.00					3.8	17	230	12	240
	69.4	39.0	54.2							Monthly Averages | Totals			0.24					3.6				
	6.0	-2.1	2.0	Departure from Normal (1991-2020)									-3.49									

Degree Days

	Monthly		Season-to-date	
	Total	Departure	Total	Departure
Heating	334	-69	397	
Cooling	0	-6	874	

Number of days with...

	Temperature				Precipitation		Snow	Weather	
	Max		Min						
	>=90°	<=32°	<=32°	<=0°	>=0.01"	>=0.1"	>=1"	T-Storms	Heavy Fog
Heating	0	0	8	0	4	1			1
Cooling									

Date of 5-sec to 3-sec wind equipment change

09/12/2006

Sea Level Pressure

		Date	Time
Maximum	30.56	19	0843
Minimum	29.55	14	1339

Greatest...

24-Hr...		Snow Depth
Precip	Snowfall	
0.19		
Date		
13-14		

Station Augmentation

Name:N/A Lat: N/A Lon: N/A Elevation: N/A Distance: N/A Elements: N/A Equipment: N/A

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data v2
Daily Summary
November 2024

Generated on 01/23/2025

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 166 ft. Lat: 41.6257° N Lon: 73.8816° W

Station: **POUGHKEEPSIE AIRPORT, NY US GHCNH:USW00014757 (ICAO:N/A)**

Date	Temperature (F)							Degree Days (base 65F)		Sun (LST)		Weather	Precipitation (in)			Pressure (inHg)		Wind	Maximum Wind Speed = MPH / Direction = Degrees			
	Max	Min	Avg	Dep	ARH	ADP	AWB	Heat	Cool	Rise	Set	Weather Type	TLC	Snow Fall	Snow Depth	Avg Stn	Avg SL	Avg Speed	Peak Speed	Peak Dir	Sust. Speed	Sust. Dir
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	80	53	67	20.0				0	2	0627	1650		0.00					9.2	39	250	25	260
02	59	33	46	-0.2				19	0	0628	1649		0.00					5.1	20	010	14	020
03	54	26	40	-5.9				25	0	0630	1648		0.00					2.9	18	010	13	340
04	58	26	42	-3.5				23	0	0631	1647		0.00					3.6	23	230	14	140
05	76	44	60	14.8				5	0	0632	1646		0.00					4.9	22	240	15	230
06	81*	51	66	21.2				0	1	0633	1645		0.00					6.5	27	270	20	270
07	72	39	56	11.0				9	0	0634	1643		0.00					5.8	28	290	20	280
08	67	32	49	5.3				15	0	0636	1642		0.00					9.2	40	360	24	340
09	54	28	41	-2.7				24	0	0637	1641		0.00					4.5	29	320	22	330
10	56	25	41	-2.8				24	0	0638	1640	BR HZ RA	0.13					1.6	18	210	12	210
11	68	48	58	14.9				7	0	0639	1639	BR RA	0.03					6.5	28	270	21	270
12	55	37	46	3.3				19	0	0641	1638		0.00					12.3	39	020	24	010
13	48	24	36	-6.3				29	0	0642	1637		0.00					6.5	25	010	16	010
14	47	19*	33	-9.0				32	0	0643	1636		0.00					0.9	15	070	9	100
15	56	27	42	-0.2				23	0	0644	1636		0.00					2.0	14	330	9	340
16	64	23	44	2.3				21	0	0645	1635		0.00					4.0	25	330	17	330
17	60	24	42	1.2				23	0	0647	1634		0.00					0.9	13	340	9	020
18	66	34	50	9.3				15	0	0648	1633		0.00					3.1	20	350	14	350
19	58	28	43	2.8				22	0	0649	1632		0.00					2.0	21	360	13	010
20	57	40	49	8.6				16	0	0650	1632		0.00					2.0	20	100	14	100
21	52	36	44	4.4				21	0	0651	1631	BR SN RA	1.09					7.2	23	340	14	330
22	37	33	35	-4.2				30	0	0653	1630	BR FG SN UP RA	1.10					6.5	23	180	13	140
23	51	35	43	4.2				22	0	0654	1630		T					7.4	38	310	25	320
24	50	38	44	5.5				21	0	0655	1629		0.00					11.2	34	270	24	270
25	51	26	39	0.4				26	0	0656	1629		0.00					0.9	12	010	8	020
26	57	36	47	8.7				18	0	0657	1628	BR RA	0.34					4.9	23	310	16	310
27	49	31	40	2.5				25	0	0658	1628		0.00					6.7	25	250	17	250
28	39	31	35	-2.2				30	0	0659	1627	BR UP RA	0.67					4.3	19	350	13	350
29	43	28	36	-1.4				29	0	0700	1627	RA	0.01					5.4	33	270	24	270
30	38	27	33	-4.0				32	0	0702	1627		0.00					8.5	25	230	16	280
	56.7	32.8	44.8							Monthly Averages | Totals			3.37					5.1				
	5.3	1.2	3.2	Departure from Normal (1991-2020)									0.10									

Degree Days

	Monthly		Season-to-date	
	Total	Departure	Total	Departure
Heating	609	-97	1005	
Cooling	2	2	876	

Number of days with...

	Temperature				Precipitation		Snow	Weather	
	Max		Min						
	>=90°	<=32°	<=32°	<=0°	>=0.01"	>=0.1"	>=1"	T-Storms	Heavy Fog
Heating									
Cooling	0	0	16	0	7	5			

Date of 5-sec to 3-sec wind equipment change	Sea Level Pressure			Greatest...		
		Date	Time	24-Hr...		Snow Depth
09/12/2006	Maximum 30.56	04	0805	Precip	Snowfall	
	Minimum 29.15	22	0630	1.52		
				Date		
				21-22		

Station Augmentation

Name:N/A Lat: N/A Lon: N/A Elevation: N/A Distance: N/A Elements: N/A Equipment: N/A

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data v2
Daily Summary
December 2024

Generated on 01/23/2025

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 166 ft. Lat: 41.6257° N Lon: 73.8816° W

Station: **POUGHKEEPSIE AIRPORT, NY US GHCNH:USW00014757 (ICAO:N/A)**

Date	Temperature (F)							Degree Days (base 65F)		Sun (LST)		Weather	Precipitation (in)			Pressure (inHg)		Wind	Maximum Wind Speed = MPH / Direction = Degrees			
	Max	Min	Avg	Dep	ARH	ADP	AWB	Heat	Cool	Rise	Set	Weather Type	TLC	Snow Fall	Snow Depth	Avg Stn	Avg SL	Avg Speed	Peak Speed	Peak Dir	Sust. Speed	Sust. Dir
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	37	19	28	-8.0				37	0	0703	1626		0.00					5.1	21	260	16	280
02	39	15	27	-8.8				38	0	0704	1626		0.00					1.6	12	320	8	240
03	40	19	30	-6.0				35	0	0705	1626		T					3.8	27	300	20	300
04	38	16	27	-8.2				38	0	0706	1626	SN	T					5.1	26	180	14	180
05	39	32	36	0.5				29	0	0707	1625	BR SN	0.10					9.2	37	250	23	260
06	33	27	30	-4.6				35	0	0708	1625		0.00					11.4	33	290	22	300
07	40	28	34	-0.3				31	0	0709	1625	SN	T					8.1	26	220	18	250
08	51	31	41	7.0				24	0	0709	1625	SN	T					7.8	27	230	16	270
09	48	26	37	3.4				28	0	0710	1625	BR RA	0.27					1.3	9	100	7	070
10	44	42	43	9.6				22	0	0711	1625	BR RA	0.12					1.8	16	130	10	130
11	62*	40	51	17.8				14	0	0712	1625	BR RA	1.76					6.5	30	250	22	260
12	40	25	33	-0.5				32	0	0713	1625		0.00					13.2	37	260	25	250
13	33	15	24	-8.5				41	0	0714	1626		0.00					5.8	21	260	15	300
14	34	11	23	-9.9				42	0	0714	1626		0.00					1.1	14	020	9	360
15	35	12	24	-8.5				41	0	0715	1626	BR SN	T					0.2	9	280	7	280
16	37	31	34	2.1				31	0	0716	1626	BR FG SN RA	0.39					1.1	7	350	6	100
17	56	31	44	11.8				21	0	0717	1627	BR FG RA	0.08					3.4	17	230	13	240
18	51	25	38	6.6				27	0	0717	1627	BR RA	0.26					2.2	14	150	9	250
19	44	29	37	5.4				28	0	0718	1627	BR	0.00					3.6	22	310	14	320
20	31	28	30	-1.4				35	0	0718	1628	BR FG SN	0.04					5.1	15	350	12	360
21	28	13	21	-10.2				44	0	0719	1628	BR SN	0.02					8.7	30	310	20	330
22	17	1	9	-21.3				56	0	0719	1629		0.00					5.4	20	010	15	360
23	24	-2*	11	-19.1				54	0	0720	1629		0.00					2.0	12	180	8	170
24	34	22	28	-2.1				37	0	0720	1630	BR FG SN	0.07					1.6	14	220	10	220
25	32	12	22	-7.9				43	0	0721	1631	BR	0.00					4.3	18	010	15	010
26	30	5	18	-12.0				47	0	0721	1631	BR	0.00					0.9	9	330	7	320
27	35	5	20	-9.4				45	0	0721	1632	BR	0.00					0.0	7	260	3	330
28	41	29	35	5.7				30	0	0722	1633	BR FG FZRA RA	0.14					0.0	6	180	5	270
29	58	37	47	18.2				17	0	0722	1633	BR FG RA	0.17					3.4	31	170	16	140
30	58	43	51	21.5				14	0	0722	1634	BR RA	0.25					8.9	34	240	25	240
31	53	30	42	12.7				23	0	0722	1635		0.57									
	40.1	22.6	31.4							Monthly Averages | Totals			4.24									
	-0.5	-1.2	-0.8	Departure from Normal (1991-2020)									0.85									

Degree Days

	Monthly		Season-to-date	
	Total	Departure	Total	Departure
Heating	1043	25	2048	
Cooling	0	0	876	

Number of days with...

	Temperature				Precipitation		Snow	Weather	
	Max		Min						
	>=90°	<=32°	<=32°	<=0°	>=0.01"	>=0.1"	>=1"	T-Storms	Heavy Fog
Heating	0	6	27	1	14	10			
Cooling									

Date of 5-sec to 3-sec wind equipment change	Sea Level Pressure			Greatest...		
		Date	Time	24-Hr...		Snow Depth
				Precip	Snowfall	
09/12/2006	Maximum					
	Minimum			1.76		
				Date		
				11		

Station Augmentation

Name:N/A Lat: N/A Lon: N/A Elevation: N/A Distance: N/A Elements: N/A Equipment: N/A

Appendix F

Groundwater Analytical Data (Organics): January 1, 2024 to December 31, 2024
Supplemental Groundwater Analytical Data (Organics): January 1, 2024 to December 31, 2024
Groundwater Analytical Data (Inorganics): January 1, 2024 to December 31, 2024
Table F-1: Groundwater 1,4-Dioxane Data Summary, 2024
Table F-2: Groundwater PFAS Data Summary, 2024

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		007	007	010	010	015	015
Sample Description		DUPLICATE	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/22/2024	04/22/2024	04/26/2024	10/18/2024	04/24/2024	10/24/2024
Laboratory Sample I.D.		410169069-5	410169069-4	410169657-4	410193369-8	410169699-5	410193911-10
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0	4.1
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	0.44 J	0.97	ND@5.0	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	7.9	15	ND@5.0	7.2
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	1.1	2.3	ND@5.0	0.82
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@50	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0	1.3
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	1.2	1.5	2.7 J	61
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0	0.076 J
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	23	24	1200	6200
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	6.5	9.5	20	200
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.13 J	ND@5.0	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		016	016	032B	032B	032B	032B
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/22/2024	10/31/2024	01/17/2024	04/30/2024	07/08/2024	11/06/2024
Laboratory Sample I.D.		410169062-2	410195041-6	410157960-6	410170027-9	410179203-9	410195917-4
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	1.2	1.5	0.36 J	0.27 J	0.33 J	0.40 J
DICHLORODIFLUOROMETHANE	ug/l	6.1	11	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	11	14	0.91	0.72	0.90	0.93
TRICHLOROETHYLENE	ug/l	2.4	3.0	4.3	3.8	4.4	4.7
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		046	046	046	046	048	048
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		01/17/2024	04/12/2024	07/09/2024	10/11/2024	01/15/2024	04/11/2024
Laboratory Sample I.D.		410157960-3	410167821-4	410179203-16	410192222-3	410157551-9	410167736-11
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	0.082 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	1.2	0.56	2.0	0.91	3.5	3.3
TRICHLOROETHYLENE	ug/l	0.097 J	ND@0.5	0.095 J	0.081 J	0.16 J	0.14 J
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		048	048	053	053	053	053
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	DUPLICATE	GROUNDWATER
Sample Date		07/09/2024	10/15/2024	04/25/2024	11/08/2024	12/05/2024	12/05/2024
Laboratory Sample I.D.		410179203-14	410192664-15	410169700-6	410196130-4	410199509-7	410199509-6
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.33 J	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0 J	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	0.23 J	0.46 J	0.14 J	0.90 J	0.24 J	0.31 J
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	0.40 J	0.56	0.32 J	1.8 J	0.95	0.96
TRICHLOROETHYLENE	ug/l	0.20 J	0.26 J	0.34 J	1.6 J	0.75	0.75
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		054	054	054	054	059	060
Sample Description		GROUNDWATER	DUPLICATE	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/25/2024	05/28/2024	05/28/2024	10/16/2024	04/22/2024	04/22/2024
Laboratory Sample I.D.		410169699-10	410173805-5	410173805-4	410193009-7	410169062-5	410169062-6
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.10 J	0.10 J	0.093 J	0.092 J	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5 J	ND@0.5	ND@0.5	0.13 J	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0 J	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	2.1 J	1.8	1.7	2.2	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	1.9 J	1.6	1.5	1.7	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	4.7 J	4.3	3.9	4.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		061	064	064	064	064	065
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	DUPLICATE
Sample Date		04/05/2024	01/15/2024	04/15/2024	07/08/2024	10/14/2024	01/15/2024
Laboratory Sample I.D.		410166911-6	410157551-3	410168158-3	410179203-4	410192664-3	410157551-5
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.11 J	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.37 J	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.10 J	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		065	065	065	065	066	066
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		01/15/2024	04/15/2024	07/08/2024	10/14/2024	01/18/2024	04/05/2024
Laboratory Sample I.D.		410157551-4	410168158-4	410179203-3	410192664-4	410157960-9	410166911-7
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		066	066	067	067	067	067
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	DUPLICATE	GROUNDWATER
Sample Date		07/08/2024	10/14/2024	01/17/2024	04/05/2024	07/09/2024	07/09/2024
Laboratory Sample I.D.		410179203-7	410192664-6	410157960-7	410166911-8	410179203-13	410179203-12
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	0.53	ND@0.5	0.90	0.86
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	0.10 J	ND@0.5	0.13 J	0.13 J
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		067	068	068	068	068	069
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		10/14/2024	01/18/2024	05/06/2024	07/09/2024	10/14/2024	04/23/2024
Laboratory Sample I.D.		410192664-7	410157960-10	410171012-6	410179203-11	410192664-8	410169069-11
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	0.38 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.11 J	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	0.10 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		085	085	085	087	087	103
Sample Description		DUPLICATE	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/16/2024	04/16/2024	11/06/2024	04/25/2024	10/03/2024	04/26/2024
Laboratory Sample I.D.		410168158-15	410168158-12	410195917-3	410169655-11	410191281-8	410169657-3
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.69
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.38 J
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		103	104	104	104	105	105
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		10/18/2024	04/26/2024	05/28/2024	10/22/2024	04/25/2024	10/30/2024
Laboratory Sample I.D.		410193369-6	410169657-2	410173805-7	410193537-8	410169656-2	410194697-11
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	0.36 J	8.4	6.4	8.0	0.15 J	0.17 J
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	0.78	83 J	82	87 J	0.46 J	0.60
TRICHLOROETHYLENE	ug/l	0.43 J	23	19	22	0.42 J	0.44 J
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	0.30 J	0.20 J	0.35 J	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		106	109	109	113	113	118
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/23/2024	04/11/2024	10/15/2024	04/25/2024	10/30/2024	04/24/2024
Laboratory Sample I.D.		410169069-10	410167736-9	410192664-12	410169655-10	410194697-12	410169699-4
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1400
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@2500
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	0.15 J	0.17 J	0.17 J	0.12 J	1100
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	1.6	1.8	150000 J
TRICHLOROETHYLENE	ug/l	ND@0.5	1.6	1.8	0.30 J	0.27 J	1800
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		143	146	151	151	156	156
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/24/2024	04/11/2024	04/09/2024	10/04/2024	04/22/2024	10/04/2024
Laboratory Sample I.D.		410169699-3	410167736-13	410167232-12	410191281-14	410169062-4	410191281-12
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	0.13 J	0.15 J	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	6.1	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.10 J	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		167	167	178	181	181	204
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/22/2024	10/24/2024	04/26/2024	04/24/2024	11/01/2024	04/10/2024
Laboratory Sample I.D.		410169069-3	410193911-8	410169657-5	410169391-5	410195041-10	410167736-5
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	0.96	ND@0.5	0.28 J	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	1.6	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	2.4 J	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	0.12 J	8.3	16	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.17 J	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	1.1	24	41	0.41 J
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	0.51	8.9	16	0.19 J
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	0.12 J	ND@0.5	3.2	6.7	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		502	520	520	521	521	545
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/23/2024	04/16/2024	10/03/2024	04/16/2024	10/03/2024	04/22/2024
Laboratory Sample I.D.		410169069-9	410168158-10	410191281-6	410168158-11	410191281-7	410169069-6
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		545	559	559	559	561	561
Sample Description		GROUNDWATER	DUPLICATE	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		10/24/2024	04/25/2024	04/25/2024	11/06/2024	04/25/2024	10/16/2024
Laboratory Sample I.D.		410193911-9	410169655-7	410169655-6	410195917-6	410169655-9	410193009-4
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	29	28	4.7	0.25 J	1.3
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	5.1	5.5	2.4	ND@0.5	0.082 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	2.9	3.0	1.9	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	2.3	2.4	0.22 J	ND@0.5	0.087 J
CIS-1,2-DICHLOROETHYLENE	ug/l	0.16 J	120	120	62	4.0	23
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	44	47	8.6	4.6	24
TRICHLOROETHYLENE	ug/l	ND@0.5	94	98	30	1.6	7.0
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	9.2	9.6	1.2	ND@0.5	0.76

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		563	563	564	564	571	572
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/25/2024	10/16/2024	05/06/2024	10/15/2024	04/08/2024	04/30/2024
Laboratory Sample I.D.		410169655-8	410193009-3	410171012-3	410192664-13	410167232-6	410170027-11
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	0.15 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	0.12 J	ND@0.5	ND@0.5	ND@0.5	ND@250
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@2500
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250
CIS-1,2-DICHLOROETHYLENE	ug/l	1.3	2.7	ND@0.5	ND@0.5	ND@0.5	940
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250
TETRACHLOROETHYLENE	ug/l	0.87	1.3	ND@0.5	ND@0.5	ND@0.5	160000 J
TRICHLOROETHYLENE	ug/l	2.2	3.2	ND@0.5	ND@0.5	ND@0.5	1100
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@250

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		574	576	576	576	577	577
Sample Description		GROUNDWATER	DUPLICATE	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/30/2024	04/29/2024	04/29/2024	10/21/2024	04/23/2024	10/30/2024
Laboratory Sample I.D.		410170027-10	410170027-6	410170027-5	410193537-6	410169392-2	410194697-10
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@50	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@50	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@50	0.31 J	0.30 J	0.21 J	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@50	ND@0.5	ND@0.5	0.31 J	ND@0.5	ND@0.5
ACETONE	ug/l	ND@500	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@50	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@50	0.18 J	0.19 J	1.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@50	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@50	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@50	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@50	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	22000	13	12	6.4	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	87	1.1	1.2	2.7	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@50	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@50	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		579	580	581	600	601	601
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/29/2024	04/29/2024	04/10/2024	04/10/2024	04/16/2024	10/14/2024
Laboratory Sample I.D.		410170028-6	410170027-4	410167736-4	410167736-7	410168158-13	410192664-10
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	0.21 J	ND@0.5	ND@0.5	0.13 J	0.11 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.14 J	0.13 J	ND@0.5	ND@0.5	0.13 J	0.10 J
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	0.21 J	ND@0.5	ND@0.5	ND@0.5	2.2	1.9
DICHLORODIFLUOROMETHANE	ug/l	0.11 J	1.1	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	0.20 J	ND@0.5	ND@0.5	0.36 J	0.36 J
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.14 J	1.5	1.3
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	0.63	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		602	603	604	607	607	609
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/08/2024	04/08/2024	04/16/2024	04/25/2024	10/29/2024	04/25/2024
Laboratory Sample I.D.		410167232-8	410167232-7	410168158-14	410169700-3	410194697-7	410169700-5
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@25	ND@50	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@25	ND@50	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	0.22 J	200	310	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	23 J	23 J	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@250	ND@500	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	81	98	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	6600	6500	0.22 J
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@25	ND@50	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@25	ND@50	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@25	ND@50	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@25	ND@50	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	0.49 J	12000	16000	1.4
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	2400	2500	1.1
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@25	ND@50	0.80
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	460	450	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		609	610	610	610	610	611
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	DUPLICATE	GROUNDWATER	GROUNDWATER
Sample Date		10/31/2024	04/25/2024	05/30/2024	10/29/2024	10/29/2024	05/08/2024
Laboratory Sample I.D.		410195041-5	410169700-4	410174124-4	410194697-6	410194697-5	410171438-3
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5 J	ND@0.5	ND@2.5	ND@2.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5 J	ND@0.5	ND@2.5	ND@2.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.11 J	4.4 J	3.6	2.8	2.8	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5 J	ND@0.5	ND@2.5	ND@2.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0 J	ND@5.0	ND@25	ND@25	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5 J	ND@0.5	ND@2.5	ND@2.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	0.27 J	8.0 J	5.4	4.3	4.3	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5 J	ND@0.5	ND@2.5	ND@2.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5 J	ND@0.5	ND@2.5	ND@2.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5 J	ND@0.5	ND@2.5	ND@2.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5 J	ND@0.5	ND@2.5	ND@2.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	1.5	280 J	300	300	300	ND@0.5
TRICHLOROETHYLENE	ug/l	1.2	32 J	19	22	21	0.082 J
TRICHLOROFLUOROMETHANE	ug/l	1.1	1.9 J	2.3	2.1 J	2.0 J	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5 J	ND@0.5	ND@2.5	ND@2.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		612	612	612	612	622	622
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	DUPLICATE	GROUNDWATER
Sample Date		01/17/2024	04/25/2024	07/09/2024	10/16/2024	05/07/2024	05/07/2024
Laboratory Sample I.D.		410157960-5	410169699-7	410179203-17	410193009-6	410171012-10	410171012-9
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.25 J	0.24 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.10 J	1.4	1.3
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	9.2	8.9
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1.9	1.9
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.12 J	0.11 J

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		622	623	623	624	624	627
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		10/17/2024	04/30/2024	11/01/2024	04/26/2024	11/01/2024	04/29/2024
Laboratory Sample I.D.		410193009-11	410170028-8	410195041-9	410169655-13	410195041-8	410170027-2
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.099 J
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.26 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	160
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	1.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	4.1
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	9.9	0.57	0.45 J	1.7	2.0	64
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	160	130	0.42 J	0.60	80
TRICHLOROETHYLENE	ug/l	2.1	1.1	0.72	0.76	0.89	34
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		628	628	628	628	640	640
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		01/17/2024	04/12/2024	07/09/2024	10/11/2024	04/25/2024	05/28/2024
Laboratory Sample I.D.		410157960-4	410167821-5	410179203-15	410192222-4	410169699-9	410173805-6
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	4.7	8.4
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	0.55	ND@0.5	ND@0.5	0.51	25 J	45
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	7.0	11
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		640	701	702	702	706	706
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		10/18/2024	04/09/2024	04/08/2024	10/11/2024	04/25/2024	05/28/2024
Laboratory Sample I.D.		410193369-5	410167232-14	410167232-4	410192222-6	410169699-6	410173805-3
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.15 J	0.15 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.63	0.60
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	16	ND@0.5	ND@0.5	ND@0.5	45 J	50
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	85	ND@0.5	0.69	1.7	17	19
TRICHLOROETHYLENE	ug/l	20	0.10 J	0.088 J	0.26 J	7.5	8.8
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	26 J	34

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		706	711	714	714	714	716
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		10/22/2024	04/12/2024	04/12/2024	05/07/2024	11/06/2024	04/23/2024
Laboratory Sample I.D.		410193537-11	410167821-3	410167821-7	410171012-11	410195917-7	410169392-3
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@1.0 J	ND@0.5	ND@1.0	ND@2.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	1.7 J	1.8	1.6	ND@2.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.23 J	ND@0.5	36 J	36	59	31
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.64	ND@0.5	4.3 J	5.8	6.8	ND@2.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@10 J	4.0 J	ND@10	ND@25
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@1.0 J	ND@0.5	ND@1.0	ND@2.5
CIS-1,2-DICHLOROETHYLENE	ug/l	63	ND@0.5	7.1 J	7.6	5.4	8.6
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@1.0 J	ND@0.5	ND@1.0	ND@2.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@1.0 J	ND@0.5	ND@1.0	ND@2.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@1.0 J	ND@0.5	ND@1.0	ND@2.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@1.0 J	ND@0.5	ND@1.0	ND@2.5
TETRACHLOROETHYLENE	ug/l	33	ND@0.5	220 J	240	170	220
TRICHLOROETHYLENE	ug/l	15	ND@0.5	51 J	57	45	7.4
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@1.0 J	ND@0.5	ND@1.0	ND@2.5
VINYL CHLORIDE	ug/l	24	ND@0.5	ND@1.0 J	ND@0.5	ND@1.0	ND@2.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		716	720	720	722	732	732
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		10/25/2024	04/22/2024	10/16/2024	05/07/2024	04/29/2024	05/31/2024
Laboratory Sample I.D.		410194095-3	410169062-3	410193009-8	410171012-8	410170028-7	410174124-6
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0 J	ND@5.0
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0 J	ND@5.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	37	ND@0.5	ND@0.5	ND@0.5	300 J	340
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@2.5	ND@0.5	ND@0.5	ND@0.5	7.1 J	6.6
ACETONE	ug/l	ND@25	5.3	ND@5.0	ND@5.0	28 J	ND@50
CHLOROBENZENE	ug/l	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0 J	ND@5.0
CIS-1,2-DICHLOROETHYLENE	ug/l	11	0.32 J	0.24 J	ND@0.5	130 J	150
DICHLORODIFLUOROMETHANE	ug/l	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0 J	ND@5.0
ETHYLBENZENE	ug/l	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0 J	ND@5.0
M,P-XYLENE	ug/l	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0 J	ND@5.0
O-XYLENE	ug/l	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0 J	ND@5.0
TETRACHLOROETHYLENE	ug/l	310	1.5	0.91	ND@0.5	2500 J	2300
TRICHLOROETHYLENE	ug/l	9.7	0.37 J	0.18 J	ND@0.5	640 J	630
TRICHLOROFLUOROMETHANE	ug/l	ND@2.5	ND@0.5	ND@0.5	ND@0.5	4.4 J	5.0
VINYL CHLORIDE	ug/l	ND@2.5	ND@0.5	ND@0.5	ND@0.5	ND@5.0 J	ND@5.0

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		732	732	734	734	734	734
Sample Description		DUPLICATE	GROUNDWATER	DUPLICATE	GROUNDWATER	DUPLICATE	GROUNDWATER
Sample Date		11/07/2024	11/07/2024	04/05/2024	04/05/2024	10/30/2024	10/30/2024
Laboratory Sample I.D.		410195917-11	410195917-10	410166911-4	410166911-3	410194697-14	410194697-13
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@5.0 J	ND@25	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@5.0 J	ND@25	ND@0.5	ND@0.5	0.11 J	0.12 J
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	210 J	330	2.1	2.1	2.4	2.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	7.3 J	8.6 J	0.69	0.73	0.84	0.87
ACETONE	ug/l	19 J	ND@250	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@5.0 J	ND@25	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	150 J	140	1.7	1.8	1.8	1.8
DICHLORODIFLUOROMETHANE	ug/l	ND@5.0 J	ND@25	0.13 J	0.12 J	0.20 J	ND@0.5
ETHYLBENZENE	ug/l	ND@5.0 J	ND@25	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@5.0 J	ND@25	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@5.0 J	ND@25	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	1700 J	2400	18	18	21	22
TRICHLOROETHYLENE	ug/l	400 J	580	5.0	5.1	5.5	5.6
TRICHLOROFLUOROMETHANE	ug/l	4.9 J	5.3 J	0.40 J	0.40 J	0.52	0.52
VINYL CHLORIDE	ug/l	ND@5.0 J	ND@25	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		735	735	737	737	737	737
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	DUPLICATE	GROUNDWATER	DUPLICATE
Sample Date		04/19/2024	10/18/2024	04/24/2024	05/09/2024	05/09/2024	10/25/2024
Laboratory Sample I.D.		410168684-3	410193369-3	410169392-9	410171438-9	410171438-8	410194095-5
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@1.0	ND@5.0	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@1.0	ND@5.0	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	80	92	8.9 J	9.1	8.6	11
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	2.9	7.9	1.8 J	1.9	1.8	2.0
ACETONE	ug/l	ND@10	ND@50	ND@5.0 J	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@1.0	ND@5.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	12	83	0.80 J	1.1	0.98	1.3
DICHLORODIFLUOROMETHANE	ug/l	0.22 J	ND@5.0	0.13 J	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@1.0	ND@5.0	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@1.0	ND@5.0	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@1.0	ND@5.0	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	190	620	3.4 J	3.4	3.4	2.9
TRICHLOROETHYLENE	ug/l	25	110	0.67 J	0.67	0.66	0.53
TRICHLOROFLUOROMETHANE	ug/l	ND@1.0	ND@5.0	0.35 J	0.41 J	0.40 J	0.40 J
VINYL CHLORIDE	ug/l	ND@1.0	ND@5.0	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		737	739	740	742	742	742
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	DUPLICATE	GROUNDWATER	DUPLICATE
Sample Date		10/25/2024	04/25/2024	04/29/2024	04/24/2024	04/24/2024	05/10/2024
Laboratory Sample I.D.		410194095-4	410169655-2	410170027-3	410169392-11	410169392-10	410171608-4
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5 J	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5 J	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	11	0.41 J	5.4	0.25 J	0.24 J	0.21 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	2.1	ND@0.5	1.1	ND@0.5 J	ND@0.5 J	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0 J	ND@5.0 J	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5 J	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	1.5	ND@0.5	1.5	ND@0.5 J	ND@0.5 J	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	1.2	ND@0.5 J	ND@0.5 J	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5 J	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5 J	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5 J	ND@0.5
TETRACHLOROETHYLENE	ug/l	2.8	ND@0.5	7.2	0.30 J	0.29 J	0.26 J
TRICHLOROETHYLENE	ug/l	0.50	ND@0.5	8.2	0.17 J	0.18 J	0.15 J
TRICHLOROFLUOROMETHANE	ug/l	0.38 J	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5 J	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5 J	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		742	742	742	742	742	743
Sample Description		GROUNDWATER	DUPLICATE	GROUNDWATER	DUPLICATE	GROUNDWATER	GROUNDWATER
Sample Date		05/10/2024	11/12/2024	11/12/2024	12/05/2024	12/05/2024	04/24/2024
Laboratory Sample I.D.		410171608-3	410196464-4	410196464-3	410199509-4	410199509-3	410169392-12
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.22 J	0.26 J	0.23 J	0.18 J	0.19 J	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0 J	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	0.11 J	0.12 J	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	0.28 J	0.35 J	0.33 J	0.21 J	0.22 J	ND@0.5
TRICHLOROETHYLENE	ug/l	0.17 J	0.21 J	0.19 J	0.11 J	0.12 J	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		744	744	745	751	753	754
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/08/2024	10/11/2024	04/09/2024	05/06/2024	04/29/2024	04/25/2024
Laboratory Sample I.D.		410167232-9	410192222-5	410167232-13	410171012-5	410170027-7	410169699-8
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	7.7	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	0.12 J	0.12 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	0.26 J	0.23 J	ND@0.5	2.8	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	0.35 J	0.34 J	ND@0.5	0.31 J	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.27 J	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		755	755	756	757	757	761
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/12/2024	10/16/2024	04/05/2024	04/08/2024	10/15/2024	04/09/2024
Laboratory Sample I.D.		410167821-6	410193009-5	410166911-5	410167232-3	410192664-17	410167232-16
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.16 J	0.39 J	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	0.096 J	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	0.36 J	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	0.18 J	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	0.37 J	0.43 J	0.62	0.59	1.1	ND@0.5
TRICHLOROETHYLENE	ug/l	0.17 J	0.17 J	ND@0.5	3.0	5.0	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		763	766	766	766	767	767
Sample Description		GROUNDWATER	DUPLICATE	GROUNDWATER	GROUNDWATER	DUPLICATE	GROUNDWATER
Sample Date		04/10/2024	04/17/2024	04/17/2024	10/18/2024	04/19/2024	04/19/2024
Laboratory Sample I.D.		410167736-3	410168306-5	410168306-4	410193369-4	410168684-6	410168684-5
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	3.6	3.4	9.5	0.45 J	0.50
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.13 J	23	23	8.4	5.9	5.8
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.27 J	41	43	130	6.6	6.7
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@10	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	0.17 J	0.20 J
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	26	28	60	31	32
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	13	13	13	10	10
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	43	43	140	16	16
TRICHLOROETHYLENE	ug/l	ND@0.5	33	35	110	13	13
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	0.44 J	0.41 J	ND@1.0	0.65	0.66
VINYL CHLORIDE	ug/l	ND@0.5	0.58	0.55	4.5	0.41 J	0.43 J

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		767	768	768	769	769	771
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		10/18/2024	04/17/2024	10/18/2024	04/17/2024	10/21/2024	04/19/2024
Laboratory Sample I.D.		410193369-7	410168306-6	410193369-9	410168306-7	410193537-5	410168684-4
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	2.8	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.18 J	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	5.0	3.1	3.1	2.2	2.1	0.30 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	7.5	4.8	3.8	1.0	1.0	0.73
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	0.35 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	34	14	40	4.1	1.6	1.0
DICHLORODIFLUOROMETHANE	ug/l	11	1.1	1.2	0.12 J	0.24 J	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	26	8.6	18	1.9	3.3	1.4
TRICHLOROETHYLENE	ug/l	22	9.3	18	4.0	4.9	2.8
TRICHLOROFLUOROMETHANE	ug/l	0.61	ND@0.5	0.14 J	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	0.45 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		772	772	773	774	774	775
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/17/2024	10/15/2024	04/09/2024	04/23/2024	10/22/2024	04/23/2024
Laboratory Sample I.D.		410168306-3	410192664-16	410167232-11	410169069-8	410193537-10	410169069-7
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.085 J	0.11 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.72	1.2	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	0.57	1.0	0.15 J	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	0.13 J	0.42 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	0.21 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	0.72	0.62	0.12 J	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		777	777	779	779	789	791
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/25/2024	10/29/2024	04/25/2024	10/29/2024	04/09/2024	04/10/2024
Laboratory Sample I.D.		410169655-5	410194697-4	410169655-4	410194697-3	410167232-15	410167736-6
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		792	793	793	832	857	857
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/19/2024	04/19/2024	10/23/2024	05/06/2024	04/23/2024	10/03/2024
Laboratory Sample I.D.		410168684-8	410168684-7	410193911-6	410171012-4	410169062-9	410191281-5
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	0.081 J	0.45 J	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	1.3	3.0	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	20	21	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	0.22 J	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	16	34	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	1.8	4.9	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	2.7	9.4	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	4.6	16	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	0.16 J	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	0.51	1.1	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		858	858	921	921	922	922
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/23/2024	10/03/2024	04/23/2024	10/22/2024	04/23/2024	10/23/2024
Laboratory Sample I.D.		410169062-8	410191281-4	410169392-8	410193537-9	410169391-2	410193911-5
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	0.17 J	0.36 J	ND@0.5	0.40 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	0.36 J	0.50	ND@0.5	0.56
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	2.5 J	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	3.6	5.3	1.1	5.2
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.32 J	1.6	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	1.2	2.2	1.4	2.7
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	0.53	0.71	ND@0.5	0.72

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		923	923	929	929	931	931
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/23/2024	10/23/2024	04/29/2024	10/29/2024	04/24/2024	11/06/2024
Laboratory Sample I.D.		410169062-7	410193911-4	410170028-4	410194697-8	410169700-2	410195917-5
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@1.0	ND@1.0	0.074 J	ND@2.5	ND@2.5	ND@5.0
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@1.0	ND@1.0	ND@0.5	ND@2.5	ND@2.5	ND@5.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.45 J	0.46 J	2.6	3.0	0.43 J	0.94 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.82 J	1.1	0.53	ND@2.5	ND@2.5	ND@5.0
ACETONE	ug/l	ND@10	ND@10	ND@5.0	ND@25	ND@25	ND@50
CHLOROBENZENE	ug/l	ND@1.0	ND@1.0	ND@0.5	ND@2.5	ND@2.5	ND@5.0
CIS-1,2-DICHLOROETHYLENE	ug/l	58	140	44	42	42	51
DICHLORODIFLUOROMETHANE	ug/l	ND@1.0	ND@1.0	ND@0.5	ND@2.5	ND@2.5	ND@5.0
ETHYLBENZENE	ug/l	ND@1.0	ND@1.0	ND@0.5	ND@2.5	ND@2.5	ND@5.0
M,P-XYLENE	ug/l	ND@1.0	ND@1.0	ND@0.5	ND@2.5	ND@2.5	ND@5.0
O-XYLENE	ug/l	ND@1.0	ND@1.0	ND@0.5	ND@2.5	ND@2.5	ND@5.0
TETRACHLOROETHYLENE	ug/l	310	600	480	510	890	990
TRICHLOROETHYLENE	ug/l	110	210	17	16	26	35
TRICHLOROFLUOROMETHANE	ug/l	ND@1.0	ND@1.0	ND@0.5	ND@2.5	ND@2.5	ND@5.0
VINYL CHLORIDE	ug/l	1.1	1.3	0.20 J	ND@2.5	ND@2.5	ND@5.0

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		932	932	941	941	943	943
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		05/09/2024	11/08/2024	04/25/2024	11/12/2024	04/23/2024	10/21/2024
Laboratory Sample I.D.		410171438-7	410196130-3	410169655-12	410196464-5	410169392-6	410193537-3
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	3.3	3.2	40 J	26	2.7	3.3
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	1.2	1.2	0.91	ND@2.5	0.21 J	0.23 J
ACETONE	ug/l	ND@5.0	ND@5.0	3.9 J	ND@25	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	21	18	11	2.8	3.5	4.0
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	0.20 J	ND@2.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@2.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	12	8.4	340	190	7.0	8.3
TRICHLOROETHYLENE	ug/l	18	15	60	27	7.8	9.0
TRICHLOROFLUOROMETHANE	ug/l	0.16 J	0.12 J	1.5	1.3 J	ND@0.5	0.13 J
VINYL CHLORIDE	ug/l	0.18 J	0.12 J	0.11 J	ND@2.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		944	944	952	952	952	953
Sample Description		GROUNDWATER	GROUNDWATER	DUPLICATE	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/23/2024	10/17/2024	05/08/2024	05/08/2024	10/17/2024	04/26/2024
Laboratory Sample I.D.		410169392-5	410193009-12	410171438-5	410171438-4	410193009-10	410169656-4
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1.0
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	160 J
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.85
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.68
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		953	953	954	954	954	956
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		05/30/2024	11/14/2024	04/29/2024	11/14/2024	12/05/2024	04/23/2024
Laboratory Sample I.D.		410174124-3	410196886-4	410170028-5	410196886-3	410199509-5	410169392-7
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5 J	ND@1.0
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5 J	ND@1.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.11 J	ND@1.0	0.28 J	ND@0.5	ND@0.5 J	0.34 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@1.0	0.63	0.44 J	0.53 J	0.58 J
ACETONE	ug/l	ND@5.0	ND@10	ND@5.0	ND@5.0	ND@5.0 J	ND@10
CHLOROBENZENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5 J	ND@1.0
CIS-1,2-DICHLOROETHYLENE	ug/l	1.2	0.83 J	79	160 J	140	44
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5 J	ND@1.0
ETHYLBENZENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5 J	ND@1.0
M,P-XYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5 J	ND@1.0
O-XYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5 J	ND@1.0
TETRACHLOROETHYLENE	ug/l	220	120	150	23 J	27	200
TRICHLOROETHYLENE	ug/l	1.1	0.66 J	29	8.7	9.1 J	27
TRICHLOROFLUOROMETHANE	ug/l	0.91	0.70 J	ND@0.5	ND@0.5	ND@0.5 J	ND@1.0
VINYL CHLORIDE	ug/l	ND@0.5	ND@1.0	2.5	7.4	8.6 J	2.4

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		956	958	958	959	959	959
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	DUPLICATE	GROUNDWATER
Sample Date		10/21/2024	04/11/2024	10/04/2024	04/26/2024	05/29/2024	05/29/2024
Laboratory Sample I.D.		410193537-4	410167736-10	410191281-13	410169655-14	410173805-10	410173805-9
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@1.0	ND@0.5	ND@0.5	12	18	18
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.20 J	ND@0.5	ND@0.5	0.41 J	0.67	0.57
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.48 J	ND@0.5	ND@0.5	1.3	2.1	2.1
ACETONE	ug/l	ND@10	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@1.0	ND@0.5	ND@0.5	0.19 J	0.28 J	0.28 J
CIS-1,2-DICHLOROETHYLENE	ug/l	50	ND@0.5	ND@0.5	62 J	63	67
DICHLORODIFLUOROMETHANE	ug/l	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	160	ND@0.5	ND@0.5	20	21	20
TRICHLOROETHYLENE	ug/l	28	ND@0.5	ND@0.5	18	23	24
TRICHLOROFLUOROMETHANE	ug/l	ND@1.0	ND@0.5	ND@0.5	0.11 J	0.15 J	0.15 J
VINYL CHLORIDE	ug/l	2.2	ND@0.5	ND@0.5	1.5	2.5	2.2

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		959	959	960	960	963	963
Sample Description		DUPLICATE	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		10/31/2024	10/31/2024	05/29/2024	11/06/2024	04/15/2024	10/04/2024
Laboratory Sample I.D.		410195041-4	410195041-3	410173805-11	410195917-8	410168158-7	410191281-10
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	21	21	22	21	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.63	0.64	0.64	0.60	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	2.1	2.1	1.7	1.4	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	0.31 J	0.31 J	0.39 J	0.31 J	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	68	69	69	52	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	22	23	13	12	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	23	23	14	11	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	0.14 J	0.13 J	0.11 J	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	3.9	3.9	7.4	6.6	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		964	964	965	966	966	987
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/15/2024	10/04/2024	04/24/2024	04/24/2024	10/23/2024	01/15/2024
Laboratory Sample I.D.		410168158-8	410191281-11	410169391-3	410169391-4	410193911-3	410157551-6
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.20 J	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	0.10 J	0.17 J	0.26 J	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	0.78	0.96	1.6	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	0.95	17	23	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	0.61	1.2	1.6	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.62	0.27 J	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		987	987	987	990	990	990
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/15/2024	07/08/2024	10/03/2024	01/15/2024	04/15/2024	07/08/2024
Laboratory Sample I.D.		410168158-5	410179203-5	410191281-3	410157551-7	410168158-6	410179203-6
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.95	0.77	0.82
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.10 J	0.086 J	0.097 J
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		990	998	998	999	999	PW-23
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		10/14/2024	04/08/2024	10/11/2024	04/11/2024	10/14/2024	01/15/2024
Laboratory Sample I.D.		410192664-5	410167232-5	410192222-7	410167736-14	410192664-9	410157551-8
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	0.11 J	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	0.51	0.98	0.16 J	0.14 J	0.081 J
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	1.0	ND@0.5	ND@0.5	1.0	1.1	1.6
TRICHLOROETHYLENE	ug/l	0.13 J	ND@0.5	ND@0.5	0.21 J	0.20 J	0.15 J
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	0.22 J	0.99	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		PW-23	PW-23	PW-23
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/11/2024	07/08/2024	10/15/2024
Laboratory Sample I.D.		410167736-12	410179203-8	410192664-14
Sample Comment Codes				
Parameter	**Units**			
Base/Neutral Extractables				
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5
Volatile Organics				
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	0.082 J
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	0.70	0.42 J	0.44 J
TRICHLOROETHYLENE	ug/l	0.10 J	0.11 J	0.12 J
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Explanation of Reporting Conventions and Key to Comment Codes

Reporting Conventions

NA	Not Analyzed
ND@X	Not Detected at Detection Limit X

Code	Explanation
J	Estimated value - compound meets identification criteria, but result is less than the reporting limit

Former IBM East Fishkill Remediation
Supplemental Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		012	MLI-12 PORT2	MLI-12 PORT3	MLI-12 PORT4
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		11/07/2024	04/30/2024	04/30/2024	04/30/2024
Laboratory Sample I.D.		410195917-12	410170027-12	410170027-13	410170027-14
Sample Comment Codes					
Parameter	**Units**				
Base/Neutral Extractables					
1,2-DICHLOROBENZENE	ug/l	ND@50	1900	2800	1200
Volatile Organics					
1,1,1-TRICHLOROETHANE	ug/l	ND@50	ND@100	ND@100	ND@50
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	57	140	160	49 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@50	ND@100	49 J	63
ACETONE	ug/l	ND@500	ND@1000	ND@1000	ND@500
CHLOROBENZENE	ug/l	ND@50	ND@100	ND@100	18 J
CIS-1,2-DICHLOROETHYLENE	ug/l	2800	3700	31000	27000
DICHLORODIFLUOROMETHANE	ug/l	ND@50	ND@100	ND@100	ND@50
ETHYLBENZENE	ug/l	ND@50	180	470	200
M,P-XYLENE	ug/l	ND@50	560	1200	520
O-XYLENE	ug/l	ND@50	150	290	80
TETRACHLOROETHYLENE	ug/l	1100	85000	88000	56000
TRICHLOROETHYLENE	ug/l	410	3600	12000	14000
TRICHLOROFLUOROMETHANE	ug/l	ND@50	ND@100	ND@100	ND@50
VINYL CHLORIDE	ug/l	170	120	1500	1100

Former IBM East Fishkill Remediation
Supplemental Groundwater Analytical Data - Organics
January 1, 2024 - December 31, 2024

Explanation of Reporting Conventions and Key to Comment Codes

Reporting Conventions

NA	Not Analyzed
ND@X	Not Detected at Detection Limit X

Code	Explanation
J	Estimated value - compound meets identification criteria, but result is less than the reporting limit

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Inorganics
January 1, 2024 - December 31, 2024

Sample Location		007	007	010	015	068	104
Sample Description		DUPLICATE	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/22/2024	04/22/2024	04/26/2024	04/24/2024	05/06/2024	04/26/2024
Laboratory Sample I.D.		410169069-5	410169069-4	410169657-4	410169699-5	410171012-6	410169657-2
Sample Comment Codes							
Parameter	**Units**						
Inorganics							
FLUORIDE	mg/l	NA	NA	NA	2.3	NA	NA
Metals							
ARSENIC, DISSOLVED	mg/l	NA	NA	NA	NA	0.0042	NA
ARSENIC, TOTAL	mg/l	NA	NA	NA	NA	0.0069	NA
CHROMIUM, DISSOLVED	mg/l	ND@0.0021	ND@0.0021	ND@0.0021	0.0015 J	NA	ND@0.0021
CHROMIUM, TOTAL	mg/l	ND@0.0020	0.00059 J	0.0078	0.036	NA	0.018
NICKEL, DISSOLVED	mg/l	NA	NA	NA	NA	NA	NA
NICKEL, TOTAL	mg/l	NA	NA	NA	NA	NA	NA

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Inorganics
January 1, 2024 - December 31, 2024

Sample Location		204	580	581	627	701	706
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/10/2024	04/29/2024	04/10/2024	04/29/2024	04/09/2024	04/25/2024
Laboratory Sample I.D.		410167736-5	410170027-4	410167736-4	410170027-2	410167232-14	410169699-6
Sample Comment Codes							
Parameter	**Units**						
Inorganics							
FLUORIDE	mg/l	NA	2.7	NA	59	NA	ND@1.0
Metals							
ARSENIC, DISSOLVED	mg/l	NA	NA	NA	ND@0.0021	NA	NA
ARSENIC, TOTAL	mg/l	NA	NA	NA	ND@0.0020	NA	NA
CHROMIUM, DISSOLVED	mg/l	0.0036	ND@0.0021	ND@0.0021	NA	ND@0.0021	NA
CHROMIUM, TOTAL	mg/l	1.1	0.0012 J	0.00083 J	NA	0.0055	NA
NICKEL, DISSOLVED	mg/l	NA	NA	NA	0.083	NA	NA
NICKEL, TOTAL	mg/l	NA	NA	NA	0.088	NA	NA

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Inorganics
January 1, 2024 - December 31, 2024

Sample Location		735	740	754	761	763	766
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	DUPLICATE
Sample Date		04/19/2024	04/29/2024	04/25/2024	04/09/2024	04/10/2024	04/17/2024
Laboratory Sample I.D.		410168684-3	410170027-3	410169699-8	410167232-16	410167736-3	410168306-5
Sample Comment Codes							
Parameter	**Units**						
Inorganics							
FLUORIDE	mg/l	9.1	5.4	NA	NA	NA	4.2
Metals							
ARSENIC, DISSOLVED	mg/l	ND@0.0021	NA	NA	NA	NA	ND@0.0021
ARSENIC, TOTAL	mg/l	0.00084 J	NA	NA	NA	NA	0.0089
CHROMIUM, DISSOLVED	mg/l	NA	ND@0.0021	ND@0.0021	ND@0.0021	0.0017 J	ND@0.0021
CHROMIUM, TOTAL	mg/l	NA	0.25	0.17	0.79	0.0036	0.33
NICKEL, DISSOLVED	mg/l	NA	NA	NA	NA	NA	0.020
NICKEL, TOTAL	mg/l	NA	NA	NA	NA	NA	0.18

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Inorganics
January 1, 2024 - December 31, 2024

Sample Location		766	767	767	768	769	771
Sample Description		GROUNDWATER	DUPLICATE	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/17/2024	04/19/2024	04/19/2024	04/17/2024	04/17/2024	04/19/2024
Laboratory Sample I.D.		410168306-4	410168684-6	410168684-5	410168306-6	410168306-7	410168684-4
Sample Comment Codes							
Parameter	**Units**						
Inorganics							
FLUORIDE	mg/l	4.2	2.4	2.1	1.7 J	ND@2.0	NA
Metals							
ARSENIC, DISSOLVED	mg/l	ND@0.0021	0.0030	0.0033	ND@0.0021	ND@0.0021	NA
ARSENIC, TOTAL	mg/l	0.0090	0.038	0.038	0.038	ND@0.0020	NA
CHROMIUM, DISSOLVED	mg/l	ND@0.0021	ND@0.0021	ND@0.0021	ND@0.0021	0.0056	0.0021
CHROMIUM, TOTAL	mg/l	0.33	1.3	1.1	5.5	0.023	2.3
NICKEL, DISSOLVED	mg/l	0.021	NA	NA	0.066	0.16	NA
NICKEL, TOTAL	mg/l	0.17	NA	NA	1.6	0.19	NA

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Inorganics
January 1, 2024 - December 31, 2024

Sample Location		772	773	774	775	789	791
Sample Description		GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/17/2024	04/09/2024	04/23/2024	04/23/2024	04/09/2024	04/10/2024
Laboratory Sample I.D.		410168306-3	410167232-11	410169069-8	410169069-7	410167232-15	410167736-6
Sample Comment Codes							
Parameter	**Units**						
Inorganics							
FLUORIDE	mg/l	NA	NA	NA	NA	NA	NA
Metals							
ARSENIC, DISSOLVED	mg/l	ND@0.0021	NA	NA	NA	NA	NA
ARSENIC, TOTAL	mg/l	0.0039	NA	NA	NA	NA	NA
CHROMIUM, DISSOLVED	mg/l	ND@0.0021	ND@0.0021	0.014	0.00085 J	0.0052	0.0026
CHROMIUM, TOTAL	mg/l	0.61	0.53	0.00071 J	0.020	0.73	0.64
NICKEL, DISSOLVED	mg/l	0.018	NA	NA	NA	NA	NA
NICKEL, TOTAL	mg/l	0.14	NA	NA	NA	NA	NA

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Inorganics
January 1, 2024 - December 31, 2024

Sample Location		792	793	952	952	959	960
Sample Description		GROUNDWATER	GROUNDWATER	DUPLICATE	GROUNDWATER	GROUNDWATER	GROUNDWATER
Sample Date		04/19/2024	04/19/2024	05/08/2024	05/08/2024	04/26/2024	04/29/2024
Laboratory Sample I.D.		410168684-8	410168684-7	410171438-5	410171438-4	410169655-14	410170028-3
Sample Comment Codes							
Parameter	**Units**						
Inorganics							
FLUORIDE	mg/l	NA	ND@1.0	NA	NA	NA	NA
Metals							
ARSENIC, DISSOLVED	mg/l	ND@0.0021	ND@0.0021	ND@0.0021	ND@0.0021	ND@0.0021	ND@0.0021
ARSENIC, TOTAL	mg/l	0.0077	ND@0.0020	0.00081 J	0.00071 J	0.30	0.025
CHROMIUM, DISSOLVED	mg/l	0.0010 J	ND@0.0021	0.0016 J	0.0015 J	NA	NA
CHROMIUM, TOTAL	mg/l	3.7	0.42	0.0024	0.0016 J	NA	NA
NICKEL, DISSOLVED	mg/l	NA	0.022	NA	NA	NA	NA
NICKEL, TOTAL	mg/l	NA	0.15	NA	NA	NA	NA

Former IBM East Fishkill Remediation
Groundwater Analytical Data - Inorganics
January 1, 2024 - December 31, 2024

Explanation of Reporting Conventions and Key to Comment Codes

Reporting Conventions

NA	Not Analyzed
ND@X	Not Detected at Detection Limit X

Code	Explanation
J	Estimated value - compound meets identification criteria, but result is less than the reporting limit

Table F-1
Groundwater 1,4-Dioxane Data Summary, 2024
Former IBM East Fishkill Remediation
East Fishkill, New York

		Site Area	Area A, Bedrock	Area A	Area A, Bedrock	Area A, Bedrock	Area D
		LabID	410-195907-9	410-195907-5	410-195907-7	410-195907-8	410-195907-2
		SampleID	GW241107012	GW241106714	GW241107732	NR241107311	GW241106032B
		Location	GW-012	GW-714	GW-732	GW-732 (Dup)	GW-032B
Parameter	**Units**	**Cas Number | Date**	11/6/2024	11/6/2024	11/6/2024	11/6/2024	11/6/2024
1,4-Dioxane	ug/l	123-91-1	ND@0.20	ND@0.20	1.0	1.1	ND@0.20

		Site Area	Area C, Bedrock	B/330, Bedrock	Bedrock	Bedrock
		LabID	410-195907-4	410-195907-3	410-195907-6	410-195907-1
		SampleID	GW241106559	GW241106931	GW241106960	GW241106085
		Location	GW-559	GW-931	GW-960	GW-085
Parameter	**Units**	**Cas Number | Date**	11/6/2024	11/6/2024	11/6/2024	11/6/2024
1,4-Dioxane	ug/l	123-91-1	ND@0.20	ND@0.20	0.24	ND@0.20

Key:
J - Estimated value
ND@X - Not Detected at Detection Limit X
ug/l - micrograms per liter
Dup - Duplicate sample
Samples analyzed by USEPA Method SW-846 8270D SIM

Table F-2
Groundwater PFAS Data Summary, 2024
Former IBM East Fishkill Remediation
East Fishkill, New York

					Sample Location	**GW-061**	**GW-064**	**GW-065**	**GW-066**	**GW-066 (Dup)**	**GW-067**	**GW-990**
					Site Area	**B/330**	**Area B**	**Area B**	**Area D**	**Area D**	**Area D**	**SEQ**
					Sample Designation	GW241010061	GW241010064	GW241010065	GW241011066	GW241011066D	GW241011067	GW241010990
					Sample Date	10/10/2024	10/10/2024	10/10/2024	10/11/2024	10/11/2024	10/11/2024	10/10/2024
					Analytical Laboratory Identification #	410-192076-8	410-192076-3	410-192076-4	410-192246-5	410-192246-6	410-192246-3	410-192076-6
					Units	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
Group	**Chemical Name**	**Abbreviation**	**# Carbon Atoms**	**Mol. Weight (g/mol)**	**CAS Number**							
Perfluoroalkyl sulfonic acids	**Perfluorobutanesulfonic acid**	**PFBS**	**C-4**	**299.09**	**375-73-5**	**0.62 J**	**4.7**	**5.0**	**5.2**	**5.4**	**2.4**	**0.75 J**
	Perfluoropentanesulfonic acid	PFPeS	C-5	350.11	2706-91-4	ND@1.5	4.3	5.1	ND@1.5	ND@1.5	0.66 J	ND@1.5
	Perfluorohexanesulfonic acid	**PFHxS**	**C-6**	**399.11**	**355-46-4**	**0.62 J**	**43**	**54**	**3.5**	**3.5**	**11**	**2.2**
	Perfluoroheptanesulfonic acid	PFHpS	C-7	449.12	375-92-8	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	0.67 J	ND@1.5
	Perfluorooctanesulfonic acid	**PFOS**	**C-8**	**499.12**	**1763-23-1**	**1.8**	**20**	**24**	**19**	**18**	**43**	**0.86 J**
	Perfluorononanesulfonic acid	PFNS	C-9	550.14	68259-12-1	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluorodecanesulfonic acid	PFDS	C-10	599.14	335-77-3	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluorododecanesulfonic acid	PFDoS	C-12	700.16	79780-39-5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
Perfluoroalkyl carboxylic acids	Perfluorobutanoic acid	PFBA	C-4	214.04	375-22-4	1.1 J	6.0	6.7	17	17	31	ND@3.0
	Perfluoropentanoic acid	PFPeA	C-5	264.05	2706-90-3	ND@1.5	3.1	3.8	4.0	4.1	4.2	ND@1.5
	Perfluorohexanoic acid	PFHxA	C-6	314.05	307-24-4	ND@1.5	7.2	9.0	2.6	2.9	3.6	ND@1.5
	Perfluoroheptanoic acid	PFHpA	C-7	364.06	375-85-9	ND@1.5	1.6	1.8	2.3	2.9	5.3	ND@1.5
	Perfluorooctanoic acid	**PFOA**	**C-8**	**414.07**	**335-67-1**	**0.73 J**	**4.4**	**5.4**	**19**	**18**	**12**	**ND@1.5**
	Perfluorononanoic acid	**PFNA**	**C-9**	**464.08**	**375-95-1**	**ND@1.5**	**ND@1.5**	**ND@1.5**	**0.77 J**	**0.80 J**	**2.4**	**ND@1.5**
	Perfluorodecanoic acid	PFDA	C-10	514.08	335-76-2	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluoroundecanoic acid	PFUnA	C-11	564.09	2058-94-8	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluorododecanoic acid	PFDoA	C-12	614.10	307-55-1	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluorotridecanoic acid	PFTrDA	C-13	664.10	72629-94-8	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluorotetradecanoic acid	PFTeDA	C-14	714.11	376-06-7	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
Per- and Polyfluoroether carboxylic acids	**Hexafluoropropylene oxide dimer acid**	**HFPO-DA**	**C-6**	**330.05**	**13252-13-6**	**ND@2.3**	**ND@2.3**	**ND@2.2**	**ND@2.2**	**ND@2.2**	**ND@2.2**	**ND@2.3**
	4,8-Dioxa-3H-perfluorononanoic acid	ADONA	C-7	378.07	919005-14-4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluoro-3-methoxypropanoic acid	PFMPA	C-4	230.04	377-73-1	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluoro-4-methoxybutanoic acid	PFMBA	C-5	280.04	863090-89-5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	C-5	296.04	151772-58-6	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
Fluorotelomer sulfonic acids	4:2 Fluorotelomer sulfonic acid	4:2 FTS	C-6	428.17	757124-72-4	ND@3.0	ND@3.0	ND@2.9	ND@2.9	ND@3.0	ND@2.9	ND@3.0
	6:2 Fluorotelomer sulfonic acid	6:2 FTS	C-6	428.17	27619-97-2	ND@3.0	ND@3.0	ND@2.9	ND@2.9	ND@3.0	ND@2.9	ND@3.0
	8:2 Fluorotelomer sulfonic acid	8:2 FTS	C-8	528.18	39108-34-4	ND@3.0	ND@3.0	ND@2.9	ND@2.9	ND@3.0	ND@2.9	ND@3.0
Fluorotelomer carboxylic acids	3:3 Fluorotelomer carboxylic acid	3:3 FTCA	C-6	242.09	356-02-5	ND@3.0	ND@3.0	ND@2.9	ND@2.9	ND@3.0	ND@2.9	ND@3.0
	5:3 Fluorotelomer carboxylic acid	5:3 FTCA	C-6	342.11	914637-49-3	ND@7.6	ND@7.5	ND@7.4	ND@7.3	ND@7.5	ND@7.4	ND@7.6
	7:3 Fluorotelomer carboxylic acid	7:3 FTCA	C-10	442.12	812-70-4	ND@7.6	ND@7.5	ND@7.4	ND@7.3	ND@7.5	ND@7.4	ND@7.6
Perfluorooctane-sulfonamides	Perfluorooctane sulfonamide	PFOSA	C-8	499.15	754-91-6	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	N-methylperfluorooctane sulfonamide	NMeFOSA	C-9	513.17	31506-32-8	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	N-ethylperfluorooctane sulfonamide	NEtFOSA	C-10	527.20	4151-50-2	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
Perfluorooctane-sulfonamidoacetic acids	N-methyl perfluorooctane sulfonamidoacetic acid	N-MeFOSAA	C-8	571.21	2355-31-9	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	N-ethyl perfluorooctane sulfonamidoacetic acid	N-EtFOSAA	C-8	585.24	2991-50-6	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
Perfluorooctane sulfonamide ethanols	N-methylperfluorooctane sulfonamidoethanol	MeFOSE	C-10	557.23	24448-09-7	ND@7.6	ND@7.5	ND@7.4	ND@7.3	ND@7.5	ND@7.4	ND@7.6
	N-ethylperfluorooctane sulfonamidoethanol	EtFOSE	C-12	571.25	1691-99-2	ND@7.6	ND@7.5	ND@7.4	ND@7.3	ND@7.5	ND@7.4	ND@7.6
Ether sulfonic acids	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (F-53B Major)	9Cl-PF3ONS	C-8	532.58	756426-58-1	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor)	11Cl-PF3OUdS	C-10	632.60	763051-92-9	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluoro(2-ethoxyethane) sulfonic acid	PFEESA	C-4	316.10	113507-82-7	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5

NOTES:
Bold entries depict the 6 PFAS identified in the United States Environmental Protection Agency (USEPA) National Primary Drinking Water Regulation
"ng/L" - denotes concentration in units of nanograms per liter
"J" - signifies estimated concentration below Limit of Quantitation but above Method Detection Limit
"ND@X" - signifies "Not Detected at Limit of Quantitation X"
N/A - Not Applicable
SEQ - Southeast Quadrant
Dup - denotes duplicate sample

GROUNDWATER SCIENCES CORPORATION and
GROUNDWATER SCIENCES, P.C.

Appendix G

Extraction Well Analytical Data: January 1, 2024 to December 31, 2024
Table G-1: Groundwater Treatment Facility PFAS Data Summary, 2024

Former IBM East Fishkill Remediation
Extraction Well Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		395	395	395	395	634	634
Sample Description		B/384 SUMP	B/384 SUMP	B/384 SUMP	B/384 SUMP	GW/AREA A IN	GW/AREA A IN
Sample Date		01/03/2024	04/01/2024	07/01/2024	12/02/2024	01/03/2024	04/01/2024
Laboratory Sample I.D.		410156406-20	410166353-7	410178637-7	410199017-10	410156406-21	410166353-8
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@50	ND@25	ND@25	ND@25	ND@10	ND@1.0
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@50	ND@25	ND@25	18 J	ND@10	ND@1.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	14 J	26	ND@25	240	6.2 J	1.2
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@50	ND@25	ND@25	ND@25	4.5 J	4.9
ACETONE	ug/l	ND@500	ND@250	ND@250	ND@250	ND@100	ND@10
CHLOROBENZENE	ug/l	ND@50	ND@25	ND@25	14 J	ND@10	ND@1.0
CIS-1,2-DICHLOROETHYLENE	ug/l	20 J	24 J	4.9 J	370	3.9 J	1.9
DICHLORODIFLUOROMETHANE	ug/l	ND@50	ND@25	ND@25	ND@25	ND@10	ND@1.0
ETHYLBENZENE	ug/l	ND@50	ND@25	ND@25	ND@25	ND@10	ND@1.0
M,P-XYLENE	ug/l	ND@50	ND@25	ND@25	ND@25	ND@10	ND@1.0
O-XYLENE	ug/l	ND@50	ND@25	ND@25	5.3 J	ND@10	ND@1.0
TETRACHLOROETHYLENE	ug/l	4000	5200	1500 J	55000	1500	240
TRICHLOROETHYLENE	ug/l	70	130	42	3600	26	5.9
TRICHLOROFLUOROMETHANE	ug/l	ND@50	ND@25	ND@25	ND@25	ND@10	ND@1.0
VINYL CHLORIDE	ug/l	ND@50	ND@25	ND@25	ND@25	ND@10	ND@1.0

Former IBM East Fishkill Remediation
Extraction Well Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		634	634	PW- 1	PW- 1	PW- 1	PW- 1
Sample Description		GW/AREA A IN	GW/AREA A IN	PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL
Sample Date		07/01/2024	12/02/2024	01/02/2024	04/02/2024	07/02/2024	10/02/2024
Laboratory Sample I.D.		410178637-8	410199017-11	410156406-5	410166353-16	410178637-16	410190840-5
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	0.38 J	3.0 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@1.0	ND@10	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	2.7	35	1.5	1.8	2.0	2.2
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	1.4	ND@10	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@10	ND@100	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@1.0	ND@10	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	2.9	10	0.99	0.89	1.1	1.1
DICHLORODIFLUOROMETHANE	ug/l	ND@1.0	ND@10	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@1.0	ND@10	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@1.0	4.4 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@1.0	1.4 J	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	1600	14000	11	11	13	14
TRICHLOROETHYLENE	ug/l	24	140	4.3	4.3	5.1	5.2
TRICHLOROFLUOROMETHANE	ug/l	ND@1.0	ND@10	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@1.0	ND@10	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Extraction Well Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		PW- 2R	PW- 2R	PW- 2R	PW- 2R	PW-1 GTF IN	PW-1 GTF IN
Sample Description		PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL
Sample Date		01/03/2024	04/02/2024	07/02/2024	10/01/2024	01/02/2024	02/29/2024
Laboratory Sample I.D.		410156406-10	410166353-17	410178637-21	410190843-12	410156406-4	410162530-4
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@50	ND@50	ND@50	ND@100	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@50	ND@50	ND@50	ND@100	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	120	160	140	160	2.0	0.80
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	12 J	12 J	13 J	ND@100	ND@0.5	ND@0.5
ACETONE	ug/l	ND@500	ND@500	ND@500	ND@1000	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@50	ND@50	ND@50	ND@100	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	1200	1300	1300	1200	1.1	0.39 J
DICHLORODIFLUOROMETHANE	ug/l	ND@50	ND@50	ND@50	ND@100	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@50	ND@50	ND@50	ND@100	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@50	ND@50	ND@50	ND@100	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@50	ND@50	ND@50	ND@100	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	10000	12000	11000	14000	14	4.9
TRICHLOROETHYLENE	ug/l	780	840	810	810	5.2	1.9
TRICHLOROFLUOROMETHANE	ug/l	ND@50	ND@50	ND@50	ND@100	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	180	200	200	200	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Extraction Well Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		PW-1 GTF IN	PW-1 GTF IN	PW-1 GTF IN	PW-1 GTF IN	PW-1 GTF IN	PW-1 GTF IN
Sample Description		PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL
Sample Date		03/05/2024	04/02/2024	05/01/2024	06/06/2024	07/02/2024	08/14/2024
Laboratory Sample I.D.		410162906-16	410166353-15	410170415-4	410175065-11	410178637-15	410184307-4
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	1.5	1.9	2.1	2.0	2.1	1.6 J
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0 J
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J
CIS-1,2-DICHLOROETHYLENE	ug/l	0.68	0.91	1.0	1.1	0.97	0.83 J
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J
TETRACHLOROETHYLENE	ug/l	8.3	11	13	13	13	9.0 J
TRICHLOROETHYLENE	ug/l	3.3	4.3	5.2	4.9	4.9	3.4 J
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J

Former IBM East Fishkill Remediation
Extraction Well Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		PW-1 GTF IN	PW-1 GTF IN	PW-1 GTF IN	PW-1 GTF IN	PW-2 GTF IN	PW-2 GTF IN
Sample Description		PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL
Sample Date		09/06/2024	10/02/2024	11/04/2024	12/02/2024	01/03/2024	02/01/2024
Laboratory Sample I.D.		410187236-12	410190840-4	410195482-4	410199017-4	410156406-14	410159527-5
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@50	ND@50
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@50	ND@50
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	2.2	2.5	2.7	2.5	120	160
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	11 J	16 J
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@500	ND@500
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@50	ND@50
CIS-1,2-DICHLOROETHYLENE	ug/l	1.0	1.2	1.3	1.2	1200	1300
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@50	ND@50
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@50	ND@50
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@50	ND@50
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@50	ND@50
TETRACHLOROETHYLENE	ug/l	13	16	16	16	10000	8800
TRICHLOROETHYLENE	ug/l	4.7	5.7	6.2	5.9	800	850
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@50	ND@50
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	180	260

Former IBM East Fishkill Remediation
Extraction Well Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		PW-2 GTF IN	PW-2 GTF IN	PW-2 GTF IN	PW-2 GTF IN	PW-2 GTF IN	PW-2 GTF IN
Sample Description		PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL
Sample Date		03/05/2024	04/02/2024	05/02/2024	06/05/2024	07/02/2024	08/01/2024
Laboratory Sample I.D.		410162906-8	410166353-21	410170415-11	410175065-5	410178637-20	410182667-5
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@50	ND@50	ND@25	1.6 J	ND@50	ND@50
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@50	ND@50	ND@25	ND@5.0	ND@50	ND@50
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	160	150	150	150	150	160
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	15 J	13 J	14 J	13	14 J	14 J
ACETONE	ug/l	ND@500	ND@500	ND@250	ND@50	ND@500	ND@500
CHLOROBENZENE	ug/l	ND@50	ND@50	ND@25	1.4 J	ND@50	ND@50
CIS-1,2-DICHLOROETHYLENE	ug/l	1300	1300	1200	1300	1300	1300
DICHLORODIFLUOROMETHANE	ug/l	ND@50	ND@50	ND@25	ND@5.0	ND@50	ND@50
ETHYLBENZENE	ug/l	ND@50	ND@50	ND@25	4.3 J	ND@50	ND@50
M,P-XYLENE	ug/l	ND@50	ND@50	ND@25	ND@5.0	ND@50	ND@50
O-XYLENE	ug/l	ND@50	ND@50	ND@25	3.5 J	ND@50	ND@50
TETRACHLOROETHYLENE	ug/l	9700	12000	10000	11000	12000	11000
TRICHLOROETHYLENE	ug/l	880	840	810	820	840	830
TRICHLOROFLUOROMETHANE	ug/l	ND@50	ND@50	ND@25	1.6 J	ND@50	ND@50
VINYL CHLORIDE	ug/l	230	200	220	200	210	250

Former IBM East Fishkill Remediation
Extraction Well Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		PW-2 GTF IN	PW-2 GTF IN	PW-2 GTF IN	PW-2 GTF IN	PW-25	PW-25
Sample Description		PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL
Sample Date		09/06/2024	10/01/2024	11/04/2024	12/03/2024	01/02/2024	04/01/2024
Laboratory Sample I.D.		410187236-16	410190843-11	410195482-11	410199017-18	410156406-9	410166353-12
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@50	ND@100	ND@50	ND@50	ND@5.0	ND@2.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@50	ND@100	ND@50	ND@50	ND@5.0	ND@2.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	150	150	190	160	9.9	12
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@50	ND@100	15 J	17 J	ND@5.0	ND@2.5
ACETONE	ug/l	ND@500	ND@1000	ND@500	ND@500	ND@50	ND@25
CHLOROBENZENE	ug/l	ND@50	ND@100	ND@50	ND@50	ND@5.0	ND@2.5
CIS-1,2-DICHLOROETHYLENE	ug/l	1100	1200	1400	1300	21	23
DICHLORODIFLUOROMETHANE	ug/l	ND@50	ND@100	ND@50	ND@50	ND@5.0	ND@2.5
ETHYLBENZENE	ug/l	ND@50	ND@100	ND@50	ND@50	ND@5.0	ND@2.5
M,P-XYLENE	ug/l	ND@50	ND@100	ND@50	ND@50	ND@5.0	ND@2.5
O-XYLENE	ug/l	ND@50	ND@100	ND@50	ND@50	ND@5.0	ND@2.5
TETRACHLOROETHYLENE	ug/l	12000	11000	12000	12000	540	500
TRICHLOROETHYLENE	ug/l	780	790	950	860	66	67
TRICHLOROFLUOROMETHANE	ug/l	ND@50	ND@100	ND@50	ND@50	ND@5.0	ND@2.5
VINYL CHLORIDE	ug/l	210	230	240	220	ND@5.0	ND@2.5

Former IBM East Fishkill Remediation
Extraction Well Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		PW-25	PW-25	PW-25 GTF IN	PW-25 GTF IN	PW-25 GTF IN	PW-25 GTF IN
Sample Description		PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL
Sample Date		07/01/2024	10/02/2024	01/02/2024	02/01/2024	03/04/2024	04/01/2024
Laboratory Sample I.D.		410178637-12	410190840-9	410156406-8	410159527-8	410162906-4	410166353-11
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@2.5 J	ND@5.0	ND@5.0	ND@0.5	ND@5.0	ND@5.0
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@2.5 J	ND@5.0	ND@5.0	ND@0.5	ND@5.0	ND@5.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	10 J	11	10	17	12	11
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@2.5 J	ND@5.0	ND@5.0	0.45 J	ND@5.0	ND@5.0
ACETONE	ug/l	ND@25 J	ND@50	ND@50	ND@5.0	ND@50	ND@50
CHLOROBENZENE	ug/l	ND@2.5 J	ND@5.0	ND@5.0	ND@0.5	ND@5.0	ND@5.0
CIS-1,2-DICHLOROETHYLENE	ug/l	22 J	21	22	23	21	22
DICHLORODIFLUOROMETHANE	ug/l	ND@2.5 J	ND@5.0	ND@5.0	ND@0.5	ND@5.0	ND@5.0
ETHYLBENZENE	ug/l	ND@2.5 J	ND@5.0	ND@5.0	ND@0.5	ND@5.0	ND@5.0
M,P-XYLENE	ug/l	ND@2.5 J	ND@5.0	ND@5.0	ND@0.5	ND@5.0	ND@5.0
O-XYLENE	ug/l	ND@2.5 J	ND@5.0	ND@5.0	ND@0.5	ND@5.0	ND@5.0
TETRACHLOROETHYLENE	ug/l	500 J	530	530	480	510	530
TRICHLOROETHYLENE	ug/l	65 J	64	69	69	69	67
TRICHLOROFLUOROMETHANE	ug/l	ND@2.5 J	ND@5.0	ND@5.0	0.34 J	ND@5.0	ND@5.0
VINYL CHLORIDE	ug/l	ND@2.5 J	ND@5.0	ND@5.0	0.10 J	ND@5.0	ND@5.0

Former IBM East Fishkill Remediation
Extraction Well Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		PW-25 GTF IN	PW-25 GTF IN	PW-25 GTF IN	PW-25 GTF IN	PW-25 GTF IN	PW-25 GTF IN
Sample Description		PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL	PUMPING WELL
Sample Date		05/01/2024	06/05/2024	07/01/2024	08/01/2024	09/05/2024	10/02/2024
Laboratory Sample I.D.		410170415-7	410175065-8	410178637-11	410182667-8	410187236-9	410190840-8
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@1.0	ND@0.5	ND@1.0	ND@1.0	ND@1.0	ND@1.0
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@1.0	ND@0.5	ND@1.0	ND@1.0	ND@1.0	ND@1.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	10	14	10	12	10	11
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.29 J	0.35 J	0.28 J	0.32 J	0.27 J	0.31 J
ACETONE	ug/l	ND@10	ND@5.0	ND@10	ND@10	ND@10	ND@10
CHLOROBENZENE	ug/l	ND@1.0	ND@0.5	ND@1.0	ND@1.0	ND@1.0	ND@1.0
CIS-1,2-DICHLOROETHYLENE	ug/l	19	24	21	21	20	21
DICHLORODIFLUOROMETHANE	ug/l	ND@1.0	ND@0.5	ND@1.0	ND@1.0	ND@1.0	ND@1.0
ETHYLBENZENE	ug/l	ND@1.0	ND@0.5	ND@1.0	ND@1.0	ND@1.0	ND@1.0
M,P-XYLENE	ug/l	ND@1.0	ND@0.5	ND@1.0	ND@1.0	ND@1.0	ND@1.0
O-XYLENE	ug/l	ND@1.0	ND@0.5	ND@1.0	ND@1.0	ND@1.0	ND@1.0
TETRACHLOROETHYLENE	ug/l	460	500	450	490	490	480
TRICHLOROETHYLENE	ug/l	60	65	59	58	61	63
TRICHLOROFLUOROMETHANE	ug/l	0.20 J	0.31 J	0.26 J	0.26 J	0.23 J	0.25 J
VINYL CHLORIDE	ug/l	ND@1.0	ND@0.5	ND@1.0	ND@1.0	ND@1.0	ND@1.0

Former IBM East Fishkill Remediation
Extraction Well Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		PW-25 GTF IN	PW-25 GTF IN
Sample Description		PUMPING WELL	PUMPING WELL
Sample Date		11/04/2024	12/02/2024
Laboratory Sample I.D.		410195482-7	410199017-14
Sample Comment Codes			
Parameter	**Units**		
Base/Neutral Extractables			
1,2-DICHLOROBENZENE	ug/l	ND@5.0	ND@0.5
Volatile Organics			
1,1,1-TRICHLOROETHANE	ug/l	ND@5.0	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	13	13
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@5.0	0.35 J
ACETONE	ug/l	ND@50	ND@5.0
CHLOROBENZENE	ug/l	ND@5.0	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	22	22
DICHLORODIFLUOROMETHANE	ug/l	ND@5.0	ND@0.5
ETHYLBENZENE	ug/l	ND@5.0	ND@0.5
M,P-XYLENE	ug/l	ND@5.0	ND@0.5
O-XYLENE	ug/l	ND@5.0	ND@0.5
TETRACHLOROETHYLENE	ug/l	510	480
TRICHLOROETHYLENE	ug/l	68	58
TRICHLOROFLUOROMETHANE	ug/l	ND@5.0	0.32 J
VINYL CHLORIDE	ug/l	ND@5.0	ND@0.5

Former IBM East Fishkill Remediation
Extraction Well Analytical Data - Organics
January 1, 2024 - December 31, 2024

Explanation of Reporting Conventions and Key to Comment Codes

Reporting Conventions

NA	Not Analyzed
ND@X	Not Detected at Detection Limit X

Code	Explanation
J	Estimated value - compound meets identification criteria, but result is less than the reporting limit

Table G-1
Groundwater Treatment Facility PFAS Data Summary, 2024
Former IBM East Fishkill Remediation
East Fishkill, New York

					Sample Location	**PW-1 GTF**	**PW-1 GTF**	**PW-1 GTF**	**PW-2 GTF**	**PW-2 GTF**	**PW-2 GTF**	**PW-2 GTF**
					Description	PW-1 Influent	GAC Mid-Point	GTF Effluent	PW-2R Influent	Perox Carb Eff.	GAC Mid-Point	GTF Effluent
					Sample Designation	PW241028210A	PW241028210E	PW241028210F	P241028220RA	P241028220RE	P241028220RI	P241028220RJ
					Sample Date	10/28/2024	10/28/2024	10/28/2024	10/28/2024	10/28/2024	10/28/2024	10/28/2024
					Analytical Laboratory Identification #	410-194331-5	410-194331-4	410-194331-3	410-194331-13	410-194331-12	410-194331-11	410-194331-10
					Units	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
Group	**Chemical Name**	**Abbreviation**	**# Carbon Atoms**	**Mol. Weight (g/mol)**	**CAS Number**							
Perfluoroalkyl sulfonic acids	**Perfluorobutanesulfonic acid**	**PFBS**	**C-4**	**299.09**	**375-73-5**	**1.1 J**	**ND@1.5**	**ND@1.5**	**4.3**	**6.4**	**ND@1.5**	**ND@1.5**
	Perfluoropentanesulfonic acid	PFPeS	C-5	350.11	2706-91-4	0.92 J	ND@1.5	ND@1.5	2.4	2.6	ND@1.5	ND@1.5
	Perfluorohexanesulfonic acid	**PFHxS**	**C-6**	**399.11**	**355-46-4**	**9.7**	**ND@1.5**	**ND@1.5**	**16**	**8.8**	**ND@1.5**	**ND@1.5**
	Perfluoroheptanesulfonic acid	PFHpS	C-7	449.12	375-92-8	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluorooctanesulfonic acid	**PFOS**	**C-8**	**499.12**	**1763-23-1**	**2.2**	**ND@1.5**	**ND@1.5**	**24**	**ND@1.5**	**ND@1.5**	**ND@1.5**
	Perfluorononanesulfonic acid	PFNS	C-9	550.14	68259-12-1	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluorodecanesulfonic acid	PFDS	C-10	599.14	335-77-3	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluorododecanesulfonic acid	PFDoS	C-12	700.16	79780-39-5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
Perfluoroalkyl carboxylic acids	Perfluorobutanoic acid	PFBA	C-4	214.04	375-22-4	1.4 J	ND@2.9	ND@3.0	19	22	36	ND@2.9
	Perfluoropentanoic acid	PFPeA	C-5	264.05	2706-90-3	0.72 J	ND@1.5	ND@1.5	34	39	24	ND@1.5
	Perfluorohexanoic acid	PFHxA	C-6	314.05	307-24-4	2.5	ND@1.5	ND@1.5	30	47	ND@1.5	ND@1.5
	Perfluoroheptanoic acid	PFHpA	C-7	364.06	375-85-9	ND@1.5	ND@1.5	ND@1.5	9.6	13	ND@1.5	ND@1.5
	Perfluorooctanoic acid	**PFOA**	**C-8**	**414.07**	**335-67-1**	**1.5**	**ND@1.5**	**ND@1.5**	**29**	**22**	**ND@1.5**	**ND@1.5**
	Perfluorononanoic acid	**PFNA**	**C-9**	**464.08**	**375-95-1**	**ND@1.5**	**ND@1.5**	**ND@1.5**	**0.58 J**	**ND@1.5**	**ND@1.5**	**ND@1.5**
	Perfluorodecanoic acid	PFDA	C-10	514.08	335-76-2	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluoroundecanoic acid	PFUnA	C-11	564.09	2058-94-8	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluorododecanoic acid	PFDoA	C-12	614.10	307-55-1	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluorotridecanoic acid	PFTrDA	C-13	664.10	72629-94-8	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluorotetradecanoic acid	PFTeDA	C-14	714.11	376-06-7	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
Per- and Polyfluoroether carboxylic acids	**Hexafluoropropylene oxide dimer acid**	**HFPO-DA**	**C-6**	**330.05**	**13252-13-6**	**ND@1.5**	**ND@1.5**	**4.4**	**ND@1.5**	**ND@1.5**	**ND@1.5**	**ND@1.5**
	4,8-Dioxa-3H-perfluorononanoic acid	ADONA	C-7	378.07	919005-14-4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluoro-3-methoxypropanoic acid	PFMPA	C-4	230.04	377-73-1	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluoro-4-methoxybutanoic acid	PFMBA	C-5	280.04	863090-89-5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	C-5	296.04	151772-58-6	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
Fluorotelomer sulfonic acids	4:2 Fluorotelomer sulfonic acid	4:2 FTS	C-6	428.17	757124-72-4	ND@3.0	ND@2.9	ND@3.0	1.0 J	1.0 J	ND@2.9	ND@2.9
	6:2 Fluorotelomer sulfonic acid	6:2 FTS	C-6	428.17	27619-97-2	ND@3.0	ND@2.9	ND@3.0	23	4.8	ND@2.9	ND@2.9
	8:2 Fluorotelomer sulfonic acid	8:2 FTS	C-8	528.18	39108-34-4	ND@3.0	ND@2.9	ND@3.0	ND@3.1	ND@2.9	ND@2.9	ND@2.9
Fluorotelomer carboxylic acids	3:3 Fluorotelomer carboxylic acid	3:3 FTCA	C-6	242.09	356-02-5	ND@3.0	ND@2.9	ND@3.0	ND@3.1	ND@2.9	ND@2.9	ND@2.9
	5:3 Fluorotelomer carboxylic acid	5:3 FTCA	C-6	342.11	914637-49-3	ND@7.5	ND@7.4	ND@7.5	ND@7.6	ND@7.3	ND@7.3	ND@7.3
	7:3 Fluorotelomer carboxylic acid	7:3 FTCA	C-10	442.12	812-70-4	ND@7.5	ND@7.4	ND@7.5	ND@7.6	ND@7.3	ND@7.3	ND@7.3
Perfluorooctane sulfonamides	Perfluorooctane sulfonamide	PFOSA	C-8	499.15	754-91-6	ND@1.5	ND@1.5	ND@1.5	1.8	ND@1.5	ND@1.5	ND@1.5
	N-methylperfluorooctane sulfonamide	NMeFOSA	C-9	513.17	31506-32-8	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	N-ethylperfluorooctane sulfonamide	NEtFOSA	C-10	527.20	4151-50-2	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
Perfluorooctane sulfonamidoacetic acids	N-methyl perfluorooctane sulfonamidoacetic acid	N-MeFOSAA	C-8	571.21	2355-31-9	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	N-ethyl perfluorooctane sulfonamidoacetic acid	N-EtFOSAA	C-8	585.24	2991-50-6	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
Perfluorooctane sulfonamide ethanols	N-methylperfluorooctane sulfonamidoethanol	MeFOSE	C-10	557.23	24448-09-7	ND@7.5	ND@7.4	ND@7.5	ND@7.6	ND@7.3	ND@7.3	ND@7.3
	N-ethylperfluorooctane sulfonamidoethanol	EtFOSE	C-12	571.25	1691-99-2	ND@7.5	ND@7.4	ND@7.5	ND@7.6	ND@7.3	ND@7.3	ND@7.3
Ether sulfonic acids	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (F-53B Major)	9Cl-PF3ONS	C-8	532.58	756426-58-1	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor)	11Cl-PF3OUdS	C-10	632.60	763051-92-9	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5
	Perfluoro(2-ethoxyethane) sulfonic acid	PFEESA	C-4	316.10	113507-82-7	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5

NOTES:
Bold entries depict the 6 PFAS identified in the United States Environmental Protection Agency (USEPA) National Primary Drinking Water Regulation
"ng/L" - denotes concentration in units of nanograms per liter
"J" - signifies estimated concentration below Limit of Quantitation but above Method Detection Limit
"ND@X" - signifies "Not Detected at Limit of Quantitation X"
N/A - Not Applicable
GAC - Granular Activated Carbon
GTF - Groundwater Treatment Facility
Dup - denotes duplicate sample

GROUNDWATER SCIENCES CORPORATION and
GROUNDWATER SCIENCES, P.C.

Table G-1
Groundwater Treatment Facility PFAS Data Summary, 2024
Former IBM East Fishkill Remediation
East Fishkill, New York

					Sample Location	**PW-25 GTF**	**PW-25 GTF**	**PW-25 GTF**	**PW-25 GTF**	**B/384**	**B/384**	**B/384**	**B/384**
					Description	PW-25 Influent	PW-25 Inf. (Dup)	GAC Mid-Point	GTF Effluent	Sump Influent	Air Stripper Inf.	GAC Mid-Point	GTF Effluent
					Sample Designation	PW241028325A	NR241028316	PW241028325C	PW241028325F	SW241028384A	SW241028384B	SW241028384J	SW241028384L
					Sample Date	10/28/2024	10/28/2024	10/28/2024	10/28/2024	10/28/2024	10/28/2024	10/28/2024	10/28/2024
					Analytical Laboratory Identification #	410-194331-8	410-194331-9	410-194331-7	410-194331-6	410-194331-17	410-194331-16	410-194331-15	410-194331-14
					Units	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
Group	**Chemical Name**	**Abbreviation**	**# Carbon Atoms**	**Mol. Weight (g/mol)**	**CAS Number**								
Perfluoroalkyl sulfonic acids	**Perfluorobutanesulfonic acid**	**PFBS**	**C-4**	**299.09**	**375-73-5**	**2.0**	**2.0**	**ND@1.5**	**ND@1.5**	**2.2**	**2.2**	**ND@1.5**	**ND@1.4**
	Perfluoropentanesulfonic acid	PFPeS	C-5	350.11	2706-91-4	0.74 J	0.79 J	ND@1.5	ND@1.5	ND@1.5	0.38 J	ND@1.5	ND@1.4
	Perfluorohexanesulfonic acid	**PFHxS**	**C-6**	**399.11**	**355-46-4**	**7.8**	**8.2**	**ND@1.5**	**ND@1.5**	**3.0**	**4.0**	**ND@1.5**	**ND@1.4**
	Perfluoroheptanesulfonic acid	PFHpS	C-7	449.12	375-92-8	ND@1.4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4
	Perfluorooctanesulfonic acid	**PFOS**	**C-8**	**499.12**	**1763-23-1**	**17**	**17**	**ND@1.5**	**ND@1.5**	**55**	**52**	**ND@1.5**	**ND@1.4**
	Perfluorononanesulfonic acid	PFNS	C-9	550.14	68259-12-1	ND@1.4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4
	Perfluorodecanesulfonic acid	PFDS	C-10	599.14	335-77-3	ND@1.4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4
	Perfluorododecanesulfonic acid	PFDoS	C-12	700.16	79780-39-5	ND@1.4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4
Perfluoroalkyl carboxylic acids	Perfluorobutanoic acid	PFBA	C-4	214.04	375-22-4	3.6	3.9	ND@3.1	ND@2.9	12	13	19	ND@2.9
	Perfluoropentanoic acid	PFPeA	C-5	264.05	2706-90-3	2.9	2.8	ND@1.5	ND@1.5	5.5	6.9	0.79 J	ND@1.4
	Perfluorohexanoic acid	PFHxA	C-6	314.05	307-24-4	3.3	3.5	ND@1.5	ND@1.5	6.9	8.0	ND@1.5	ND@1.4
	Perfluoroheptanoic acid	PFHpA	C-7	364.06	375-85-9	1.2 J	1.3 J	ND@1.5	ND@1.5	3.5	3.6	ND@1.5	ND@1.4
	Perfluorooctanoic acid	**PFOA**	**C-8**	**414.07**	**335-67-1**	**7.4**	**7.6**	**ND@1.5**	**ND@1.5**	**17**	**17**	**ND@1.5**	**ND@1.4**
	Perfluorononanoic acid	**PFNA**	**C-9**	**464.08**	**375-95-1**	**ND@1.4**	**ND@1.5**	**ND@1.5**	**ND@1.5**	**1.5**	**1.4 J**	**ND@1.5**	**ND@1.4**
	Perfluorodecanoic acid	PFDA	C-10	514.08	335-76-2	ND@1.4	ND@1.5	ND@1.5	ND@1.5	0.42 J	0.39 J	ND@1.5	ND@1.4
	Perfluoroundecanoic acid	PFUnA	C-11	564.09	2058-94-8	ND@1.4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4
	Perfluorododecanoic acid	PFDoA	C-12	614.10	307-55-1	ND@1.4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4
	Perfluorotridecanoic acid	PFTrDA	C-13	664.10	72629-94-8	ND@1.4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4
	Perfluorotetradecanoic acid	PFTeDA	C-14	714.11	376-06-7	ND@1.4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4
Per- and Polyfluoroether carboxylic acids	**Hexafluoropropylene oxide dimer acid**	**HFPO-DA**	**C-6**	**330.05**	**13252-13-6**	**ND@1.4**	**ND@1.5**	**ND@1.5**	**ND@1.5**	**ND@1.5**	**ND@1.5**	**ND@1.5**	**ND@1.4**
	4,8-Dioxa-3H-perfluorononanoic acid	ADONA	C-7	378.07	919005-14-4	ND@1.4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4
	Perfluoro-3-methoxypropanoic acid	PFMPA	C-4	230.04	377-73-1	ND@1.4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4
	Perfluoro-4-methoxybutanoic acid	PFMBA	C-5	280.04	863090-89-5	ND@1.4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4
	Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	C-5	296.04	151772-58-6	ND@1.4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4
Fluorotelomer sulfonic acids	4:2 Fluorotelomer sulfonic acid	4:2 FTS	C-6	428.17	757124-72-4	ND@2.9	ND@3.0	ND@3.1	ND@2.9	ND@2.9	ND@3.0	ND@2.9	ND@2.9
	6:2 Fluorotelomer sulfonic acid	6:2 FTS	C-6	428.17	27619-97-2	ND@2.9	ND@3.0	ND@3.1	ND@2.9	ND@2.9	ND@3.0	ND@2.9	ND@2.9
	8:2 Fluorotelomer sulfonic acid	8:2 FTS	C-8	528.18	39108-34-4	ND@2.9	ND@3.0	ND@3.1	ND@2.9	ND@2.9	ND@3.0	ND@2.9	ND@2.9
Fluorotelomer carboxylic acids	3:3 Fluorotelomer carboxylic acid	3:3 FTCA	C-6	242.09	356-02-5	ND@2.9	ND@3.0	ND@3.1	ND@2.9	ND@2.9	ND@3.0	ND@2.9	ND@2.9
	5:3 Fluorotelomer carboxylic acid	5:3 FTCA	C-6	342.11	914637-49-3	ND@7.2	ND@7.6	ND@7.6	ND@7.3	ND@7.3	ND@7.4	ND@7.3	ND@7.2
	7:3 Fluorotelomer carboxylic acid	7:3 FTCA	C-10	442.12	812-70-4	ND@7.2	ND@7.6	ND@7.6	ND@7.3	ND@7.3	ND@7.4	ND@7.3	ND@7.2
Perfluorooctane sulfonamides	Perfluorooctane sulfonamide	PFOSA	C-8	499.15	754-91-6	4.6	4.9	0.39 J	ND@1.5	8.9	8.0	ND@1.5	ND@1.4
	N-methylperfluorooctane sulfonamide	NMeFOSA	C-9	513.17	31506-32-8	ND@1.4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4
	N-ethylperfluorooctane sulfonamide	NEtFOSA	C-10	527.20	4151-50-2	ND@1.4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4
Perfluorooctane sulfonamidoacetic acids	N-methyl perfluorooctane sulfonamidoacetic acid	N-MeFOSAA	C-8	571.21	2355-31-9	ND@1.4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4
	N-ethyl perfluorooctane sulfonamidoacetic acid	N-EtFOSAA	C-8	585.24	2991-50-6	3.5	3.7	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4
Perfluorooctane sulfonamide ethanols	N-methylperfluorooctane sulfonamidoethanol	MeFOSE	C-10	557.23	24448-09-7	ND@7.2	ND@7.6	ND@7.6	ND@7.3	ND@7.3	ND@7.4	ND@7.3	ND@7.2
	N-ethylperfluorooctane sulfonamidoethanol	EtFOSE	C-12	571.25	1691-99-2	ND@7.2	ND@7.6	ND@7.6	ND@7.3	ND@7.3	ND@7.4	ND@7.3	ND@7.2
Ether sulfonic acids	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (F-53B Major)	9Cl-PF3ONS	C-8	532.58	756426-58-1	ND@1.4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor)	11Cl-PF3OUdS	C-10	632.60	763051-92-9	ND@1.4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4
	Perfluoro(2-ethoxyethane) sulfonic acid	PFEESA	C-4	316.10	113507-82-7	ND@1.4	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.5	ND@1.4

NOTES:
Bold entries depict the 6 PFAS identified in the United States Environmental Protection Agency (USEPA) National Primary Drinking Water Regulation
"ng/L" - denotes concentration in units of nanograms per liter
"J" - signifies estimated concentration below Limit of Quantitation but above Method Detection Limit
"ND@X" - signifies "Not Detected at Limit of Quantitation X"
N/A - Not Applicable
GAC - Granular Activated Carbon
GTF - Groundwater Treatment Facility
Dup - denotes duplicate sample

GROUNDWATER SCIENCES CORPORATION and
GROUNDWATER SCIENCES, P.C.

Appendix H

Quality Assurance/Quality Control Analytical Data: January 1, 2024 to December 31, 2024
Table H-1: Quality Assurance/Quality Control PFAS Data Summary, 2024

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK
Sample Description		WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND
Sample Date		01/15/2024	01/17/2024	01/18/2024	04/05/2024	04/08/2024	04/09/2024
Laboratory Sample I.D.		410157551-2	410157960-2	410157960-8	410166911-2	410167232-2	410167232-10
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK
Sample Description		WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND
Sample Date		04/10/2024	04/11/2024	04/12/2024	04/15/2024	04/16/2024	04/17/2024
Laboratory Sample I.D.		410167736-2	410167736-8	410167821-2	410168158-2	410168158-9	410168306-2
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK
Sample Description		WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	SUBM PUMP
Sample Date		04/19/2024	04/22/2024	04/23/2024	04/24/2024	04/25/2024	04/26/2024
Laboratory Sample I.D.		410168684-2	410169069-2	410169392-4	410169699-2	410169655-3	410169656-3
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK
Sample Description		SUBM PUMP	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	SUBM PUMP
Sample Date		04/29/2024	04/30/2024	05/06/2024	05/07/2024	05/08/2024	05/09/2024
Laboratory Sample I.D.		410170028-2	410170027-8	410171012-2	410171012-7	410171438-2	410171438-6
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK
Sample Description		SUBM PUMP	WTR LVL IND	SUBM PUMP	SUBM PUMP	SUBM PUMP	WTR LVL IND
Sample Date		05/10/2024	05/28/2024	05/29/2024	05/30/2024	05/31/2024	07/08/2024
Laboratory Sample I.D.		410171608-2	410173805-2	410173805-8	410174124-2	410174124-5	410179203-2
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK
Sample Description		WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND
Sample Date		07/09/2024	10/03/2024	10/04/2024	10/11/2024	10/14/2024	10/15/2024
Laboratory Sample I.D.		410179203-10	410191281-2	410191281-9	410192222-2	410192664-2	410192664-11
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	1.9 J	2.2 J	3.3 J	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK
Sample Description		WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND	WTR LVL IND
Sample Date		10/16/2024	10/17/2024	10/18/2024	10/21/2024	10/22/2024	10/23/2024
Laboratory Sample I.D.		410193009-2	410193009-9	410193369-2	410193537-2	410193537-7	410193911-2
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK
Sample Description		WTR LVL IND	SUBM PUMP	WTR LVL IND	SUBM PUMP	SUBM PUMP	SUBM PUMP
Sample Date		10/24/2024	10/25/2024	10/29/2024	10/30/2024	10/31/2024	11/01/2024
Laboratory Sample I.D.		410193911-7	410194095-2	410194697-2	410194697-9	410195041-2	410195041-7
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	2.6 J	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK	EQ RINSE BLK
Sample Description		SUBM PUMP	SUBM PUMP	SUBM PUMP	SUBM PUMP	SUBM PUMP	SUBM PUMP
Sample Date		11/06/2024	11/07/2024	11/08/2024	11/12/2024	11/14/2024	12/05/2024
Laboratory Sample I.D.		410195917-2	410195917-9	410196130-2	410196464-2	410196886-2	410199509-2
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	1.7 J	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sample Description		NO. 1	NO. 1	NO. 1	NO. 1	NO. 1	NO. 2
Sample Date		01/02/2024	01/03/2024	01/15/2024	01/17/2024	02/01/2024	02/01/2024
Laboratory Sample I.D.		410156406-1	24A0275-02	410157551-1	410157960-1	410159527-1	24B0084-01
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@1.0
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@1.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@1.0
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@1.0
ACETONE	ug/l	ND@5.0	6.5	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@1.0
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@1.0
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@1.0
ETHYLBENZENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@1.0
M,P-XYLENE	ug/l	ND@0.5	ND@2.0	ND@0.5	ND@0.5	ND@0.5	ND@2.0
O-XYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@1.0
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@1.0
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@1.0
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@1.0
VINYL CHLORIDE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@1.0

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sample Description		NO. 1	NO. 1	NO. 1	NO. 2	NO. 1	NO. 2
Sample Date		02/06/2024	02/29/2024	03/04/2024	03/05/2024	04/01/2024	04/02/2024
Laboratory Sample I.D.		410159991-1	410162530-1	410162906-1	24C0341-01	410166353-1	24D0224-01
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@2.0	ND@0.5	ND@2.0
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sample Description		NO. 1	NO. 1	NO. 1	NO. 1	NO. 1	NO. 1
Sample Date		04/05/2024	04/08/2024	04/10/2024	04/12/2024	04/15/2024	04/17/2024
Laboratory Sample I.D.		410166911-1	410167232-1	410167736-1	410167821-1	410168158-1	410168306-1
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sample Description		NO. 1	NO. 1	NO. 2	NO. 1	NO. 2	NO. 1
Sample Date		04/19/2024	04/22/2024	04/22/2024	04/23/2024	04/23/2024	04/24/2024
Laboratory Sample I.D.		410168684-1	410169069-1	410169062-1	410169391-1	410169392-1	410169699-1
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sample Description		NO. 2	NO. 1	NO. 2	NO. 1	NO. 1	NO. 1
Sample Date		04/24/2024	04/25/2024	04/25/2024	04/26/2024	04/29/2024	04/29/2024
Laboratory Sample I.D.		410169700-1	410169656-1	410169655-1	410169657-1	410170027-1	410170028-1
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sample Description		NO. 1	NO. 2	NO. 1	NO. 1	NO. 1	NO. 1
Sample Date		05/01/2024	05/02/2024	05/06/2024	05/08/2024	05/10/2024	05/28/2024
Laboratory Sample I.D.		410170415-1	24E0371-01	410171012-1	410171438-1	410171608-1	410173805-1
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@2.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sample Description		NO. 1	NO. 1	NO. 2	NO. 1	NO. 2	NO. 1
Sample Date		05/30/2024	06/05/2024	06/05/2024	07/01/2024	07/02/2024	07/08/2024
Laboratory Sample I.D.		410174124-1	410175065-1	24F0539-01	410178637-1	24G0321-01	410179203-1
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@2.0	ND@0.5	ND@2.0	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@1.0	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sample Description		NO. 1	NO. 2	NO. 1	NO. 1	NO. 1	NO. 1
Sample Date		08/01/2024	08/01/2024	08/14/2024	09/05/2024	09/06/2024	10/01/2024
Laboratory Sample I.D.		410182667-1	24H0108-01	410184307-1	410187236-1	24I0777-01	410190843-1
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@1.0	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@1.0	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@1.0	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@1.0	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@1.0	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@1.0	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@1.0	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@1.0	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@2.0	ND@0.5	ND@0.5	ND@2.0	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@1.0	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@1.0	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@1.0	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@1.0	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@1.0	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sample Description		NO. 1	NO. 1	NO. 1	NO. 1	NO. 1	NO. 1
Sample Date		10/02/2024	10/03/2024	10/11/2024	10/14/2024	10/16/2024	10/18/2024
Laboratory Sample I.D.		410190840-1	410191281-1	410192222-1	410192664-1	410193009-1	410193369-1
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sample Description		NO. 1	NO. 1	NO. 1	NO. 2	NO. 1	NO. 1
Sample Date		10/21/2024	10/23/2024	10/25/2024	10/25/2024	10/29/2024	10/31/2024
Laboratory Sample I.D.		410193537-1	410193911-1	410194095-1	24J3747-01	410194697-1	410195041-1
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@2.0	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sample Description		NO. 1	NO. 2	NO. 1	NO. 1	NO. 1	NO. 1
Sample Date		11/04/2024	11/04/2024	11/06/2024	11/08/2024	11/12/2024	11/14/2024
Laboratory Sample I.D.		410195482-1	70320008001	410195917-1	410196130-1	410196464-1	410196886-1
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@2.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Sample Location		TRIP BLANK	TRIP BLANK	TRIP BLANK
Sample Description		NO. 1	NO. 1	NO. 1
Sample Date		12/02/2024	12/03/2024	12/05/2024
Laboratory Sample I.D.		410199017-1	70325228001	410199509-1
Sample Comment Codes				
Parameter	**Units**			
Base/Neutral Extractables				
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@1.0	ND@0.5
Volatile Organics				
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@1.0	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@1.0	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@2.0	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@1.0	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@1.0	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@1.0	ND@0.5

Former IBM East Fishkill Remediation
Quality Assurance/Quality Control Analytical Data
January 1, 2024 - December 31, 2024

Explanation of Reporting Conventions and Key to Comment Codes

Reporting Conventions

NA	Not Analyzed
ND@X	Not Detected at Detection Limit X

Code	Explanation
J	Estimated value - compound meets identification criteria, but result is less than the reporting limit

Table H-1
Quality Assurance / Quality Control PFAS Data Summary, 2024
Former IBM East Fishkill Remediation
East Fishkill, New York

					Sample Location	**Trip Blank**	**Trip Blank**	**Trip Blank**	**Equip. Blank**	**Equip. Blank**	**Field Blank**	**Field Blank**	**Field Blank**	**Field Blank**
					Description	**N/A**	**N/A**	**N/A**	**WLID**	**WLID**	**At GW-061**	**At GW-064**	**At GW-066**	**At GTF-25**
					Sample Designation	ETB410101011	ETB410111012	ETB410281028	EB241010303	EB241011303	FB241010CJX	FB241010CJS	FB241011CJS	FB241028301
					Sample Date	10/10/2024	10/11/2024	10/28/2024	10/10/2024	10/11/2024	10/10/2024	10/10/2024	10/11/2024	10/28/2024
					Analytical Laboratory Identification #	410-192076-1	410-192246-1	410-194331-1	410-192076-5	410-192246-2	410-192076-7	410-192076-2	410-192246-4	410-194331-2
					Units	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
Group	**Chemical Name**	**Abbreviation**	**# Carbon Atoms**	**Mol. Weight (g/mol)**	**CAS Number**	**Analytical Laboratory Results**								
Perfluoroalkyl sulfonic acids	**Perfluorobutanesulfonic acid**	**PFBS**	**C-4**	**299.09**	**375-73-5**	**ND@1.9**	**ND@1.8**	**ND@1.9**	**ND@1.5**	**ND@1.5**	**ND@1.5**	**ND@1.6**	**ND@1.6**	**ND@1.5**
	Perfluoropentanesulfonic acid	PFPeS	C-5	350.11	2706-91-4	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	Perfluorohexanesulfonic acid	**PFHxS**	**C-6**	**399.11**	**355-46-4**	**ND@1.9**	**ND@1.8**	**ND@1.9**	**ND@1.5**	**ND@1.5**	**ND@1.5**	**ND@1.6**	**ND@1.6**	**ND@1.5**
	Perfluoroheptanesulfonic acid	PFHpS	C-7	449.12	375-92-8	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	Perfluorooctanesulfonic acid	**PFOS**	**C-8**	**499.12**	**1763-23-1**	**ND@1.9**	**ND@1.8**	**ND@1.9**	**ND@1.5**	**ND@1.5**	**ND@1.5**	**ND@1.6**	**ND@1.6**	**ND@1.5**
	Perfluorononanesulfonic acid	PFNS	C-9	550.14	68259-12-1	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	Perfluorodecanesulfonic acid	PFDS	C-10	599.14	335-77-3	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	Perfluorododecanesulfonic acid	PFDoS	C-12	700.16	79780-39-5	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
Perfluoroalkyl carboxylic acids	Perfluorobutanoic acid	PFBA	C-4	214.04	375-22-4	ND@3.8	ND@3.6	ND@3.8	ND@3.0	ND@3.0	ND@3.0	ND@3.3	ND@3.1	ND@3.0
	Perfluoropentanoic acid	PFPeA	C-5	264.05	2706-90-3	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	Perfluorohexanoic acid	PFHxA	C-6	314.05	307-24-4	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	Perfluoroheptanoic acid	PFHpA	C-7	364.06	375-85-9	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	Perfluorooctanoic acid	**PFOA**	**C-8**	**414.07**	**335-67-1**	**ND@1.9**	**ND@1.8**	**ND@1.9**	**ND@1.5**	**ND@1.5**	**ND@1.5**	**ND@1.6**	**ND@1.6**	**ND@1.5**
	Perfluorononanoic acid	**PFNA**	**C-9**	**464.08**	**375-95-1**	**ND@1.9**	**ND@1.8**	**ND@1.9**	**ND@1.5**	**ND@1.5**	**ND@1.5**	**ND@1.6**	**ND@1.6**	**ND@1.5**
	Perfluorodecanoic acid	PFDA	C-10	514.08	335-76-2	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	Perfluoroundecanoic acid	PFUnA	C-11	564.09	2058-94-8	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	Perfluorododecanoic acid	PFDoA	C-12	614.10	307-55-1	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	Perfluorotridecanoic acid	PFTrDA	C-13	664.10	72629-94-8	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	Perfluorotetradecanoic acid	PFTeDA	C-14	714.11	376-06-7	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
Per- and Polyfluoroether carboxylic acids	**Hexafluoropropylene oxide dimer acid**	**HFPO-DA**	**C-6**	**330.05**	**13252-13-6**	**ND@2.8**	**ND@2.7**	**ND@1.9**	**ND@2.3**	**ND@2.2**	**ND@2.3**	**ND@2.5**	**ND@2.3**	**ND@1.5**
	4,8-Dioxa-3H-perfluorononanoic acid	ADONA	C-7	378.07	919005-14-4	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	Perfluoro-3-methoxypropanoic acid	PFMPA	C-4	230.04	377-73-1	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	Perfluoro-4-methoxybutanoic acid	PFMBA	C-5	280.04	863090-89-5	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	C-5	296.04	151772-58-6	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
Fluorotelomer sulfonic acids	4:2 Fluorotelomer sulfonic acid	4:2 FTS	C-6	428.17	757124-72-4	ND@3.8	ND@3.6	ND@3.8	ND@3.0	ND@3.0	ND@3.0	ND@3.3	ND@3.1	ND@3.0
	6:2 Fluorotelomer sulfonic acid	6:2 FTS	C-6	428.17	27619-97-2	ND@3.8	ND@3.6	ND@3.8	ND@3.0	ND@3.0	ND@3.0	ND@3.3	ND@3.1	ND@3.0
	8:2 Fluorotelomer sulfonic acid	8:2 FTS	C-8	528.18	39108-34-4	ND@3.8	ND@3.6	ND@3.8	ND@3.0	ND@3.0	ND@3.0	ND@3.3	ND@3.1	ND@3.0
Fluorotelomer carboxylic acids	3:3 Fluorotelomer carboxylic acid	3:3 FTCA	C-6	242.09	356-02-5	ND@3.8	ND@3.6	ND@3.8	ND@3.0	ND@3.0	ND@3.0	ND@3.3	ND@3.1	ND@3.0
	5:3 Fluorotelomer carboxylic acid	5:3 FTCA	C-6	342.11	914637-49-3	ND@9.4	ND@9.1	ND@9.4	ND@7.6	ND@7.5	ND@7.6	ND@8.2	ND@7.8	ND@7.5
	7:3 Fluorotelomer carboxylic acid	7:3 FTCA	C-10	442.12	812-70-4	ND@9.4	ND@9.1	ND@9.4	ND@7.6	ND@7.5	ND@7.6	ND@8.2	ND@7.8	ND@7.5
Perfluorooctane-sulfonamides	Perfluorooctane sulfonamide	PFOSA	C-8	499.15	754-91-6	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	N-methylperfluorooctane sulfonamide	NMeFOSA	C-9	513.17	31506-32-8	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	N-ethylperfluorooctane sulfonamide	NEtFOSA	C-10	527.20	4151-50-2	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
Perfluorooctane-sulfonamidoacetic acids	N-methyl perfluorooctane sulfonamidoacetic acid	N-MeFOSAA	C-8	571.21	2355-31-9	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	N-ethyl perfluorooctane sulfonamidoacetic acid	N-EtFOSAA	C-8	585.24	2991-50-6	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
Perfluorooctane sulfonamide ethanols	N-methylperfluorooctane sulfonamidoethanol	MeFOSE	C-10	557.23	24448-09-7	ND@9.4	ND@9.1	ND@9.4	ND@7.6	ND@7.5	ND@7.6	ND@8.2	ND@7.8	ND@7.5
	N-ethylperfluorooctane sulfonamidoethanol	EtFOSE	C-12	571.25	1691-99-2	ND@9.4	ND@9.1	ND@9.4	ND@7.6	ND@7.5	ND@7.6	ND@8.2	ND@7.8	ND@7.5
Ether sulfonic acids	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (F-53B Major)	9Cl-PF3ONS	C-8	532.58	756426-58-1	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor)	11Cl-PF3OUdS	C-10	632.60	763051-92-9	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5
	Perfluoro(2-ethoxyethane) sulfonic acid	PFEESA	C-4	316.10	113507-82-7	ND@1.9	ND@1.8	ND@1.9	ND@1.5	ND@1.5	ND@1.5	ND@1.6	ND@1.6	ND@1.5

NOTES:
Bold entries depict the 6 PFAS identified in the United States Environmental Protection Agency (USEPA) National Primary Drinking Water Regulation
"ng/L" - denotes concentration in units of nanograms per liter
"J" - signifies estimated concentration below Limit of Quantitation but above Method Detection Limit
"ND@X" - signifies "Not Detected at Limit of Quantitation X"
N/A - Not Applicable
WLID - Water Level Indicator

GROUNDWATER SCIENCES CORPORATION and
GROUNDWATER SCIENCES, P.C.

Appendix I

Groundwater Treatment Analytical Data (Organics): January 1, 2024 to December 31, 2024
Groundwater Treatment Analytical Data (Inorganics): January 1, 2024 to December 31, 2024

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		210C MID	210C MID	210C MID	210C MID	210C MID	210C MID
Sample Description		PW-1 GAC	PW-1 GAC	PW-1 GAC	PW-1 GAC	PW-1 GAC	PW-1 GAC
Sample Date		01/02/2024	02/29/2024	03/05/2024	04/02/2024	05/01/2024	06/06/2024
Laboratory Sample I.D.		410156406-3	410162530-3	410162906-15	410166353-14	410170415-3	410175065-10
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	1.8	1.0	1.4	1.9	2.1	2.0
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.10 J	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	0.45 J	0.29 J	0.30 J	0.50	0.64	0.74
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		210E MID	210E MID	210E MID	210E MID	210E MID	210E MID
Sample Description		PW-1 GAC	PW-1 GAC	PW-1 GAC	PW-1 GAC	PW-1 GAC	PW-1 GAC
Sample Date		07/02/2024	08/14/2024	09/06/2024	10/02/2024	11/04/2024	12/02/2024
Laboratory Sample I.D.		410178637-14	410184307-3	410187236-11	410190840-3	410195482-3	410199017-3
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0 J	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		210F	210F	210F	210F	210F	210F
Sample Description		PW-1 GTF EF	PW-1 GTF EF	PW-1 GTF EF	PW-1 GTF EF	PW-1 GTF EF	PW-1 GTF EF
Sample Date		01/02/2024	02/29/2024	03/05/2024	04/02/2024	05/01/2024	06/06/2024
Laboratory Sample I.D.		410156406-2	410162530-2	410162906-14	410166353-13	410170415-2	410175065-9
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		210F	210F	210F	210F	210F	210F
Sample Description		PW-1 GTF EF	PW-1 GTF EF	PW-1 GTF EF	PW-1 GTF EF	PW-1 GTF EF	PW-1 GTF EF
Sample Date		07/02/2024	08/14/2024	09/06/2024	10/02/2024	11/04/2024	12/02/2024
Laboratory Sample I.D.		410178637-13	410184307-2	410187236-10	410190840-2	410195482-2	410199017-2
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		220RC	220RC	220RC	220RC	220RC	220RC
Sample Description		PW-2 RAY EF	PW-2 RAY EF	PW-2 RAY EF	PW-2 RAY EF	PW-2 RAY EF	PW-2 RAY EF
Sample Date		01/03/2024	02/01/2024	03/05/2024	04/02/2024	05/02/2024	06/05/2024
Laboratory Sample I.D.		24A0275-01	24B0084-02	24C0341-02	24D0224-02	24E0371-02	24F0539-02
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	0.59 J	0.71 J	0.61 J	ND@1.0	ND@1.0	0.74 J
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	130	130	170	74	140	160
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	10	18	18	7.8	14	15
ACETONE	ug/l	6.1	9.1	5.0 J	ND@5.0	4.5 J	ND@5.0
CHLOROBENZENE	ug/l	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0
DICHLORODIFLUOROMETHANE	ug/l	ND@1.0	1.1	0.80 J	ND@1.0	0.57 J	0.49 J
ETHYLBENZENE	ug/l	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0
M,P-XYLENE	ug/l	ND@2.0	ND@2.0	ND@2.0	ND@2.0	ND@2.0	ND@2.0
O-XYLENE	ug/l	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0
TETRACHLOROETHYLENE	ug/l	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0
TRICHLOROETHYLENE	ug/l	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0
TRICHLOROFLUOROMETHANE	ug/l	1.2	2.0	2.5	1.1	1.6	1.8
VINYL CHLORIDE	ug/l	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		220RC	220RC	220RC	220RC	220RC	220RC
Sample Description		PW-2 RAY EF	PW-2 RAY EF	PW-2 RAY EF	PW-2 RAY EF	PW-2 RAY EF	PW-2 RAY EF
Sample Date		07/02/2024	08/01/2024	09/06/2024	10/25/2024	11/04/2024	12/03/2024
Laboratory Sample I.D.		24G0321-02	24H0108-02	24I0777-02	24J3747-02	70320008002	70325228002
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	0.77 J	0.54 J	ND@1.0	ND@1.0	ND@1.0	ND@1.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	150	140	130	140	171	164
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	15	14	13	15	17.2	18.3
ACETONE	ug/l	ND@5.0	4.6 J	ND@5.0	4.9 J	3.4 J	4.9 J
CHLOROBENZENE	ug/l	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0
DICHLORODIFLUOROMETHANE	ug/l	0.58 J	0.96 J	0.53 J	ND@1.0	ND@1.0	ND@1.0
ETHYLBENZENE	ug/l	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0
M,P-XYLENE	ug/l	ND@2.0	ND@2.0	ND@2.0	ND@2.0	ND@2.0	ND@2.0
O-XYLENE	ug/l	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0
TETRACHLOROETHYLENE	ug/l	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0
TRICHLOROETHYLENE	ug/l	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0
TRICHLOROFLUOROMETHANE	ug/l	1.7	1.8	1.6	1.8	2.1	2.1
VINYL CHLORIDE	ug/l	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0	ND@1.0

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		220RE	220RE	220RE	220RE	220RE	220RE
Sample Description		PW-2 PCAR EF	PW-2 PCAR EF	PW-2 PCAR EF	PW-2 PCAR EF	PW-2 PCAR EF	PW-2 PCAR EF
Sample Date		01/03/2024	02/01/2024	03/05/2024	04/02/2024	05/02/2024	06/05/2024
Laboratory Sample I.D.		410156406-13	410159527-4	410162906-7	410166353-20	410170415-10	410175065-4
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	0.73	0.77	0.65 J	0.72	0.75	0.80
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	78	85	90	84	76	87
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	9.5	14	9.6	10	11	11
ACETONE	ug/l	ND@5.0	ND@5.0	ND@10	ND@5.0	ND@5.0	5.5
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	0.87	0.66	0.45 J	0.89	1.1	2.5
DICHLORODIFLUOROMETHANE	ug/l	0.32 J	0.37 J	0.31 J	ND@0.5	0.31 J	0.29 J
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@1.0	0.26 J	0.40 J	0.54
TRICHLOROETHYLENE	ug/l	1.1	1.3	1.2	1.4	1.8	1.9
TRICHLOROFLUOROMETHANE	ug/l	1.4	1.5	1.0	1.0	1.2	1.2
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@1.0	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		220RE	220RE	220RE	220RE	220RE	220RE
Sample Description		PW-2 PCAR EF	PW-2 PCAR EF	PW-2 PCAR EF	PW-2 PCAR EF	PW-2 PCAR EF	PW-2 PCAR EF
Sample Date		07/02/2024	08/01/2024	09/06/2024	10/01/2024	11/04/2024	12/03/2024
Laboratory Sample I.D.		410178637-19	410182667-4	410187236-15	410190843-10	410195482-10	410199017-17
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	0.77	0.85	0.78	0.87	0.95	0.83
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	83	77	79	120	130	120
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	11	13	10	13	16	17
ACETONE	ug/l	ND@5.0	ND@5.0	6.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	1.2	8.2	6.1	2.8	2.7	1.2
DICHLORODIFLUOROMETHANE	ug/l	0.28 J	0.39 J	0.31 J	0.47 J	0.64	0.60
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	0.68	17	17	15	14	11
TRICHLOROETHYLENE	ug/l	2.1	5.7	6.1	5.5	5.0	3.5
TRICHLOROFLUOROMETHANE	ug/l	1.2	1.5	1.2	1.7	2.0	1.7
VINYL CHLORIDE	ug/l	ND@0.5	0.16 J	0.14 J	ND@0.5	0.11 J	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		220RI MID	220RI MID	220RI MID	220RI MID	220RI MID	220RI MID
Sample Description		PW-2 GAC	PW-2 GAC	PW-2 GAC	PW-2 GAC	PW-2 GAC	PW-2 GAC
Sample Date		01/03/2024	02/01/2024	03/05/2024	04/02/2024	05/02/2024	06/05/2024
Laboratory Sample I.D.		410156406-12	410159527-3	410162906-6	410166353-19	410170415-9	410175065-3
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	0.18 J	0.37 J	0.86	1.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	0.15 J	ND@0.5	0.24 J	0.27 J
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		220RI MID	220RI MID	220RI MID	220RI MID	220RI MID	220RI MID
Sample Description		PW-2 GAC	PW-2 GAC	PW-2 GAC	PW-2 GAC	PW-2 GAC	PW-2 GAC
Sample Date		07/02/2024	08/01/2024	09/06/2024	10/01/2024	11/04/2024	12/03/2024
Laboratory Sample I.D.		410178637-18	410182667-3	410187236-14	410190843-9	410195482-9	410199017-16
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.11 J
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.12 J	9.1	45	43	45	39
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	2.5	14	18	13	13	13
ACETONE	ug/l	ND@5.0	ND@5.0	3.7 J	3.9 J	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.086 J
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	0.60	0.53	0.59	0.56	0.50
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	0.21 J	0.76	0.82	0.87	0.76
VINYL CHLORIDE	ug/l	ND@0.5	1.1	1.8	0.97	0.58	0.44 J

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		220RJ	220RJ	220RJ	220RJ	220RJ	220RJ
Sample Description		PW-2 GTF EF	PW-2 GTF EF	PW-2 GTF EF	PW-2 GTF EF	PW-2 GTF EF	PW-2 GTF EF
Sample Date		01/03/2024	02/01/2024	03/05/2024	04/02/2024	05/02/2024	06/05/2024
Laboratory Sample I.D.		410156406-11	410159527-2	410162906-5	410166353-18	410170415-8	410175065-2
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		220RJ	220RJ	220RJ	220RJ	220RJ	220RJ
Sample Description		PW-2 GTF EF	PW-2 GTF EF	PW-2 GTF EF	PW-2 GTF EF	PW-2 GTF EF	PW-2 GTF EF
Sample Date		07/02/2024	08/01/2024	09/06/2024	10/01/2024	11/04/2024	12/03/2024
Laboratory Sample I.D.		410178637-17	410182667-2	410187236-13	410190843-8	410195482-8	410199017-15
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.11 J
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.28 J	0.28 J
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	0.11 J	0.38 J	0.78	1.0

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		325C MID	325C MID	325C MID	325C MID	325C MID	325C MID
Sample Description		PW-25 GAC	PW-25 GAC	PW-25 GAC	PW-25 GAC	PW-25 GAC	PW-25 GAC
Sample Date		01/02/2024	02/01/2024	03/04/2024	04/01/2024	05/01/2024	06/05/2024
Laboratory Sample I.D.		410156406-7	410159527-7	410162906-3	410166353-10	410170415-6	410175065-7
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.33 J	3.4	8.2	11	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.10 J	0.36 J	0.48 J	0.43 J	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	1.1 J	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	0.84	5.6	13	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	0.23 J	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	0.23 J	0.25 J	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	0.11 J	0.12 J	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		325C MID	325C MID	325E MID	325E MID	325E MID	325E MID
Sample Description		PW-25 GAC	PW-25 GAC	PW-25 GAC	PW-25 GAC	PW-25 GAC	PW-25 GAC
Sample Date		11/04/2024	12/02/2024	07/01/2024	08/01/2024	09/05/2024	10/02/2024
Laboratory Sample I.D.		410195482-6	410199017-13	410178637-10	410182667-7	410187236-8	410190840-7
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	0.97	1.7 J	8.5	16	19
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	0.23 J	0.39 J	0.82	0.76	0.72
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0 J	ND@5.0	ND@5.0	1.6 J
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	0.096 J	1.6 J	9.6	23	29
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	0.44 J	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	0.14 J	ND@0.5	0.11 J	1.1
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5 J	0.33 J	0.47 J	0.52
VINYL CHLORIDE	ug/l	0.10 J	0.14 J	0.11 J	0.12 J	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		325F	325F	325F	325F	325F	325F
Sample Description		PW-25 GTF EF	PW-25 GTF EF	PW-25 GTF EF	PW-25 GTF EF	PW-25 GTF EF	PW-25 GTF EF
Sample Date		01/02/2024	02/01/2024	03/04/2024	04/01/2024	05/01/2024	06/05/2024
Laboratory Sample I.D.		410156406-6	410159527-6	410162906-2	410166353-9	410170415-5	410175065-6
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		325F	325F	325F	325F	325F	325F
Sample Description		PW-25 GTF EF	PW-25 GTF EF	PW-25 GTF EF	PW-25 GTF EF	PW-25 GTF EF	PW-25 GTF EF
Sample Date		07/01/2024	08/01/2024	09/05/2024	10/02/2024	11/04/2024	12/02/2024
Laboratory Sample I.D.		410178637-9	410182667-6	410187236-7	410190840-6	410195482-5	410199017-12
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0 J	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5 J	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		384A	384A	384A	384A	384A	384A
Sample Description		AREA A INFL	AREA A INFL	AREA A INFL	AREA A INFL	AREA A INFL	AREA A INFL
Sample Date		01/03/2024	02/06/2024	03/04/2024	04/01/2024	05/02/2024	06/06/2024
Laboratory Sample I.D.		410156406-19	410159991-6	410162906-13	410166353-6	410170415-16	410175065-16
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@50	ND@50	ND@50	ND@25	ND@25	22 J
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@50	ND@50	ND@50	ND@25	ND@25	ND@50
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	17 J	31 J	42 J	31	34	140
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@50	ND@50	ND@50	ND@25	ND@25	ND@50
ACETONE	ug/l	ND@500	ND@500	ND@500	ND@250	ND@250	ND@500
CHLOROBENZENE	ug/l	ND@50	ND@50	ND@50	ND@25	ND@25	22 J
CIS-1,2-DICHLOROETHYLENE	ug/l	19 J	32 J	44 J	30	32	43 J
DICHLORODIFLUOROMETHANE	ug/l	ND@50	ND@50	ND@50	ND@25	ND@25	ND@50
ETHYLBENZENE	ug/l	ND@50	ND@50	ND@50	ND@25	ND@25	80
M,P-XYLENE	ug/l	ND@50	ND@50	ND@50	ND@25	ND@25	220
O-XYLENE	ug/l	ND@50	ND@50	ND@50	ND@25	ND@25	89
TETRACHLOROETHYLENE	ug/l	4000	6400	9300	5800	8800	120000
TRICHLOROETHYLENE	ug/l	73	120	330	160	220	1800
TRICHLOROFLUOROMETHANE	ug/l	ND@50	ND@50	ND@50	ND@25	ND@25	ND@50
VINYL CHLORIDE	ug/l	ND@50	ND@50	ND@50	ND@25	ND@25	ND@50

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		384A	384A	384A	384A	384A	384A
Sample Description		AREA A INFL	AREA A INFL	AREA A INFL	AREA A INFL	AREA A INFL	AREA A INFL
Sample Date		07/01/2024	08/02/2024	09/05/2024	10/01/2024	11/05/2024	12/02/2024
Laboratory Sample I.D.		410178637-6	410182667-13	410187236-6	410190843-7	410195482-16	410199017-9
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	2.5	ND@100	ND@100	ND@100	1.3 J	ND@25
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	2.9	ND@100	ND@100	ND@100	ND@5.0	ND@25
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	27 J	23 J	69 J	ND@100	1.3 J	ND@25
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.43 J	ND@100	ND@100	ND@100	ND@5.0	ND@25
ACETONE	ug/l	5.1	ND@1000	ND@1000	ND@1000	ND@50	ND@250
CHLOROBENZENE	ug/l	2.5	ND@100	ND@100	ND@100	1.2 J	ND@25
CIS-1,2-DICHLOROETHYLENE	ug/l	13	33 J	67 J	35 J	9.5	32
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@100	ND@100	ND@100	ND@5.0	ND@25
ETHYLBENZENE	ug/l	7.4	ND@100	ND@100	ND@100	ND@5.0	ND@25
M,P-XYLENE	ug/l	17	ND@100	ND@100	ND@100	ND@5.0	ND@25
O-XYLENE	ug/l	11	ND@100	ND@100	ND@100	ND@5.0	ND@25
TETRACHLOROETHYLENE	ug/l	22000	35000	24000	11000	2000	6000
TRICHLOROETHYLENE	ug/l	260 J	740	1100	410	98	280
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@100	ND@100	ND@100	ND@5.0	ND@25
VINYL CHLORIDE	ug/l	ND@0.5	ND@100	ND@100	ND@100	ND@5.0	ND@25

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		384B	384B	384B	384B	384B	384B
Sample Description		AREA A AS IN	AREA A AS IN	AREA A AS IN	AREA A AS IN	AREA A AS IN	AREA A AS IN
Sample Date		01/03/2024	02/06/2024	03/04/2024	04/01/2024	05/02/2024	06/06/2024
Laboratory Sample I.D.		410156406-18	410159991-5	410162906-12	410166353-5	410170415-15	410175065-15
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@25	ND@25	ND@25	ND@25	ND@25	19 J
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@25	ND@25	5.0 J	ND@25	ND@25	ND@50
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	7.2 J	16 J	17 J	12 J	16 J	58
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@25	ND@25	ND@25	ND@25	ND@25	ND@50
ACETONE	ug/l	ND@250	ND@250	ND@250	ND@250	ND@250	ND@500
CHLOROBENZENE	ug/l	ND@25	ND@25	ND@25	ND@25	ND@25	19 J
CIS-1,2-DICHLOROETHYLENE	ug/l	20 J	33	38	26	29	39 J
DICHLORODIFLUOROMETHANE	ug/l	ND@25	ND@25	ND@25	ND@25	ND@25	ND@50
ETHYLBENZENE	ug/l	ND@25	ND@25	ND@25	ND@25	ND@25	60
M,P-XYLENE	ug/l	ND@25	ND@25	ND@25	ND@25	ND@25	140
O-XYLENE	ug/l	ND@25	ND@25	ND@25	ND@25	ND@25	63
TETRACHLOROETHYLENE	ug/l	3700	5000	8400	4900	7700	96000
TRICHLOROETHYLENE	ug/l	67	110	280	140	200	1500
TRICHLOROFLUOROMETHANE	ug/l	ND@25	ND@25	ND@25	ND@25	ND@25	ND@50
VINYL CHLORIDE	ug/l	ND@25	ND@25	ND@25	ND@25	ND@25	ND@50

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		384B	384B	384B	384B	384B	384B
Sample Description		AREA A AS IN	AREA A AS IN	AREA A AS IN	AREA A AS IN	AREA A AS IN	AREA A AS IN
Sample Date		07/01/2024	08/02/2024	09/05/2024	10/01/2024	11/05/2024	12/02/2024
Laboratory Sample I.D.		410178637-5	410182667-12	410187236-5	410190843-6	410195482-15	410199017-8
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@500	ND@500	ND@100	ND@100	1.1 J	ND@25
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@500	ND@500	ND@100	ND@100	ND@5.0	ND@25
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@500	ND@500	18 J	ND@100	ND@5.0	ND@25
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@500	ND@500	ND@100	ND@100	ND@5.0	ND@25
ACETONE	ug/l	ND@5000	ND@5000	ND@1000	ND@1000	ND@50	ND@250
CHLOROBENZENE	ug/l	ND@500	ND@500	ND@100	ND@100	0.96 J	ND@25
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@500	ND@500	59 J	35 J	11	32
DICHLORODIFLUOROMETHANE	ug/l	ND@500	ND@500	ND@100	ND@100	ND@5.0	ND@25
ETHYLBENZENE	ug/l	ND@500	ND@500	ND@100	ND@100	ND@5.0	ND@25
M,P-XYLENE	ug/l	ND@500	ND@500	ND@100	ND@100	ND@5.0	ND@25
O-XYLENE	ug/l	ND@500	ND@500	ND@100	ND@100	ND@5.0	ND@25
TETRACHLOROETHYLENE	ug/l	32000	24000	14000	12000	1500	3800
TRICHLOROETHYLENE	ug/l	360 J	640	830	400	73	220
TRICHLOROFLUOROMETHANE	ug/l	ND@500	ND@500	ND@100	ND@100	ND@5.0	ND@25
VINYL CHLORIDE	ug/l	ND@500	ND@500	ND@100	ND@100	ND@5.0	ND@25

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		384C	384C	384C	384C	384C	384C
Sample Description		AREA A AS EF	AREA A AS EF	AREA A AS EF	AREA A AS EF	AREA A AS EF	AREA A AS EF
Sample Date		01/03/2024	02/06/2024	03/04/2024	04/01/2024	05/02/2024	06/06/2024
Laboratory Sample I.D.		410156406-17	410159991-4	410162906-11	410166353-4	410170415-14	410175065-14
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	2.5 J	ND@5.0	2.0 J	4.6 J
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	0.62
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		384C	384C	384C	384C	384C	384C
Sample Description		AREA A AS EF	AREA A AS EF	AREA A AS EF	AREA A AS EF	AREA A AS EF	AREA A AS EF
Sample Date		07/01/2024	08/02/2024	09/05/2024	10/01/2024	11/05/2024	12/02/2024
Laboratory Sample I.D.		410178637-4	410182667-11	410187236-4	410190843-5	410195482-14	410199017-7
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	2.2 J	1.5 J	ND@5.0	2.4 J	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	0.40 J	0.27 J	0.20 J	1.4	0.43 J	0.22 J
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		384J	384J	384J	384J	384J	384J
Sample Description		AREA A GAC	AREA A GAC	AREA A GAC	AREA A GAC	AREA A GAC	AREA A GAC
Sample Date		01/03/2024	02/06/2024	03/04/2024	04/01/2024	05/02/2024	06/06/2024
Laboratory Sample I.D.		410156406-16	410159991-3	410162906-10	410166353-3	410170415-13	410175065-13
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	1.3
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		384J	384J	384J	384J	384J	384J
Sample Description		AREA A GAC	AREA A GAC	AREA A GAC	AREA A GAC	AREA A GAC	AREA A GAC
Sample Date		07/01/2024	08/02/2024	09/05/2024	10/01/2024	11/05/2024	12/02/2024
Laboratory Sample I.D.		410178637-3	410182667-10	410187236-3	410190843-4	410195482-13	410199017-6
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	0.58	0.36 J	ND@0.5	0.42 J	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		384L	384L	384L	384L	384L	384L
Sample Description		AREA A EF	AREA A EF	AREA A EF	AREA A EF	AREA A EF	AREA A EF
Sample Date		01/03/2024	02/06/2024	03/04/2024	04/01/2024	05/02/2024	06/06/2024
Laboratory Sample I.D.		410156406-15	410159991-2	410162906-9	410166353-2	410170415-12	410175065-12
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	2.6
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Sample Location		384L	384L	384L	384L	384L	384L
Sample Description		AREA A EF	AREA A EF	AREA A EF	AREA A EF	AREA A EF	AREA A EF
Sample Date		07/01/2024	08/02/2024	09/05/2024	10/01/2024	11/05/2024	12/02/2024
Laboratory Sample I.D.		410178637-2	410182667-9	410187236-2	410190843-3	410195482-12	410199017-5
Sample Comment Codes							
Parameter	**Units**						
Base/Neutral Extractables							
1,2-DICHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
Volatile Organics							
1,1,1-TRICHLOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
1,2-DICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ACETONE	ug/l	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0	ND@5.0
CHLOROBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
CIS-1,2-DICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
DICHLORODIFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
ETHYLBENZENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
M,P-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
O-XYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TETRACHLOROETHYLENE	ug/l	0.65	0.21 J	ND@0.5	0.31 J	ND@0.5	ND@0.5
TRICHLOROETHYLENE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
TRICHLOROFLUOROMETHANE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5
VINYL CHLORIDE	ug/l	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5	ND@0.5

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Organics
January 1, 2024 - December 31, 2024

Explanation of Reporting Conventions and Key to Comment Codes

Reporting Conventions

NA	Not Analyzed
ND@X	Not Detected at Detection Limit X

Code	Explanation
J	Estimated value - compound meets identification criteria, but result is less than the reporting limit

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Inorganics
January 1, 2024 - December 31, 2024

Sample Location		384A	384A	384A	384A	384A	384A
Sample Description		AREA A INFL	AREA A INFL	AREA A INFL	AREA A INFL	AREA A INFL	AREA A INFL
Sample Date		01/03/2024	02/06/2024	03/04/2024	04/01/2024	05/02/2024	06/06/2024
Laboratory Sample I.D.		410156406-19	410159991-6	410162906-13	410166353-6	410170415-16	410175065-16
Sample Comment Codes							
Parameter	**Units**						
Inorganics							
FLUORIDE	mg/l	ND@1.0	0.81 J	0.90 J	1.1	0.96 J	1.7
Metals							
CHROMIUM, DISSOLVED	mg/l	ND@0.0021	ND@0.0021	ND@0.0021	0.00082 J	0.0014 J	0.0013 J
CHROMIUM, TOTAL	mg/l	0.00068 J	0.00094 J	0.00086 J	0.00068 J	0.0015 J	0.0014 J

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Inorganics
January 1, 2024 - December 31, 2024

Sample Location		384A	384A	384A	384A	384A	384A
Sample Description		AREA A INFL	AREA A INFL	AREA A INFL	AREA A INFL	AREA A INFL	AREA A INFL
Sample Date		07/01/2024	08/02/2024	09/05/2024	10/01/2024	11/05/2024	12/02/2024
Laboratory Sample I.D.		410178637-6	410182667-13	410187236-6	410190843-7	410195482-16	410199017-9
Sample Comment Codes							
Parameter	**Units**						
Inorganics							
FLUORIDE	mg/l	1.6	3.4	2.3	3.7	3.7	3.3
Metals							
CHROMIUM, DISSOLVED	mg/l	0.0011 J	0.0020 J	0.00057 J	0.0019 J	0.0019 J	0.0017 J
CHROMIUM, TOTAL	mg/l	0.0012 J	0.0017 J	0.0015 J	0.0019 J	0.0020	0.0013 J

Former IBM East Fishkill Remediation
Groundwater Treatment Analytical Data - Inorganics
January 1, 2024 - December 31, 2024

Explanation of Reporting Conventions and Key to Comment Codes

Reporting Conventions

NA	Not Analyzed
ND@X	Not Detected at Detection Limit X

Code	Explanation
J	Estimated value - compound meets identification criteria, but result is less than the reporting limit

Appendix J

Groundwater Statistics

Maximum Groundwater Concentrations in GMP Wells during 2024
Statistical Trends in Contaminant Reduction Wells
Evaluations of Statistical Trends in Point-of-Compliance Wells
Statistical Evaluation of Changes in Water Quality at Corrective Action Monitoring Wells using the Mann-Whitney Test

Maximum Groundwater Concentrations in GMP Wells during 2024 (µg/l) (does not include extraction wells or groundwater treatment points)					
Parameter	**NYSGQS (µg/l)**	**Soil Water-Bearing Zones**		**Bedrock Water-Bearing Zones**	
		Location	**Conc. (µg/l)**	**Location**	**Conc. (µg/l)**
Chlorobenzene	5	015	1.3	607	98
1,2-Dichlorobenzene	3	766	9.5	559	29
Dichlorodifluoromethane (Freon® 12)	5	766	13	734	0.20
Ethylbenzene	5	181	0.17	none	not detected
Vinyl Chloride	2	706	34	607	460
1,2-Dichloro-1,2,2-trifluoroethane (Freon® 123a)	5	766	130	607	23
Tetrachloroethene	5	572	160,000	118	150,000
1,1,2-trichloro-1,2,2-trifluoroethane (Freon® TF)	5	627	160	118	1,400
Trichloroethene	5	572	1,100	607	2,500
cis-1,2-Dichloroethene	5	572	940	607	6,600
Total Fluoride	1,500	627	59,000	not applicable	not applicable[2]
Chromium (total) Chromium (dissolved)	50	768 774	5,500 14	952 952	2.4 1.6
Arsenic (total) Arsenic (dissolved)	25	767 068	38 4.2	960 none	300 not detected
Nickel (total) Nickel (dissolved)	100	768 769	1,600 160	not applicable	not applicable[2]
Acetone[1,3]	None[3]	745	7.7	732	28
Trichlorofluoromethane (Freon® 11)	5	767	0.66	732	5.3
m,p-xylene	5	756	0.36	none	not detected
o-xylene	5	756	0.18	none	not detected
1,1,1-Trichloroethane	5	714	1.8	734	0.12

NYSGQS - New York State Groundwater Quality Standard (6NYCRR Part 703). All concentrations have been rounded to not more than two significant figures for VOCs and three significant figures for inorganic parameters.
1 - Common laboratory contaminant.
2 - Bedrock monitoring wells are not sampled for total fluoride or nickel.
3 - A "general organic guidance value" of 50 µg/l has been established for this parameter (Part 702.15 of the NY State Water Quality Regulations).
Due to the very high concentrations of PCE in wells 572, 574, and 118, higher concentrations of some parameters may have been diluted out in the laboratory analysis for these three wells.

Statistical Trends in Contaminant Reduction Monitoring Wells 2015-2024						
Well	**Figure Number**	**Location**	**Parameter**	**Trend**	**Confidence Limit**	**Test Type**
010	5-1	Area A (OU5, Soil)	PCE-Series Freon® TF	No trend Increasing	-- >95%	MK
016	5-2	Area A (OU5, Soil)	PCE-Series Freon® TF	No trend NA	-- --	MK
032B	5-3	Area D (OU4, Soil)	PCE-Series Freon® TF	Increasing NA	>95% --	MK
103	5-4	Area A (OU5, Soil)	PCE-Series Freon® TF	No trend NA	-- --	MK
104	5-5	Area A (OU5, Soil)	PCE-Series Freon® TF	Increasing NA	>95% --	MK
105	5-6	Area A (OU5, Bedrock)	PCE-Series Freon® TF	No trend NA	-- --	MK
612	5-7	B/322 (OU7, Soil)	PCE-Series Freon® TF	No trend NA	-- --	MK
628	5-10	Area B (OU6)	PCE-Series Freon® TF	Decreasing NA	>95% --	MK
714	5-8	Area A (OU5, Soil)	PCE-Series Freon® TF	No trend No trend	-- --	MK
716	5-9	Area A (OU5, Bedrock)	PCE-Series Freon® TF	Decreasing Decreasing	>95% >95%	MK
943	5-11	Area C+BR (LF, OU6+OU2)	PCE-Series Freon® TF	No trend Increasing	-- >90%	MK
B/384 Sump [1]	5-15	Area A (OU5)	PCE-Series Freon® TF	No trend NA	-- --	MK
PW-1	5-12	Bedrock (OU2)	PCE-Series Freon® TF	Decreasing Decreasing	>95% >95%	MK
PW-2/ PW-2R	5-13	Bedrock (OU2)	PCE-Series Freon® TF	Decreasing Decreasing	>95% >95%	MK
PW-25	5-14	Bedrock (OU2)	PCE-Series Freon® TF	Decreasing Decreasing	>95% >95%	MK

Test Type: MK = Mann-Kendall test for trend with deseasonalized data, where possible.
1 - Location designation 395 from 2013 through 2018, 384A beginning in 2019.
NA – Testing for trend is not applicable, average data from 2013 to 2022 is zero or near zero.
BR = Bedrock
LF = Landfill

Evaluations of Statistical Trends in Point-of-Compliance Wells 2015-2024					
Well	**Figure No.**	**Location**	**Parameter**	**Trend**	**Confidence Limit**
064	3-20	Area B (OU6, Soil)	PCE-Series Freon® TF	Decreasing No trend	>95% --
065	3-21	Area B (OU6, Bedrock)	PCE-Series Freon® TF	No trend No trend	-- --
066	3-22	Area D (OU4, Soil)	PCE-Series Freon® TF	No trend No trend	-- --
067	3-23	Area D (OU4, Soil)	PCE-Series Freon® TF	Increasing No trend	>95% --
987	3-24	SEQ (OU9, Bedrock)	PCE-Series Freon® TF	No trend No trend	-- --
990	3-25	SEQ (OU9, Soil)	PCE-Series Freon® TF	Decreasing No trend	>95% --

Statistical Evaluation of Changes in Water Quality at Corrective Action Monitoring Wells using the Mann-Whitney Test, adjusted for Seasonality
Evaluation Period: 2015-2024

Key Compound: **PCE-Series**
Statistically Significant Change in Concentration: **Decrease**

Well	Location	Well	Location
054	Area B (OU3, Soil	716	Bedrock (OU2)
064	Area B (OU3, Soil	720	Area A (OU5, Soil)
103	Area A (OU5, Soil)	734	Area A (OU5, Bedrock)
113	Bedrock (OU2)	737	B/322+Bedrock (OU7+OU2)
559	Area C (Landfill, OU6, Bedrock)	769	B/322 (OU7, Soil)
561	Area C (Landfill, OU6, Soil/BR)	921	B/330 (OU8, Soil)
576	B/330 (OU8, Soil)	941	B/330 (OU8, Bedrock)
609	B/330+Bedrock (OU8+OU2)	953	B/330+Bedrock (OU8+OU2)
610	B/330+Bedrock (OU8+OU2)	990	SEQ (OU9, Soil)
624	B/330+Bedrock (OU8+OU2)	PW-1	Bedrock (OU2)
702	Area A (OU5, Soil)	PW-25	Bedrock (OU2)
706	Area A (OU5, Soil)		

Key Compound: **PCE-Series**
Statistically Significant Change in Concentration: **Increase**

Well	Location	Well	Location
032B	Area D (OU4, Soil)	793	B/322 (OU7, Soil)
048	SEQ (OU9, Bedrock)	923	B/330 (OU8, Bedrock)
067	Area A (OU5, Soil)	929	B/330 (OU8, Bedrock)
104	Area A (OU5, Soil)	931	B/330 (OU8, Bedrock)
105	Bedrock (OU2)	944	Area C (Landfill, OU6, Bedrock)
109	Bedrock (OU2)	954	B/330 (OU8, Bedrock)
607	B/330+Bedrock (OU8+OU2)	956	B/330 (OU8, Soil)
732	Area A (OU5, Bedrock)	959	B/322+Bedrock (OU7+OU2)
757	Area D (OU4, Soil))	960	B/322+Bedrock (OU7+OU2)
766	B/322 (OU7, Soil)	966	B/330+Bedrock (OU8+OU2)
767	B/322 (OU7, Soil)	999	Area A (OU5, Soil)
768	B/322 (OU7, Soil)		

Statistical Evaluation of Changes in Water Quality at Corrective Action Monitoring Wells using the Mann-Whitney Test, adjusted for Seasonality
Evaluation Period: 2015-2024 (continued)

Key Compound: Freon® TF
Statistically Significant Change in Concentration: Decrease

Well	Location	Well	Location
559	Area C (Landfill, OU6, Bedrock)	959	B/322+Bedrock (OU7+OU2)
610	B/330+Bedrock (OU8+OU2)	960	B/322+Bedrock (OU7+OU2)
716	Bedrock (OU2)	PW-1	Bedrock (OU2)
921	B/330 (OU8, Soil)	PW-25	Bedrock (OU2)
941	B/330 (OU8, Bedrock)		

Key Compound: **Freon® TF**
Statistically Significant Change in Concentration: **Increase**

Well	Location	Well	Location
010	Area A (OU5, Soil)	768	B/322 (OU7, Soil)
607	B/330 (OU8, Bedrock)	769	B/322 (OU7, Soil)
732	Area A (OU5, Bedrock)	793	B/322 (OU7, Soil)
734	Area A (OU5, Bedrock)	932	Area C+BR (Landfill, OU6+OU2)
766	B/322 (OU7, Soil)	943	Area C (Landfill, OU6, Bedrock)
767	B/322 (OU7, Soil)		

Appendix K

Vapor Intrusion Assessment and Mitigation 2024 Annual Report

SANBORN HEAD

Vapor Intrusion Engineering Controls
2024 Annual Report

FORMER IBM EAST FISHKILL FACILITY

Hopewell Junction, New York

Prepared for IBM Corporation

File No. 2999.022

May 23, 2025

SANBORN HEAD

6 Bedford Farms Drive, Suite 201
Bedford, NH 03110

Linda Daubert
IBM Environmental Engineering
2300 Dulles Station West Blvd
Floors 1,2,4, & 5
Herndon, VA 20171 – 6133

May 23, 2025
File No. 2999.022

Re: Vapor Intrusion Engineering Controls – 2024 Annual Report
Former IBM East Fishkill Facility
Hopewell Junction, New York
EPA ID No. NYD000707901, NYSDEC Site No. 314054

Dear Ms. Daubert:

The enclosed report provides a summary of vapor intrusion engineering controls-related work that was performed in 2024 at the former IBM East Fishkill facility. We understand that this report will be included as an appendix to the facility's 2024 Annual Corrective Action Status Report. Please contact us if you have any questions.

Very truly yours,
SANBORN, HEAD ENGINEERING, P.C.

Sean Murphy, P.G.
Project Director

David Shea, P.E.
Senior Vice President

SWM/DS:swm

Encl. Vapor Intrusion Engineering Controls – 2024 Annual Report

P:\2900s\2999.22\Source Files\2024 Annual Report\SHPC cover letter.docx

SANBORN HEAD

NYS Professional Engineer Certification
Vapor Intrusion Engineering Controls - 2024 Annual Report
Former IBM East Fishkill Facility
EPA ID No. NYD000707901
NYSDEC Site No. 314054

I, David Shea, certify that I am currently a NYS registered professional engineer and that the vapor intrusion engineering controls employed at this site are protective of public health and the environment, based on the data and information provided to me, and my inquiry of those persons responsible for operating the engineering controls and gathering the data and information.



Date: May 23, 2025

Name: David Shea

NYS P.E. License No. 70026

P:\2900s\2999.22\Source Files\2024 Annual Report\PE Certification Page-AnnualRpt.docx

TABLE OF CONTENTS

ACRONYM AND ABBREVIATION LIST III
1.0 INTRODUCTION 1
1.1 Report Organization 1
1.2 Background and Purpose 1
1.3 PMP Responsibility 3
2.0 STATUS OF BUILDING USE AND OCCUPANCY 3
2.1 Building Use and Category Changes 3
2.2 Building Occupancy Changes 4
3.0 STATUS OF VI ENGINEERING CONTROLS 4
3.1 B310 (iPark) 5
3.1.1 HVAC Operations Checks 5
3.1.2 SSD System VE-9 6
3.1.2.1 Operations and Maintenance 7
3.1.2.2 Performance Monitoring 7
3.2 B308/B310 Linkway SSD System (VE-11) 8
3.2.1 Operations and Maintenance 9
3.2.2 Performance Monitoring 9
3.3 B316 (Onsemi) 9
3.3.1 Indoor Air Quality Sampling and Results 10
3.4 B320B (Onsemi) 11
3.5 B330C (iPark) 11
3.5.1 HVAC Operations Checks 11
3.5.2 SSD Systems (VE-7, VE-8, and VE-32) 13
3.5.2.1. VE-7 and VE-8 Operations and Maintenance 14
3.5.2.2 VE-7 and VE-8 Performance Monitoring 14
3.5.2.3 VE-32 Operations, Maintenance, and Performance Monitoring 16
3.6 B330D (iPark) 16
3.6.1 SSD Systems VE-1 and VE-10 Operations and Maintenance 17
3.6.2 VE-1 and VE-10 Performance Monitoring 17
3.7 B338 (iPark) 20
3.8 B339 (iPark) 20
3.9 B300, B317, B320B, B321, B322, B323, B323A, B386 (Onsemi) 21
3.10 B308, B330L, and B334 (iPark) 21
4.0 AREA A SOIL VAPOR EXTRACTION SYSTEM (VE-3) 21
4.1 Operations and Maintenance 21
4.2 Performance Monitoring 21
5.0 UPCOMING ACTIVITIES 22
6.0 REFERENCES 24

TABLES

Table 1 Summary of Long-Term VI Monitoring Plan by Building
Table 2 Summary of 2024 PMP Monitoring Results
Table 3 Summary of 8-Hour Indoor Air Analytical Results – B316

FIGURES

Figure 1 Site Location Plan
Figure 2 Building Location Plan
Figure 3 Building PMP Category Plan
Figure 4A Subslab Pressure Response to Vapor Extraction – B310 and B310/308 Linkway, December 2024
Figure 4B Subslab Pressure Response to Vapor Extraction – B310 and B310/308 Linkway, March 2025
Figure 5 Summary of 8-Hour Indoor Air Sampling Results (PCE and TCE) – B316
Figure 6 HVAC Zones and Occupancy – B330C
Figure 7A Subslab Pressure Response to Vapor Extraction – B330C, December 2024
Figure 7B Subslab Pressure Response to Vapor Extraction – B330C, March 2025
Figure 8 Subslab Pressure Response to Vapor Extraction – B330D
Figure 9 Extent of Subsurface Depressurization (5ft Depth) – Area A SVE System
Figure 10 Extent of Subsurface Depressurization (10ft Depth) – Area A SVE System

APPENDICES

Appendix A Limitations
Appendix B Summary of Long-Term VI Management Plan by Building
Appendix C Building Tracking Table
Appendix D iPark Report Excerpts
Appendix E Mass Removal Plots for Former SSD Systems
Appendix F B316 HVAC Conditions During Sampling
Appendix G iPark SSD System Layouts for VE-30 (B338), VE-31 (B339), and VE-32 (B330C – Sloop Brewery)

ACRONYM AND ABBREVIATION LIST

Alpha-En	Alpha-En Corporation
AGC	annual guideline concentration
CFC-11	trichlorofluoromethane
CFC-12	dichlorodifluoromethane
D&B	D&B Engineers and Architects, P.C.
DP	differential pressure
EC	engineering control
EP	extraction port
ft bgs	feet below ground surface
GAC	granular activated carbon
GF	Global Foundries
GSC	Groundwater Sciences Corporation
HES	Hybrid Electrostatic Industries
HVAC	heating, ventilation, and air conditioning
IAQ	indoor air quality
in. WC	inches of water column
iPark	iPark East Fishkill, LLC (and related entities)
LLR	line load reactor
MAU	make-up air unit
N/A	not applicable
NM	not measured
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
O&M	operation and maintenance
OGS	New York State Office of General Services
Onsemi	Semiconductor Industries, Inc.
PCE	tetrachloroethene
PMP	Performance Monitoring Plan
RCRA	Resource Conservation and Recovery Act
RCU	recirculation unit
RFI	RCRA Facility Investigation
RTU	rooftop unit
Sanborn Head	Sanborn, Head Engineering, P.C.
SSD	subslab depressurization
SVE	soil vapor extraction
SWMU	solid waste management unit
TCE	trichloroethene
µg/m³	micrograms per cubic meter
VI	vapor intrusion
VOC	volatile organic compound
Walden	Walden Environmental Engineering, PLLC

1.0 INTRODUCTION

This report documents the results of monitoring conducted in 2024 for the soil vapor intrusion (VI) engineering controls (ECs) established in accordance with the Performance Monitoring Plan for Vapor Intrusion Engineering Controls (PMP) (Sanborn Head, 2021a) for certain buildings at the former IBM East Fishkill Facility (the site). The PMP was submitted to the New York State Department of Environmental Conservation (NYSDEC) and Department of Health (NYSDOH) (collectively, the Departments) as a component of the Site Management Plan, which is under review by the Departments. This report comprises an appendix to the 2024 Annual Corrective Action Status Report for the site prepared on behalf of IBM by Groundwater Sciences Corporation (GSC).

Site ownership was transferred from IBM to Global Foundries (GF) in 2015. GF then sold portions of the site in September 2017 to iPark East Fishkill LLC and iPark East Fishkill I LLC (collectively, iPark). Since that time, various parcels owned by iPark have been transferred to other iPark entities. In December 2021, Lots 2 and 3 were subdivided to form a new lot (Lot 9) on the northern portion of the site, which iPark sold to Rolling-Frito Lay. On January 1, 2023, GF transferred ownership of its parcels and site operations to Semiconductor Industries, Inc. (Onsemi). A site location plan is provided as Figure 1, and a map of site lot lines and buildings is provided as Figure 2. Property ownership information as of the end of 2024 is also shown on Figure 2.

The work described herein was conducted on behalf of IBM by Sanborn, Head Engineering, P.C. (Sanborn Head) in accordance with the PMP. Certain information presented in this report was performed/provided by Onsemi and by iPark's consultant, Walden Environmental Engineering, PLLC (Walden). This information was obtained from applicable reports and information provided by iPark, Walden, and Onsemi during the preparation of this annual report, but such information was not independently verified by Sanborn Head. The services conducted, and this report, are subject to standard limitations for this type of work, as described in Appendix A.

1.1 Report Organization

This report is organized into the following sections:

- Section 1 - introduction, including the background and purpose of the report;
- Section 2 - review of building use and occupancy in 2024;
- Section 3 - VI EC checks and operations in 2024;
- Section 4 - 2024 operations of the Area A soil vapor extraction system;
- Section 5 - upcoming activities at the site; and
- Section 6 – references.

1.2 Background and Purpose

Indoor air quality (IAQ) and VI assessments were performed at the site in accordance with IBM's Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Work Plan dated June 15, 2009 (VI RFI Work Plan) (Sanborn Head, 2009), which was approved by the Departments. The purpose of the assessments was to evaluate the potential presence of certain volatile organic chemicals (VOCs) in indoor air related to potential VI from subsurface

VOC sources beneath certain occupied buildings on the site. The results and findings for the completed RFI work are found in a series of historical reports previously submitted to the Departments.

As an outcome of the RFI and related assessments, and in accordance with the review and approval of the Departments, engineering controls (ECs) have been implemented to reduce VOC concentrations in certain buildings. VI ECs may rely upon either active or passive components. Active VI ECs comprise active mechanical measures to maintain appropriate indoor air quality; they include subslab depressurization (SSD) systems and heating, ventilation, and air conditioning (HVAC) systems. Passive ECs do not employ mechanical systems; examples include sealing of utility penetrations and subslab passive venting systems not connected to an electrically powered fan.

The PMP was prepared to establish VI EC conditions which would result in acceptable indoor air quality and to track possible changes to use of buildings without VI ECs. Under the PMP, buildings with VI ECs are grouped into the following four categories:

Category 1:	SSD implemented for full building footprint.
Category 2:	SSD implemented for partial building footprint, with HVAC system controls for remainder.
Category 3:	HVAC systems serve as VI engineering controls for entire building footprint (no site buildings are in this category).
Category 4:	HVAC systems presumed to serve as VI engineering controls under normal operating conditions.

In addition, some buildings are included in the PMP for ongoing review because they overlie VOC presence in soil vapor or groundwater; however, they are either not routinely occupied, or they may be subject to occupational VOC presence in indoor air due to the presence of groundwater remediation systems or treatment residuals handling. A final group of buildings in the PMP are those that have no known underlying VOC presence, but because they are in the central area of the site, their use and occupancy is tracked annually.

Table 1 lists the buildings included in the PMP by category, and Figure 3 is a site map that shows the buildings color-coded by category. Buildings included in the PMP are subject to annual checks of building use or occupancy. In addition, the buildings grouped in Categories 1 through 4 above are subject to annual checks of their active and passive VI ECs.

Annual checks were conducted at the site by IBM in 2024 in accordance with the VI EC long-term monitoring plan provided in Appendix B.

The purpose of this report is to summarize the status of building use/occupancy and VI EC operations in the buildings that were the subject of the PMP for the calendar year 2024.

1.3 PMP Responsibility

IBM is working cooperatively with Onsemi and iPark to monitor and maintain the appropriate VI ECs, including in the buildings where HVAC is serving, or presumed to be serving, as a VI EC. It is Onsemi's and iPark's responsibility to communicate to IBM changes to occupancy or HVAC conditions in these buildings so that additional IAQ testing can be performed as required by the PMP. IBM maintains responsibility for operation and maintenance (O&M) of the SSD and SVE systems installed by IBM for VI mitigation and VOC source reduction in the industrial spaces. iPark is responsible for O&M of the SSD systems installed by iPark.

IBM maintains responsibility for execution of the VI RFI Work Plan in spaces that are classified as industrial use. A Consent Order (NYSDEC, 2020) was negotiated with NYSDEC and the Part 373 co-permittees (IBM, iPark, and GF [now Onsemi]) to allow for commercial use within a designated area of the parcels owned by iPark (see Figure 2). As part of the Consent Order, iPark is responsible for VI-related assessments and mitigation in the commercial spaces, including the installation of SSD systems for VI mitigation purposes in each commercial space, as well as for new construction regardless of building use.

2.0 STATUS OF BUILDING USE AND OCCUPANCY

The status of building use and occupancy in 2024 was reviewed by IBM with iPark and Onsemi, and changes are documented in Table 2 and described below. The building designation by PMP category was also reviewed. The year-end 2024 status of the buildings that are the focus of the PMP is summarized on the building tracking table in Appendix C, which was provided to the Departments on April 30, 2025. The building tracking table is updated quarterly for transmittal to the Departments, and it provides information on VI assessment and mitigation status, current and proposed tenants, indoor air sampling, planned tenant fit-ups, status of SSD systems, and VI-related work in progress.

2.1 Building Use and Category Changes

One building – B316, owned by Onsemi – was re-designated under the PMP as Category 4, which means that HVAC operation is presumed to be serving as a VI EC for occupied portions of the building. B316 was previously designated as having "potential occupational VOC presence" in indoor air due to its former housing of the decommissioned Central Carbon Treatment plant. Further information on indoor air sampling conducted in 2024 to support the re-designation of B316 is provided in Section 3.3.

Other than B316, no changes to building use for buildings in the PMP category "potential occupational VOC presence" were reported, including the buildings in Exhibit 2.1 (refer to Table 1 and Figure 3):

Building Owner	Buildings
iPark	B303, B309
Onsemi	B385
IBM	B384, PW-2 groundwater treatment facility

Exhibit 2.1 – Summary of buildings with "potential occupational VOC presence."

A prospective building, called the "B330L Freezer Structure", is no longer planned to be constructed, according to iPark, and will be removed from PMP monitoring plans. This building was designated in the PMP as a building that is not routinely occupied. In addition, B335 remained unoccupied in 2024.

2.2 Building Occupancy Changes

Portions of two buildings (B330C and B339), owned by iPark, were reported as having changed occupancy status on the first floor in 2024 or early 2025. Refer to Table 2 and Appendix C for additional information on these buildings.

- B330C underwent renovations in 2023 to accommodate expansion of the eMagin, tenant space. iPark conducted IAQ sampling in the eMagin expansion area on October 14, 2023 and November 30, 2023. The results were approved by the Departments on January 31, 2024. Onsemi vacated B330C in 2024. No other occupancy changes were reported by iPark in B330C in 2024.
- The sole tenant of B339 (Jane Bakes) reportedly vacated the space in early 2025 and maintains a presence for storage only. Sanborn Head noted that the B339 SSDS (VE-31) was not operating during a March 2025 Site visit. iPark subsequently confirmed that the system was not operating due to mechanical issues in a May 8, 2025 letter to the Departments. VE-31 is not operating as of the date of this report.

3.0 STATUS OF VI ENGINEERING CONTROLS

VI EC performance monitoring was conducted in 2024 in accordance with the PMP and included HVAC system operational checks, monitoring of SSD system operational and vacuum conditions, and passive EC checks. The HVAC system operational checks were intended to verify settings that reflect conditions that have been shown to be effective for VI EC based on previous acceptable IAQ sampling results under those conditions.

In addition, the PMP calls for SSD system and passive EC checks. The primary purpose of the SSD systems is to mitigate the VI pathway, and secondarily to provide VOC source reduction. To assess ongoing effectiveness, IBM and iPark conducted periodic monitoring of SSD system operations and performance. SSD systems operated by IBM are equipped with telemetry that allows for remote monitoring and alarm notifications, such as system shutdowns, so that operating issues can be rapidly addressed. Operations monitoring also includes periodic review of system components, the results of which are recorded on a system log sheet. For SSD systems operated by IBM, performance monitoring involves sampling of extracted and treated vapor to estimate VOC mass removal and the need for change-outs of the granular activated carbon (GAC) vapor treatment units. Periodic monitoring of vacuum field conditions (cross-slab differential pressure [DP]) was also conducted to verify adequate subslab depressurization. In accordance with the PMP, if differences are noted during checks, further assessment or actions may be appropriate.

Beyond the continuous, telemetry-based monitoring described above, the 2024 monitoring program included:

- Semi-annual and annual checks completed by Sanborn Head on behalf of IBM on June 4, 2024 and December 10 through 13, 2024;
- Biweekly (i.e., every other week) inspections by Walden of HVAC systems in B310 and B330C between September and December 2024, in accordance with the revised draft IAQ O&M Compliance Plan (Walden, 2024); and
- Communication with Onsemi and iPark - Sanborn Head conducted interviews with Onsemi and iPark personnel to obtain the information for many of the buildings and only physically reviewed a subset of the buildings.

A narrative summary of Walden's biweekly HVAC inspections for B310 and B330C are included in their respective sections, below. Details regarding Walden's HVAC inspections in B310, B330C, B330L, and B334 are included as Appendix D.

A summary of the 2024 VI EC operational checks is provided in Table 2 and described in the following sections for each building. The building owner is specified in the section headings. The building spaces discussed in the following sections are on the first floor of each building.

3.1 B310 (iPark)

B310 is a Category 2 building under the PMP. An SSD system (VE-9) serves as the VI EC for a portion of the building, and the HVAC system is the VI EC for the central and northern portions of the building, partially overlapping the VE-9 area of influence. The operational checks of the B310 HVAC and SSD system ECs are described below.

3.1.1 HVAC Operations Checks

The northern and central portions of B310 (occupied by the New York State Office of General Services [OGS]), in which HVAC is the EC for VI mitigation in combination with VE-9 SSD system, is served by six HVAC units installed by iPark in 2021. Two additional units serve the southern portion of the building, within the area of influence of the VE-9; therefore, these units are not monitored as part of the PMP. According to iPark, four of the six units that serve the OGS space (Ground-1, Ground-2, Ground-3, and Rooftop Unit [RTU]-2) provide cooling and heating, while the other two units (RTU-1 and RTU-3) provide only air cooling and run seasonally.

In addition to the June and December 2024 PMP checks, the six HVAC units monitored under the PMP were checked by Sanborn Head on October 15, 2024, as well as biweekly by Walden beginning on September 13, 2024 as required by the revised draft IAQ O&M Compliance Plan (Walden, 2024). A summary of the status of these units during 2024 checks is provided in Exhibit 3.1, below, with deviations from the intended operation (per Walden/iPark) highlighted in orange, assuming a cooling season through October 2024.

HVAC Unit		Ground-1	Ground-2	Ground-3	RTU-1	RTU-2	RTU-3
Intended Operation		On	On	On	Seasonal Cooling Only	On	Seasonal Cooling Only
Date of Check	Checked by						
6/4/2024	Sanborn Head	On	On	On	On	On	On
9/13/2024	Walden	On	On	On	On	On	Off
9/26/2024	Walden	On	On	On	On	On	Off
10/11/2024	Walden	On	On	On	On	On	Off
10/15/2024	Sanborn Head	On	Off	On	On	On	Off
11/11/2024	Walden	On	On	On	On	On	Off
11/27/2024	Walden	On	On	On	On	On	Off
12/05/2024	Walden	On	On	On	Off	On	Off
12/11/2024	Sanborn Head	On	On	On	Off	Off	Off
12/24/2024	Walden	On	On	On	Off	On	Off

Exhibit 3.1 – Status of HVAC Units in B310 (OGS space) during 2024 HVAC Checks.

HVAC conditions observed during Sanborn Head's check on October 15, 2024 were not in alignment with Walden's IAQ O&M Compliance Plan, which indicated that Ground-2 would be running at all times. HVAC conditions observed during Sanborn Head's December 2024 PMP checks were also not in alignment with Walden's IAQ O&M Compliance Plan, which indicated that RTU-2 would be running at all times. IBM has alerted iPark and Walden to these discrepancies, and the parties are working collaboratively to establish long-term operating conditions under which future IAQ sampling can be conducted by iPark.

The OGS tenant space is partially within the influence of the VE-9 SSD system operated by IBM. VE-9 system operations information is provided below.

3.1.2 SSD System VE-9

SSD system VE-9 was installed by IBM and began operating on June 16, 2020. The system start-up was documented in an October 2020 report submitted to the Departments (Sanborn Head, 2020a), which was approved in a March 11, 2021 letter from the Departments to IBM.

The original B310 SSD system (VE-2) was put into operation in February 2012 as documented in a May 2013 report submitted to the Departments (Sanborn Head, 2013). In October 2020, the VE-2 and VE-9 SSD systems were combined by shutting down VE-2 and allowing vapor from the VE-2 extraction ports (EPs) to flow to the VE-9 blower through new interconnected piping, as approved by the Departments in a letter to IBM dated July 30, 2021. The VE-9 blower speed and EP vacuums were adjusted to generally match the original operating conditions before the systems were connected. The system reconfiguration and subsequent rebalancing was documented in an August 2021 letter submitted to the Departments (Sanborn Head, 2021b) as an amendment to the B310 VE-9 start-up report.

The interior vacuum piping, system enclosure, and approximate vacuum influence of the VE-9 SSD system from December 2024 are shown on Figure 4A.

The following sections provide information about the operations, maintenance, and performance monitoring of VE-9 in 2024.

3.1.2.1 Operations and Maintenance

The SSD system is designed for continuous operation and is equipped with sensors, alarms (e.g., low vacuum, power outage), and a telemetry system that automatically communicates such alarms to the appropriate personnel. The VE-9 system operated continuously without significant shutdowns in 2024.

3.1.2.2 Performance Monitoring

Cross-slab DP readings within B310 were recorded on December 11, 2024. As shown in Exhibit 3.1, RTU-2 was not operating as required by Walden's IAQ O&M Compliance Plan during this round of cross-slab DP readings. These readings, along with the applied vacuums and flow rates at each of the operating EPs, and the inferred extent of subslab depressurization, are shown on Figure 4A. Localized changes in subslab depressurization were noted in two portions of B310:

- South end of B310: DP at subslab monitoring port SS-166 was measured at 0.000 inches of water column (in. WC) in December 2023 and December 2024, as compared to -0.005 in. WC in December 2021 and December 2022; and
- Eastern portion of B310: increases in differential pressure to values greater than -0.004 in. WC (the value used to infer subslab pressure response) at SS-305, SS-175, and SS-187 in December 2024, which had DPs less than -0.004 in December 2023. These shifts in DP may be attributable to changes in HVAC system operations (i.e., less outside air), normal variations of the system, and/or other factors that impact building pressure (e.g., doors open versus closed). Year-to-year variations in DPs are normal.

Based on the localized changes observed during the December measurement round, a subsequent round of cross-slab DP readings within B310 was performed on March 27, 2025 with the six HVAC units operating in accordance with Walden's IAQ O&M Compliance Plan. During this round of readings, the DP monitoring ports were cleaned of debris prior to collecting measurements. As shown on Figure 4B, the DP measurements recorded in March 2025 indicated that the localized increases in subslab differential pressure in the eastern portion of B310 noted above were no longer present. This may be a reflection of changed HVAC operating conditions (March conditions were in alignment with those proposed by iPark), cleaning of the monitoring ports, or other short-term effects. DPs in B310 will continue to be monitored by IBM during routine PMP checks.

Based on our review of the operations log sheets and the cross-slab DP measurements, the VE-9 SSD system is operating in accordance with its design objectives.

System influent vapor samples were collected monthly and analyzed for VOCs. A plot of mass removal rate and cumulative mass removed since VE-9 startup is shown on Exhibit 3.2 below. VE-9 removed approximately 15 pounds of PCE from the subsurface during 2024, bringing the total mass of PCE removed since the June 2020 system startup to approximately 127 pounds,

and a combined mass removal of approximately 5,867 pounds of PCE, including mass removed by the VE-2 system since 2012. A mass removal plot for VE-2 prior to its reconfiguration with VE-9 is provided in Appendix E for reference.

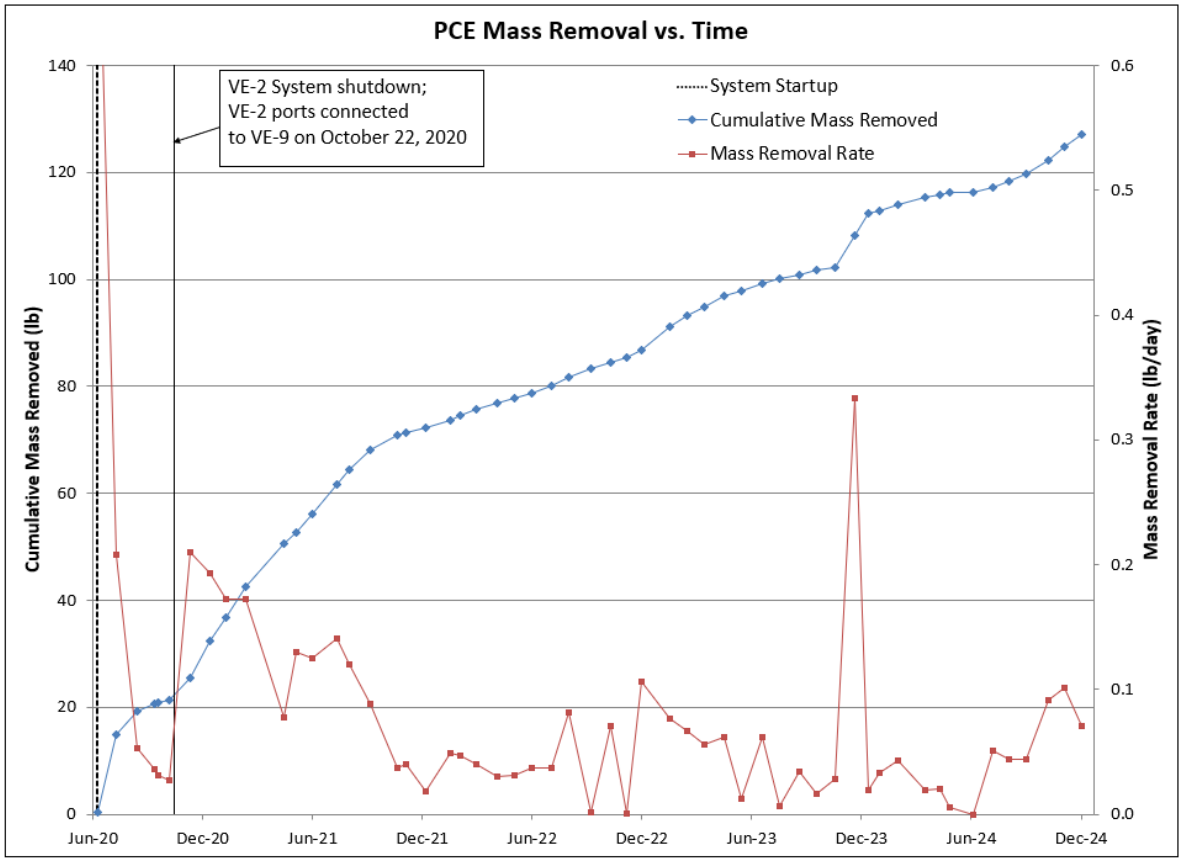


Exhibit 3.2 – VE-9 PCE Mass Removal vs. Time

3.2 B308/B310 Linkway SSD System (VE-11)

In September and October 2015, an SSD system (VE-11) was constructed by IBM within the linkway connecting B308 and B310 as a supplemental VI mitigation measure. The system was put into operation on October 7, 2015, as documented in a February 2016 report (Sanborn Head, 2016a) submitted to the Departments. In 2018, the linkway was walled-off at the entrance to B308; thus, the linkway is no longer in use.

The SSD system consists of three subslab vapor EPs, each connected to dedicated in-line fans mounted to the north exterior wall of the linkway. Soil vapor collected from the EPs is discharged directly to the atmosphere through exhaust stacks extending above the linkway roofline.

The following sections provide information about the operations, maintenance, and performance monitoring of VE-11 in 2024.

3.2.1 Operations and Maintenance

The SSD system is designed for continuous operation and is equipped with sensors, alarms (e.g., low vacuum, power outage), and an autodialer that automatically communicates such alarms to the appropriate personnel. The following shutdowns and associated maintenance items were noted in 2024:

- In March 2024, the fan connected to EP-214 was replaced after the fan was down for approximately 33 days;
- In April 2024, the fan connected to EP-211 was replaced after the fan was down for approximately 34 days;
- In May 2024, the fans connected to EP-211 and EP-214 shutdown for a very brief period, likely due to a momentary interruption in electrical service; and
- In July 2024, the entire SSD system shutdown for approximately half a day, likely due to a temporary power outage.

With the exception of these shutdowns and replacements, there were no other instances of shutdown in 2024.

3.2.2 Performance Monitoring

Cross-slab DP readings within the B308/310 linkway were recorded on December 11, 2024. These readings, along with the applied vacuums and flow rates at each of the operating EPs, and the inferred extent of subslab depressurization, are shown on Figures 4A and 4B. Subslab vacuum monitoring indicated depressurization consistent with startup conditions.

3.3 B316 (Onsemi)

B316 currently houses the central utility plant for the site, which produces deionized water for Onsemi and houses boiler and chiller units that serve the site. A portion of B316 is used for offices, laboratories, control rooms, and storage space. B316 has been re-categorized as a Category 4 building, where the normal operation of the HVAC system is presumed to be serving as a VI engineering control. B316 was originally classified as “Potential Occupational VOC Presence” in the PMP, indicating that while it is a building with presumed presence of VOCs in underlying groundwater, it may also be subject to occupational VOC presence in indoor air due to the treatment of VOC-containing groundwater by GAC in the Central Carbon Treatment area. The carbon vessels and associated piping were removed in December 2022. As required by the PMP, indoor air sampling is required following removal of the carbon vessels because it is presumed that there is no longer the potential for an occupational-related VOC presence in indoor air.

Sanborn Head conducted IAQ sampling on February 28, 2024 in accordance with the PMP, and an IAQ Summary Report was submitted to the Departments on May 14, 2024 (Sanborn Head, 2024). The IAQ Summary Report was approved on November 21, 2024 by the Departments with the requirement that additional IAQ sampling be performed if the currently unoccupied portion of B316 becomes occupied in the future.

The results of IAQ sampling conducted in the Former Central Carbon Treatment area and adjacent first floor office and control rooms are provided in the following section.

3.3.1 Indoor Air Quality Sampling and Results

On February 28, 2024, Sanborn Head collected indoor air samples on behalf of IBM from the first-floor office and control room areas on the west side of B316 and from the Former Central Carbon Treatment area in the northwest corner of B316 (Figure 5). These areas are served by one HVAC unit (HVAC-2), which was operating under normal, occupied conditions. A summary of HVAC operating conditions at the time of sampling is provided in Appendix F for reference. The laboratory analytical results are presented in Table 3, and the tetrachloroethene (PCE) and trichloroethene (TCE) results are shown on Figure 5. A summary of select results is shown in Exhibit 3.3, below.

PCE and TCE were not detected at concentrations greater than respective reporting limits in the indoor air samples (including the field duplicate) or the outdoor sample (AA0601, collected near the intake for HVAC-2). Compounds detected in the indoor air samples and outdoor sample included acetone, benzene, carbon tetrachloride, dichlorodifluoromethane (CFC-12), and trichlorofluoromethane (CFC-11). The detected concentrations of these compounds in indoor air may be attributable to the presence of these analytes in ambient outdoor air.

Ethylbenzene, toluene, and xylenes (m,p- and o-) were detected in indoor air but not in the outdoor air sample; however, the detected concentrations were several orders of magnitude less than applicable NYSDEC DAR-1 annual guideline concentrations (AGCs).[1]

Slight exceedances of the AGCs for benzene and carbon tetrachloride in indoor air are reflective of the outdoor air quality and are not indicative of vapor intrusion.

Sample Name	AA0601	IA0600	IA0600 Dup.	IA0601	IA0602	IA0603	IA0604
Sample Location	**HVAC-2 Intake (Roof)**	**Control Room**		**Conference Room**	**Break Room**	**Office Area**	**Former GW Treatment Area**
Acetone	7.1	19	<67	8.2	<60	<61	<67
Benzene	0.36	0.385	<2.3	0.35	<2.0	<2.1	<2.3
Carbon tetrachloride	0.45	0.47	<1.8	0.48	<1.6	<1.6	<1.8
CFC-12	3.6 J+	22 J+	23 J+	23 J+	26 J+	24 J+	41 J+
Ethylbenzene	<0.11	0.21	<1.2	0.21	<1.1	<1.1	<1.2
Toluene	<0.47	0.59	<5.4	0.65	<4.7	<4.9	<5.4
CFC-11	1.2	6.8	<8.0	7.4	8.5	8.0	15
Xylene (m,p-)	<0.22	0.71	<2.5	0.73	<2.2	<2.2	<2.5
Xylene (o-)	<0.11	0.46	<1.5	0.48	<1.1	<1.1	<1.2

Notes: "J+" indicates the result is an estimated quantity and should be considered biased high

Exhibit 3.3 – Summary of VOC detections in air samples collected in B316 in February 2024 (units of micrograms per cubic meter [µg/m^3])

[1] As defined within NYSDEC Program Policy: "Guidelines for the Evaluation and Control of Ambient Air Contaminants under 6NYCRR Part 212," dated February 12, 2021.

3.4 B320B (Onsemi)

B320B is a semiconductor manufacturing facility that consists of clean rooms, laboratory space, and support areas, including a chemical storage area in the central portion of the building. B320B is a Category 4 building, where the normal operation of the HVAC system is presumed to be serving as a VI engineering control. There were no changes to the HVAC operational settings observed during the PMP checks in 2024 for B320B, as documented in Table 2.

As part of the mechanical penthouse construction project in the southwestern area of B320B in 2020, subsurface piping was decommissioned by GF under a Solid Waste Management Unit (SWMU) work plan prepared by D&B Engineers and Architects, P.C. (D&B, 2020). Soil screening conducted by D&B indicated that a release of VOCs to soil may have occurred from the subsurface pipes in the northern portion of the work area. After a limited amount of soil was excavated, a passive SSD system was subsequently installed by GF in accordance with a design figure titled, "Subslab Depressurization System Plan" prepared by D&B and dated October 2020, which was approved by NYSDEC in a November 6, 2020 email to D&B. This system is included in IBM's semi-annual PMP checks.

Visual checks of the rooftop vent piping were conducted by Sanborn Head in 2024, but inspection of the indoor above-grade piping was not conducted due to inability to access the newly constructed clean rooms at the time of the PMP checks. Sanborn Head will attempt to gain access to the building in 2025 to visually inspect the integrity of the piping.

3.5 B330C (iPark)

B330C is a Category 2 building. A large portion of B330C is within the influence of two SSD systems operated by IBM (VE-7 and VE-8), as well as the SSD system operated by iPark (VE-32). The HVAC system is the VI EC for areas outside the influence of the SSD systems. The operational checks of the HVAC and SSD system ECs are described below.

3.5.1 HVAC Operations Checks

As part of the renovations in the eMagin, Sloop, and More Good tenant spaces, HVAC infrastructure and operational settings were modified. The current HVAC zones and occupancy for B330C are shown on Figure 6 and summarized below:

- Unit AC-4, which served the eMagin space along the northwest perimeter of the building as well as a portion of the expansion area, has been removed from service. The areas are now served by AC-41 and AC-42;
- Unit AC-7B, which served a portion of the eMagin expansion area, has been removed from service. The area is now served by AC-42;
- Unit AC-10A has been decommissioned and physically removed;
- Unit AC-40, which served a portion of the eMagin space in the northwest portion of the building, has been removed from service. The area is now served by AC-41;
- Unit AC-41 has been temporarily removed from service as the areas served are vacant as of August 2024;

- Unit AC-51, which served a portion of the Sloop expansion area, has been removed from service. The area is now served by AC-42;
- Unit AC-91, which served portions of the Onsemi and eMagin space near the middle of the building, is now supplied with outside air from AC-13; and
- Units AC-42 and AC-58 were installed to serve the eMagin, Sloop, and More Good expansion areas as well as the Onsemi spaces in the western corner and along the northeastern perimeter of the building.

In addition to the June and December 2024 PMP checks, the HVAC units monitored by the PMP were checked biweekly by Walden beginning on September 13, 2024 as required by the revised draft IAQ O&M Compliance Plan (Walden, 2024). A summary of the status of these units during 2024 checks is provided in Exhibit 3.4, below, with deviations from the intended operation (per Walden/iPark) highlighted in orange.

HVAC Unit		AC-11	AC-13	AC-41	AC-42	AC-58	AC-90	AC-91
Intended Operation		On	On	Off	On	On	On	On
Date of Check	Checked by							
6/4/2024	Sanborn Head	On	On	On	NM	NM	On	On
9/13/2024	Walden	On	On	N/A	On	On	On	On
9/26/2024	Walden	On	On	N/A	On	On	On	On
10/11/2024	Walden	On	On	N/A	On	On	On	On
11/11/2024	Walden	On	On	N/A	On	On	On	On
11/27/2024	Walden	On	On	N/A	On	On	On	On
12/05/2024	Walden	On	On	N/A	Off	On	On	On
12/10/2024	Sanborn Head	On	On	On	On	On	On	On
12/24/2024	Walden	On	On	N/A	Off	On	On	Off

Exhibit 3.4 – Status of HVAC Units in B330C During 2024 HVAC Checks.

Units listed as not monitored (NM) in Exhibit 3.4 were not checked in June 2024 because these units were not active or listed as ECs until the list of active HVAC units was updated by iPark in August 2024. AC-41 was marked as not applicable (N/A) by Walden throughout 2024 due to the area served by this unit reportedly not being occupied. Sanborn Head observed AC-41 to be on during both the June and December 2024 PMP checks.

Additionally, several deviations related to air damper settings were observed, including:

- In June and December 2024, HVAC unit AC-90 was observed by Sanborn Head to be operating with outside air dampers at a lesser percentage open when compared to the settings described in the PMP and Walden's IAQ O&M Compliance Plan. This observation was also made during the December 2022, June 2023, and November 2023 PMP checks performed by Sanborn Head. The HVAC zone for AC-90 is generally not within the area of influence of the B330C SSD systems (VE-8). IBM requested that iPark adjust the outside air dampers at the unit and return them to the condition described in the PMP, which had not

been confirmed as of the date of this report. IBM will continue to attempt to verify the status of these adjustments with iPark;

- In June and December 2024, HVAC unit AC-13 was observed by Sanborn Head to be operating with outside air dampers at a lesser percentage open when compared to the settings described in the PMP. The HVAC zone for AC-13 is generally not within the area of influence of the B330C SSD systems (VE-7 and VE-8). IBM has communicated this observation to iPark and requested that iPark adjust the outside air dampers at the unit to meet the condition described in the PMP; and
- In June 2024, AC-1 and AC-41 were also observed to be operating with outside air dampers at a lesser percentage open when compared to the settings described in the PMP. As part of the updated list of HVAC units used as ECs in B330C provided by Walden on August 30, 2024, AC-1 is no longer active (the areas previously served by AC-1 are now served by AC-58 and AC-41), and AC-41 was observed to be operating in accordance with the PMP in December 2024.

3.5.2 SSD Systems (VE-7, VE-8, and VE-32)

Three SSD systems operated in B330C in 2024. Two of the SSD systems (VE-7 and VE-8) were installed/are maintained by IBM and cover the southern and western areas of the building. SSD systems VE-7[2] and VE-8[3] were put into operation on April 30, 2019 (Sanborn Head, 2019) and June 11, 2020 (Sanborn Head, 2020b), respectively. VE-7 and VE-8 replaced and expanded on the area addressed by the former VE-4, which served as an interim SSD system from March 2016 to June 2020. The Departments approved the VE-7 and VE-8 startup reports in letters to IBM dated April 2, 2020 and March 11, 2021, respectively. The interior vacuum piping, system enclosures, and approximate vacuum influence of VE-7 and VE-8 during the December 2024 checks are shown on Figure 7A.

The third SSD system (VE-32) was installed and is maintained by iPark. VE-32 is located in the northeastern portion of B330C in the Sloop tenant space. System design and startup testing was conducted by GZA Geoenvironmental, Inc. (GZA) on behalf of iPark. VE-32 was put into operation on April 28, 2021, as documented in an October 2021 report submitted to the Departments (GZA, 2021).

VE-32 consists of 22 EPs located in the Sloop space as shown in the layout drawing provided in Appendix G. The EPs connect to riser pipes which run vertically along interior walls or beams to the interior ceiling level and are then routed into a header pipe. Five to six EPs are connected to each header, with four total header lines installed. The header pipes are routed to the roof and connect to separate blowers.

A description of the operations, maintenance, and performance monitoring of VE-7, VE-8, and VE-32 are provided in the following sections.

---

[2] SSD system VE-7 was constructed in two phases to accommodate iPark renovations. Phase I was put into operation on April 30, 2019 and Phase II was put into operation at the same time as VE-8 (June 11, 2020).

[3] One temporary SSD system in B330C (VE-4) was shut down in 2020 upon the start-up of VE-8. A mass removal plot for VE-4 is provided in Appendix E for reference.

3.5.2.1. VE-7 and VE-8 Operations and Maintenance

The SSD systems are designed for continuous operation and are equipped with sensors, alarms (e.g., low vacuum, power outage), and a telemetry system that automatically communicates such alarms to the appropriate personnel. The VE-7 and VE-8 systems operated continuously without significant shutdowns in 2024.

3.5.2.2 VE-7 and VE-8 Performance Monitoring

Cross-slab DP readings within B330C, outside of the Sloop tenant space, were recorded between December 10 and 13, 2024. These readings, along with the applied vacuums and flow rates at each of the operating EPs, and the inferred extent of subslab depressurization from VE-7 and VE-8, are shown on Figure 7A. Key observations are as follows:

- Two localized changes in the southwestern portion of the building were noted at subslab monitoring ports SS3044 and SS3061, where the DPs were measured at 0.000 in. WC and -0.24 in. WC, respectively, as compared to -0.007 in. WC and 0.11 in. WC, respectively, in December 2023. These slight shifts in DP may be attributable to changes in HVAC system operations (i.e., less outside air), normal variations of the system, and other factors that impact building pressure (e.g., doors open versus closed). These impacts are in discrete areas of the building surrounded by areas under SSD influence. Therefore, indoor air quality is unlikely to be affected by these relatively isolated changes to DP and additional actions beyond continued annual monitoring are not warranted.
- Two other localized changes in the central portion of the building were noted at subslab monitoring ports SS3007 and SS3052, where the DPs were measured at -0.003 in. WC and 0.000 in. WC, respectively, as compared to -0.007 in. WC and -0.009 in. WC, respectively, in December 2023. These slight shifts in DP may be attributable to changes in HVAC system operations (i.e., less outside air), normal variations of the system, and other factors that impact building pressure (e.g., doors open versus closed). These impacts are in discrete areas of the building surrounded by areas under SSD influence. Therefore, indoor air quality is unlikely to be affected by these relatively isolated changes to DP and additional actions beyond continued annual monitoring are not warranted.

Based on the localized changes observed during the December measurement round, a subsequent, limited round of cross-slab DP readings within B330C was performed on March 27, 2025. The selected DP monitoring ports were cleaned of debris prior to collecting measurements. Key observations are presented in Figure 7B and included:

- One localized change in the southwestern portion of the building was noted at subslab monitoring port SS3044, where the DP was measured at -0.003 in. WC as compared to 0.000 in. WC in December 2024.
- One other localized change in the central portion of the building was noted at subslab monitoring port SS3052, where the DP was measured at -0.006 as compared to 0.000 in. WC in December 2024.

Based on the cross-slab DP measurements from March 2025, the relatively reduced apparent area of influence of VE-7 and VE-8 observed in December 2024 was possibly related to clogging of the DP monitoring points and not indicative of reduced effectiveness of the SSD systems. It is also possible that the changing HVAC conditions within B330C affected DP measurements relative to previous rounds. We interpret that the VE-7 and VE-8 SSD systems are operating in accordance with the design objectives.

System influent vapor samples were collected monthly and analyzed for VOCs. A plot of mass removal rate and cumulative mass removed since system startup are shown on Exhibits 3.5 and 3.6 below.

- VE-7 removed approximately 15 pounds of PCE from the subsurface during 2024, bringing the total mass of PCE removed since the April 2019 system startup to approximately 168 pounds.
- VE-8 removed approximately 16 pounds of PCE from the subsurface during 2024, bringing the total mass of PCE removed since the June 2020 system startup to approximately 179 pounds.

Combined with former SSD system VE-4, the SSD systems in B330C installed and operated by IBM have removed a combined total of approximately 749 pounds of PCE. A mass removal plot for VE-4 prior to its decommissioning is provided in Appendix E for reference.

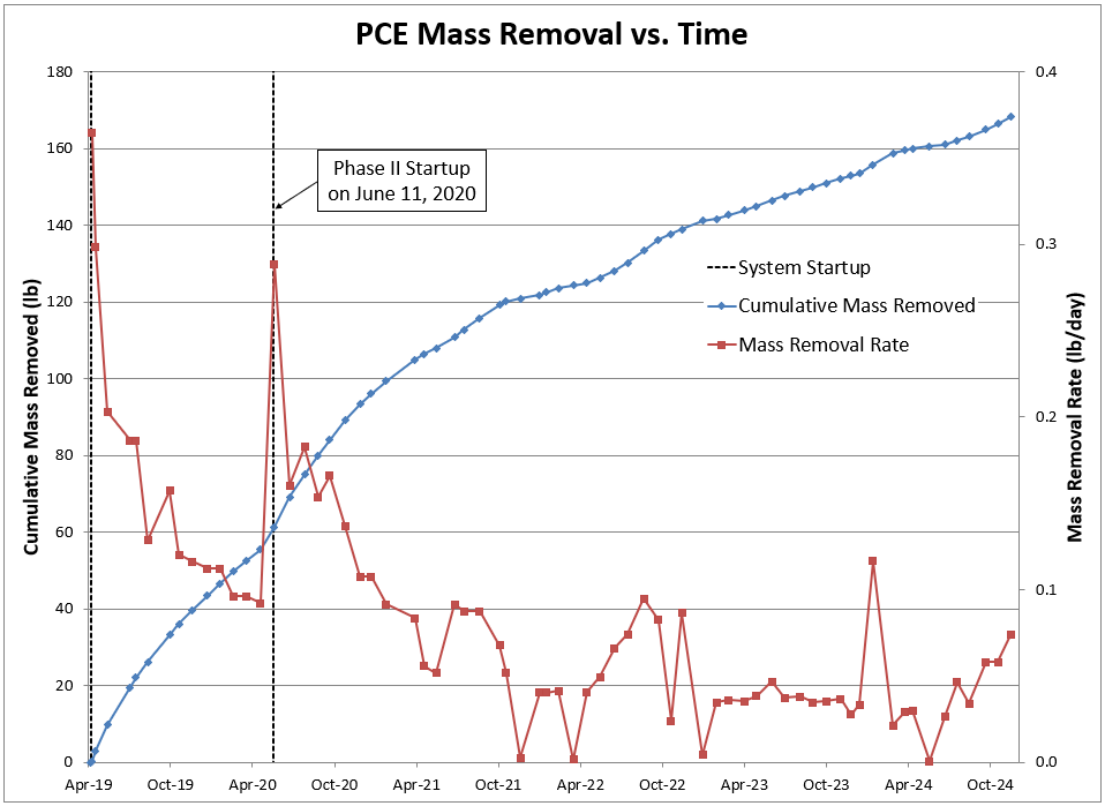


Exhibit 3.5 – VE-7 PCE Mass Removal vs. Time

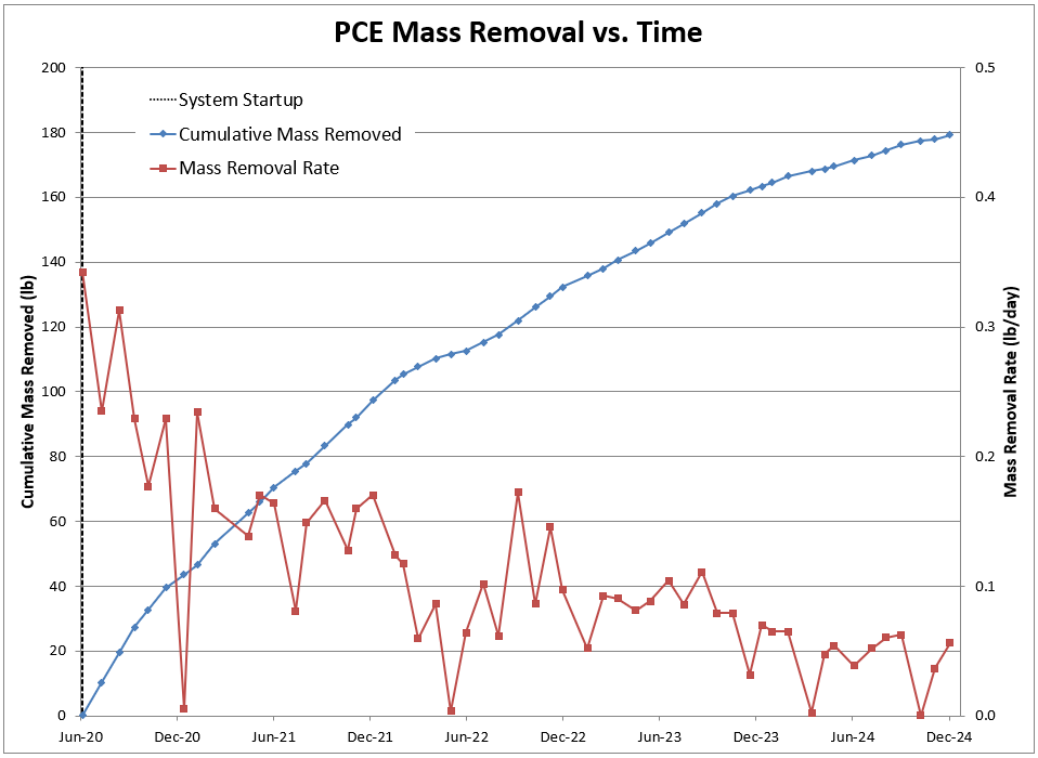


Exhibit 3.6 – VE-8 PCE Mass Removal vs. Time

3.5.2.3 VE-32 Operations, Maintenance, and Performance Monitoring

Walden conducted performance monitoring of VE-32 in December 2024, which included DP measurements at subslab vapor ports, and vacuum and velocity readings at the vapor EPs. Based on the December 2024 monitoring, Walden concluded that the system is effectively depressurizing the slab beneath the Sloop tenant space.

The system is equipped with an audible alarm that indicates when the system has stopped operating. The blower associated with Header #2 of the VE-32 system (which is connected to five extraction ports in the occupied Sloop space of B330C) was offline for 149 days in 2024, between August 5, 2024 and December 31, 2024. iPark reportedly brought this blower back online in January 2025. IBM is not aware of other instances of shutdown in 2024.

Walden noted during 2022 performance monitoring that three of the subslab vapor pins were damaged and noted during 2023 that two of these vapor pins were still damaged and needed to be replaced. During the performance monitoring in 2024, Walden indicated that the two remaining vapor pins were repaired in 2024 but were damaged again before the December 31, 2024 annual inspection due to their location in a heavily-trafficked area. Walden noted they would evaluate a solution for preventing further vapor pin damage in this area in early 2025.

3.6 B330D (iPark)

B330D is a Category 1 building. B330D is equipped with two SSD systems operated by IBM (VE-1 and VE-10). Because the SSD systems cover the entire building footprint, the HVAC systems are not subject to operational checks under the PMP.

SSD system VE-1 (previously referred to as the 80K area system in the northern part of B330D and also referred to as the B330D North SSD system) was put into operation on October 6, 2010, as documented in a December 2011 report submitted to the Departments (Sanborn Head, 2011). As described in the 2016 Annual Report (Sanborn Head, 2017), the subslab vapor EPs were changed from the original five EPs, in use since system startup, to suction pit SP4001 on December 29, 2016. The purpose of the change was to decrease the energy consumption and physical footprint of the system while maintaining a similar area of influence. The coverage of the VE-1 system was expanded in 2019 to include EPs to cover the additional footprint of the Crepini tenant space.

A second B330D system (VE-10)[4] began operation on August 27, 2020 as documented in a November 2020 start-up report submitted to the Departments (Sanborn Head, 2020c), which was approved by the Departments in an April 7, 2021 letter to IBM. VE-1 and VE-10 replaced and expanded on two interim SSD systems: VE-5 and VE-6. VE-5 operated between February 2017 and June 2020. VE-6 operated between February 2017 and July 2020.

To balance vapor extraction rates in B330D, valves were installed in the vacuum piping to split the overall extraction flow rate between systems VE-1 and VE-10. The combined subslab vacuum influence of the VE-1 and VE-10 systems includes the Crepini tenant space, the Hybrid Electrostatic Industries (HES) tenant space, the central portion of the building (Crepini expansion area), and the southern portion of the building, including the IBM tenant space. The interior vacuum piping, system enclosures, and approximate vacuum influence of VE-1 and VE-10 are shown on Figure 8.

A description of the operations, maintenance, and performance monitoring of VE-1 and VE-10 are provided in the following sections.

3.6.1 SSD Systems VE-1 and VE-10 Operations and Maintenance

The SSD systems are designed for continuous operation and are equipped with sensors, alarms (e.g., low vacuum, power outage), and a telemetry system that automatically communicates such alarms to the appropriate personnel. The following shutdown were noted in 2024:

- VE-1 was offline for 11 days beginning on November 15, 2024 following a power surge that damaged an electrical component of the system control panel. The system was repaired and restarted on November 26, 2024.

No other significant shutdowns of the VE-1 and VE-10 systems occurred in 2024.

3.6.2 VE-1 and VE-10 Performance Monitoring

Cross-slab DP readings within B330D were recorded between December 10 and 13, 2024. These readings, along with the applied vacuums and flow rates at each of the operating EPs, and the

[4] Two temporary SSD systems (VE-5 and VE-6) were shut down in 2020 upon the expansion of VE-1 and start-up of VE-10. Mass removal plots for VE-5 and VE-6 are provided in Appendix E for reference.

inferred extent of subslab depressurization, are shown on Figure 8. Key observations are as follows:

- Localized changes in subslab depressurization were noted in the southern area of B330D (IBM tenant space). At subslab monitoring port SS4036, located in the southern corner of the building, the DP was measured at -0.002 in. WC in December 2024 as compared to -0.007 in. WC in November 2023. At subslab monitoring port SS4034, located in the central portion of the IBM tenant space, DP was measured at -0.007 in. WC in December 2024 as compared to 0.000 in. WC in November 2023. These slight shifts in DP may be attributable to changes in HVAC system operations in the tenant spaces (i.e., less outside air), normal variations of the system, and other factors that impact building pressure (e.g., doors open versus closed). These impacts are in discrete areas of the building surrounded by areas under SSD influence. Therefore, indoor air quality is unlikely to be affected by these relatively isolated changes to DP and additional actions beyond continued annual monitoring are not warranted.

Based on our review of the operations log sheets and the cross-slab DP measurements, the VE-1 and VE-10 SSD systems are operating in accordance with the design objectives.

System influent vapor samples were collected monthly and analyzed for VOCs. A plot of mass removal rate and cumulative mass removed since system startup are shown on Exhibits 3.7 and 3.8 below.

- VE-1 removed approximately 225 pounds of PCE from the subsurface during 2024, bringing the total mass of PCE removed since the October 2010 system startup to approximately 19,358 pounds.
- VE-10 removed approximately 57 pounds of PCE from the subsurface during 2024, bringing the total mass of PCE removed since the August 2020 system startup to approximately 394 pounds.

Combined with former SSD systems VE-5 and VE-6, the SSD systems in B330D installed and operated by IBM have removed more than 21,100 pounds of PCE. Mass removal plots for VE-5 and VE-6 prior to their decommissioning are provided in Appendix E for reference.

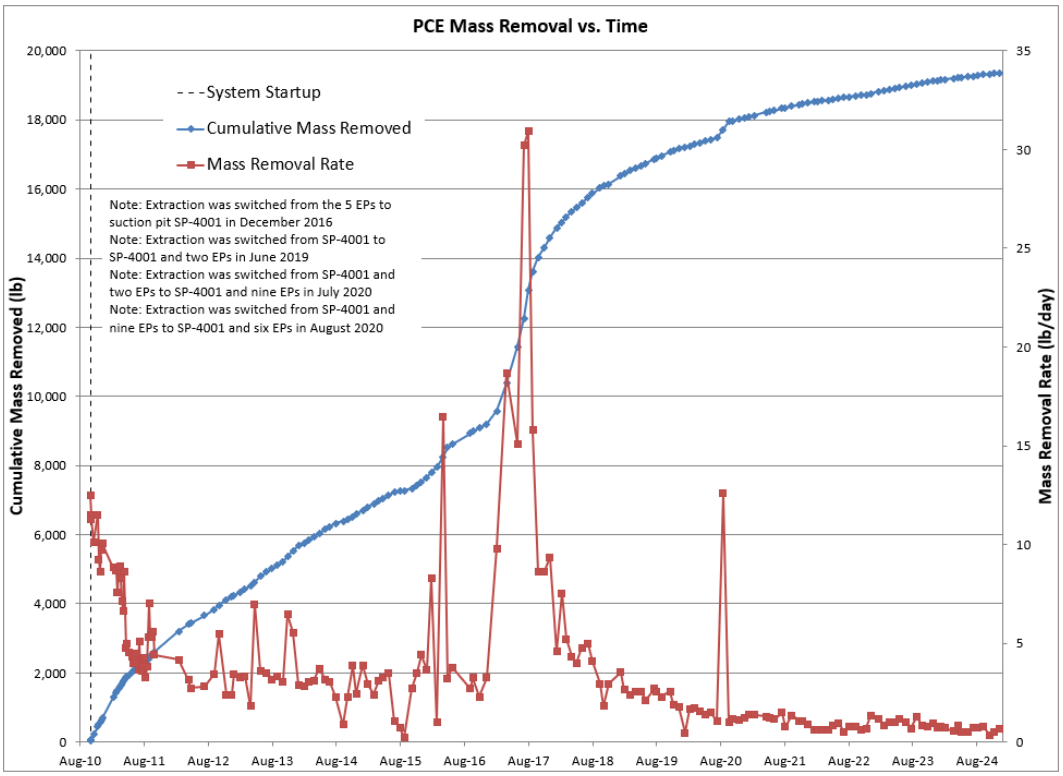


Exhibit 3.7 – VE-1 PCE Mass Removal vs. Time

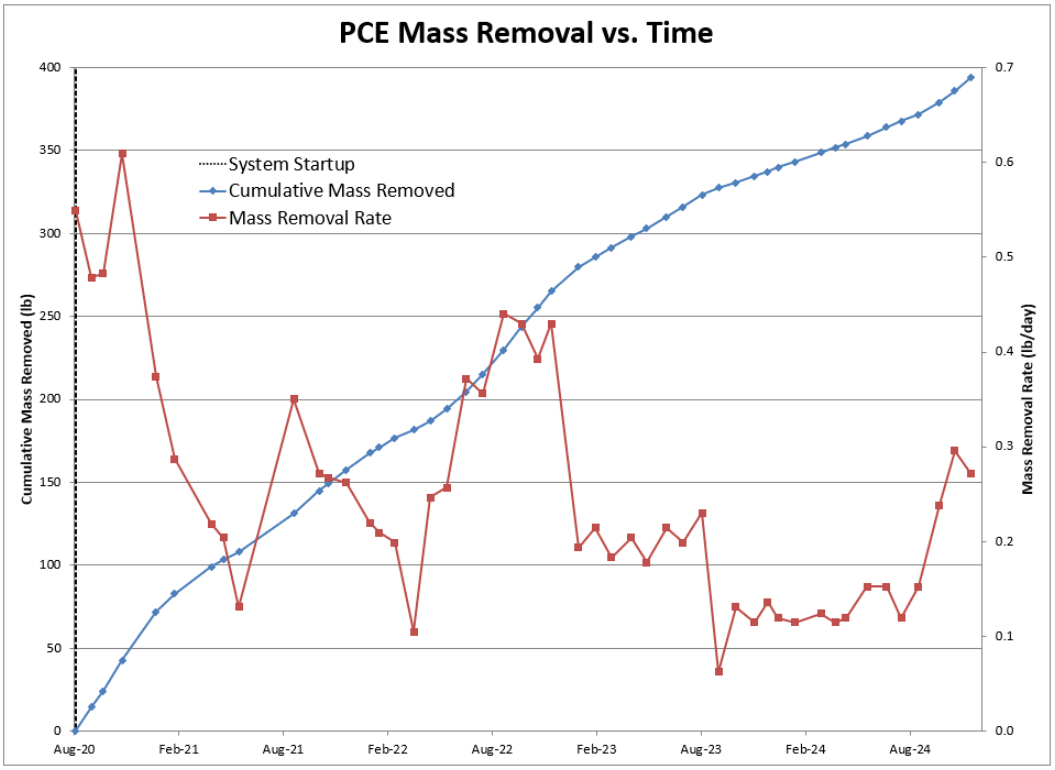


Exhibit 3.8 – VE-10 PCE Mass Removal vs. Time

3.7 B338 (iPark)

B338 is a Category 1 building. The SSD system (VE-30) was installed and is maintained by iPark. VE-30 consists of 19 EPs installed in B338 and in the visitor center / art studio building addition. The VE-30 layout drawing is provided in Appendix G. The first three ports (VE-30A, VE-30B, and VE-30C) were brought online by iPark in the Powerhouse Gym tenant space on August 24, 2020 as documented in an August 2020 report submitted to the Departments (Walden, 2020). On August 17, 2021, five additional EPs (VE-30D through VE-30H) were brought online to serve the visitor center and art studio, as documented in an August 2021 report submitted to the Departments (Walden, 2021b). In 2024, only the Powerhouse Gym tenant space was occupied.

Current system operations include eight EPs, each connected to a dedicated in-line radon mitigation-type fan, which are generally online unless they are undergoing maintenance (see below). The remaining EPs are inactive because they are in unoccupied areas.

To assess ongoing effectiveness, iPark conducts periodic monitoring of operations and performance. Operations monitoring includes an annual review of system components and monitoring of vacuum field conditions (cross-slab DP), the results of which are recorded on systems log sheets and provided to IBM for review. The three ports which serve the occupied space (VE-30A, B, and C) were reported as being online throughout 2024. One of the VE-30 system EPs (VE-30D) was indicated offline beginning in late 2021, and Walden noted that VE-30D was still offline throughout 2024. The fan associated with VE-30D was replaced on November 27, 2024 and brought back online in January 2025. In addition, VE-30F was offline between June 28, 2024 and November 8, 2024 due to a fan replacement and electrical modifications, and VE-30H was offline between July 5, 2024 and November 8, 2024 due to a fan replacement and electrical modifications.

Cross-slab DP readings within B338 were recorded by Walden on December 31, 2024. Based on the DP measurements, Walden concluded that the system is effectively depressurizing the slab beneath the occupied areas of the building (i.e., the gym tenant space). The system alarms, gauges, and valves at the functioning fans were tested by Walden and found to be functioning properly as designed.

3.8 B339 (iPark)

B339 is a Category 1 building. SSD system VE-31 was installed by iPark in B339 and started-up on August 24, 2020 as documented in an April 2021 report submitted to the Departments (Walden, 2021a). The SSD system was installed and is maintained by iPark. The system consists of five EPs that connect to a single blower. The VE-31 layout drawing is provided in Appendix G.

To assess ongoing effectiveness, iPark conducted periodic monitoring of operations and performance. Operations monitoring includes an annual review of system components and monitoring of vacuum field conditions (cross-slab DP), the results of which are recorded on systems log sheets and provided to IBM for review. Walden noted that the VE-31 system was offline for 63 days from June 24, 2024 to August 26, 2024. Walden also noted that the system fan's outlet pipe was broken on October 11, 2024 and replaced on December 3, 2024.

Cross-slab DP readings within B339 were recorded on December 9, 2024. Based on the DP measurements, Walden concluded that the system is effectively depressurizing the slab beneath the building. The system alarms, gauges, and valves were tested by Walden and found to be functioning properly as designed. Other than the period from June 24, 2024 to August 26, 2024, IBM is not aware of any instances of shutdown in 2024.

3.9 B300, B317, B320B, B321, B322, B323, B323A, B386 (Onsemi)

The buildings listed above are Category 4 buildings; therefore, changes are allowed to the HVAC operational settings as long as the units remain operating in occupied areas. Based on communication with Onsemi, no changes to normal HVAC operational settings were made in 2024. A summary of the 2024 operational checks is provided in Table 2.

3.10 B308, B330L, and B334 (iPark)

The buildings listed above are Category 4 buildings; therefore, changes are allowed to the HVAC operational settings as long as the units remain operating in occupied areas. Based on communication with iPark, no changes to normal HVAC operational settings were made in 2024. A summary of the 2024 operational checks is provided in Table 2.

4.0 AREA A SOIL VAPOR EXTRACTION SYSTEM (VE-3)

An exterior SVE system (VE-3) was installed during the second quarter of 2015 to address the presence of VOCs, primarily PCE, in soil vapor located in exterior areas of Remediation Area A, as documented in a February 2016 report (Sanborn Head, 2016a) to NYSDEC. VE-3 is not a VI EC for any building, but its operations are being tracked and reported under the PMP. IBM operates the system seasonally (spring to fall, to protect against potential excessive generation of condensation and freezing in exposed pipes) as an extended pilot system for VOC source reduction. In 2024, the system was re-started on May 2, 2024 and was shut down on October 15, 2024.

The SVE system consists of six exterior SVE wells, and a blower and treatment system that are housed in a shipping container located along the east side of B310, within Area A. The small diameter vapor wells (SDV-1, 3, 5, 6, 7, 8) are screened in the lower portion of the soil fill at depths of approximately 7.5 to 10 feet below ground surface (ft bgs). Three wells (SDV-5, 6, and 8) operated in 2024 because they best met the objectives of achieving the greatest mass removal compared to other wells while attaining a reasonable extent of vacuum influence.

4.1 Operations and Maintenance

The SVE system is designed for seasonal operation, and is equipped with sensors, alarms (e.g., low vacuum, power outage), and a telemetry system that automatically communicates such alarms to the appropriate personnel. The VE-3 system operated continuously without significant shutdowns in 2024.

4.2 Performance Monitoring

Subsurface DP readings were recorded within Area A prior to system shut down in October 2024. Figures 9 and 10 show the resulting inferred extent of subsurface vacuum at depths of 5

ft bgs and 10 ft bgs, respectively, and the applied vacuum and air flow rate at each extraction well. Subsurface vacuum monitoring indicated influence generally consistent with start-up conditions.

System influent vapor samples were collected monthly and analyzed for VOCs. A plot of mass removal rate and cumulative mass removed since system startup is shown on Exhibit 3.9 below.

- VE-3 removed approximately 25 pounds of PCE from the subsurface between May and October 2024, bringing the total PCE mass removed since the May 2015 startup to approximately 603 pounds.

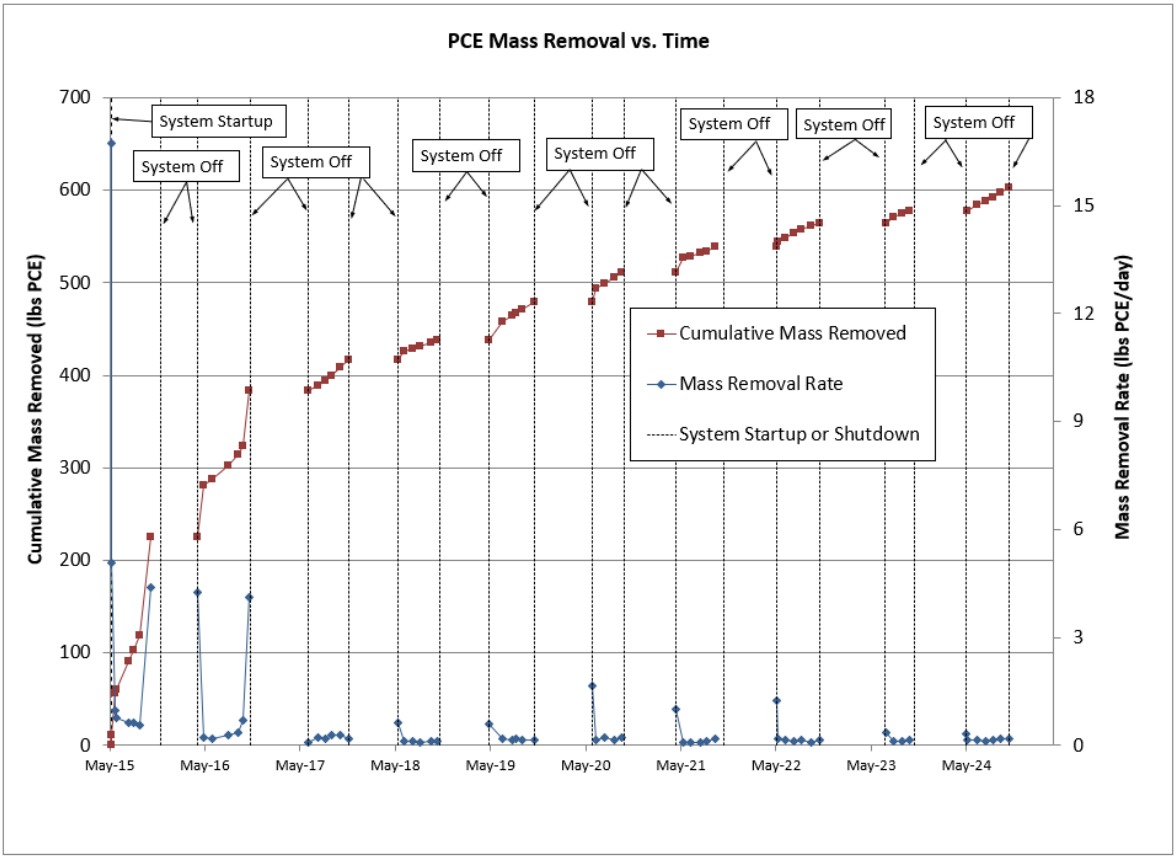


Exhibit 3.9 – VE-3 PCE Mass Removal vs. Time

5.0 UPCOMING ACTIVITIES

In response to a request by the Departments following several months of non-operation of HVAC units in areas where HVAC was meant to serve as the presumptive EC, Walden submitted an IAQ O&M Compliance Plan in 2024 (Walden, 2024). Although the Departments have not approved this plan, Walden began implementation of some of the described practices (including biweekly HVAC system checks) in September 2024, which are ongoing. Based on the continued difficulties in establishing long-term HVAC settings in B310 and B330C in particular, IBM and iPark are now working collaboratively to perform the biweekly system checks and, following establishment of conservative (i.e., low HVAC control) conditions, collect IAQ data to

inform whether the established conditions sufficiently protect against VI in the occupied spaces of these buildings.
IBM is also working cooperatively with Onsemi and iPark to verify that the appropriate HVAC operating conditions necessary for VI mitigation in routinely occupied portions of the buildings are maintained. It is Onsemi's and iPark's responsibility to communicate changes to occupancy or HVAC conditions to IBM so that additional IAQ testing can be performed as required by the PMP. Building use, occupancy, and HVAC systems will also continue to be monitored as part of the PMP.

iPark is performing ongoing renovations for new tenant spaces in B330C (eMagin, More Good, and Sloop expansions). Pre-occupancy IAQ testing has been completed in the eMagin clean room expansion area. We anticipate that iPark will perform IAQ testing in the More Good and Sloop expansion areas prior to occupancy.

6.0 REFERENCES

D&B Engineers and Architects, P.C., 2020, *Work Plan for Decontamination/Closure of Building 320B Solid Waste Management Units (SWMUs)*, May 2020.

GZA GeoEnvironmental of New York, 2021, *Construction Completion Report – Sloop Brewery, iPark 84, LLC, Former IBM East Fishkill Facility,* October 2021.

Sanborn, Head Engineering, P.C., 2009, *RCRA Facility Investigation Work Plan – VOC Source Assessment, IBM East Fishkill Facility, Hopewell Junction, New York,* June 15, 2009.

Sanborn, Head Engineering, P.C., 2011, *Performance Monitoring and Confirmatory Sampling Results – Building 330D VOC Source Assessment, Hopewell Junction, NY, IBM East Fishkill Facility,* December 2011.

Sanborn, Head Engineering, P.C., 2013, *Performance Monitoring and Confirmatory Sampling Results – Building 310 VOC Source Assessment, IBM East Fishkill Facility, Hopewell Junction, NY*, May 2013.

Sanborn, Head Engineering, P.C., 2016a, *Subslab Depressurization System Startup Report – Building 308/Building 310 Linkway, Former IBM East Fishkill Facility, Hopewell Junction, NY*, February 2016.

Sanborn, Head Engineering, P.C., 2016b, *Installation and Performance Monitoring Report – Area A Pilot SVE System, Hopewell Junction, NY, Former IBM East Fishkill Facility,* February 2016.

Sanborn, Head Engineering, P.C., 2017, *Vapor Intrusion Assessment 2016 Annual Report, Former IBM East Fishkill Facility, Hopewell Junction*, *New York*, May 16, 2017.

Sanborn, Head Engineering, P.C., 2019, *Subslab Depressurization System, Completion and Startup Report (Phase I), Building 330C, Former IBM East Fishkill Facility, Hopewell Junction, New York,* October 31, 2019.

Sanborn, Head Engineering, P.C., 2020a, *Subslab Depressurization System Completion and Startup Report – B310, Former IBM East Fishkill Facility, Hopewell Junction, NY*, October 22, 2020.

Sanborn, Head Engineering, P.C., 2020b, *Subslab Depressurization System Completion and Startup Report (Phase II), Building 330C, Former IBM East Fishkill Facility, Hopewell Junction, New York,* October 22, 2020.

Sanborn, Head Engineering, P.C., 2020c, *Subslab Depressurization System Completion and Startup Report – Building 330D Central & South System, Former IBM East Fishkill Facility, Hopewell Junction, NY,* November 24, 2020.

Sanborn, Head Engineering, P.C., 2021a, *Performance Monitoring Plan for Vapor Intrusion Engineering Controls, Former IBM East Fishkill Facility, Hopewell Junction, New York,* May 5, 2021.

Sanborn, Head Engineering, P.C., 2021b, Amendment #1 to "*Subslab Depressurization System Completion and Startup Report – Building 310*", dated October 22, 2020 – *B310, Former IBM East Fishkill Facility, Hopewell Junction, NY*, August 30, 2021.

Sanborn, Head Engineering, P.C., 2024, *Indoor Air Quality Data Summary Report, Building 316, Former IBM East Fishkill Facility, Hopewell Junction, New York,* May 10, 2024.

State of New York Department of Environmental Conservation (NYSDEC), 2020, *Order on Consent, Case No. CO 1-20181004 EPA ID No. NYD000707901*, executed by NYSDEC on May 1, 2020.

Walden Environmental Engineering, PLLC, 2020, *Building 730 (Formerly 338) Powerhouse Gym Space Vapor Mitigation System Start-Up Summary Report at iPark 84, Former IBM East Fishkill Facility,* August 27, 2020.

Walden Environmental Engineering, PLLC, 2021a, *B339/B740 Vapor Mitigation System VE-31 Start-Up Summary Report at iPark 84, Former IBM East Fishkill Facility,* April 2021.

Walden Environmental Engineering, PLLC, 2021b, *Building 730 (Formerly 338) Visitor Center Space Vapor Mitigation System (VE-30D, VE-30E, VE-30F, VE-30G and VE-30H) Start-Up Testing Summary Report at iPark 84, Former IBM East Fishkill Facility,* August 2021.

Walden Environmental Engineering, PLLC, 2024, *iPark 84, Former IBM East Fishkill Facility Indoor Air Quality Operation and Maintenance Compliance Plan*, September 3, 2024.

\\conserv1\shdata\2900s\2999.22\Source Files\2024 Annual Report\20250523-EFK-Annual-Rpt-VI.docx

Tables

Table 1
Site Buildings and Designations
VI EC Performance Monitoring Plan
Former IBM East Fishkill Facility
Hopewell Junction, New York

Building	Building Owner	iPark Building Designation	Current Use	June 2009 RFI Work Plan Building Designation (Note 1)	PMP Grouping Considerations						Rationale for PMP Grouping
					Overburden GW VOC Presence	Bedrock GW VOC Presence	Routinely Occupied (Current or Proposed)	Building Subject to VI EC	Current Occupational VOC Presence	Outside Central Area of Site	
Category 1 - Buildings Subject to Subslab Depressurization Engineering Controls for Full Building Footprint											
B308 / B310 Linkway	**iPark EFK II LLC and iPark EFK 84 LLC**	NA	Connects B310 to B308. Linkway doors currently closed going into B308.	Linkway not specifically identified in 2009 Work Plan	X	X					SSDS engineering controls installed in full building. SSDS engineering controls in the B310/B308 linkway have achieved acceptable indoor air VOC levels in B308.
330D	**iPark EFK LLC and iPark EFK 84 LLC**	700	Offices, laboratories, cleanroom manufacturing, food manufacturing, semiconductor manufacturing	Source Investigation	X	X	X	X			SSDS engineering controls installed in full building
338	**iPark EFK B338 LLC**	730	Gym in northeast portion of building. Remaining areas vacant. Visitor's center under construction.	Confirmatory IA Sampling	X	X	X	X			SSDS engineering controls proposed for full building
339	**iPark EFK B338 LLC**	740	Bakery	Not included in RFI Work Plan	X	X	X	X			SSDS engineering controls installed in full building
Category 2 - Buildings Subject to Subslab Depressurization Engineering Controls for Partial Building Footprint											
310	**iPark EFK I LLC**	220	Model Shop (southern area); Warehousing (central and northern areas)	Source Investigation	X	X	X	X			SSDS engineering control have been implemented in partial building footprint. HVAC engineering controls have have been implemented in building areas outside of SSDS influence.
330C	**iPark EFK III LLC and iPark EFK 84 LLC**	755	Offices, laboratories, cleanroom manufacturing, food manufacturing, knife sharpening, brewery	Confirmatory IA Sampling	X	X	X	X			SSDS engineering control have been implemented in partial building footprint. HVAC engineering controls have have been implemented in building areas outside of SSDS influence.

Table 1
Site Buildings and Designations
VI EC Performance Monitoring Plan
Former IBM East Fishkill Facility
Hopewell Junction, New York

Building	Building Owner	iPark Building Designation	Current Use	June 2009 RFI Work Plan Building Designation (Note 1)	PMP Grouping Considerations						Rationale for PMP Grouping
					Overburden GW VOC Presence	Bedrock GW VOC Presence	Routinely Occupied (Current or Proposed)	Building Subject to VI EC	Current Occupational VOC Presence	Outside Central Area of Site	
Category 4 - Alteration of HVAC Systems Was Not Necessary for VI Mitigation Purposes											
300	**Onsemi**	NA	Offices, laboratories, storage, data center	Confirmatory IA Sampling		X	X	X			Confirmatory sampling indicated acceptable indoor air VOC results when sampled with the HVAC system running normally and variable dampers fixed in their minimum positions.
308	**iPark EFK II LLC and iPark EFK 84 LLC**	308	Offices, shipping/receiving warehouse, emergency control	Confirmatory IA Sampling	X	X	X	X			Confirmatory sampling indicated acceptable indoor air VOC results when sampled with the HVAC system running normally and variable dampers fixed in their minimum positions. Linkway doors currently closed going into B308, cutting off impacts of VOC-containing indoor air migrating from linkway.
316	**Onsemi**	NA	DI water production, chilled water plant, and a small portion of building used for office, laboratories, and storage.	No Further Assessment	X		X		X		This building previously served as the Central Carbon treatment system where VOC-containing groundwater was treated for process and potable use. Indoor air sampling was conducted after carbon treatment vessels were removed and indicated acceptable indoor air VOC results when sampled with the HVAC system running normally.
317	**Onsemi**	NA	Ammonia treatment	No Further Assessment	X		X				Indoor air sampling indicated acceptable indoor air VOC results when sampled with the HVAC system running normally.
320B	**Onsemi**	NA	Cleanroom manufacturing, storage, laboratories	Confirmatory IA Sampling	X	X	X	X			Confirmatory sampling indicated acceptable indoor air VOC results when sampled with the HVAC system running normally and variable dampers fixed in their minimum positions.
321	**Onsemi**	NA	Cleanroom manufacturing, office, electrical test laboratories, and data center	No Further Assessment		X	X	X			Pre-RFI Work Plan indoor air sampling indicated acceptable indoor air VOC results.
322	**Onsemi**	NA	Northern 2/3 of building was demolished in 2019. Telephone panel room, vacant space, and hallways remain.	Confirmatory IA Sampling	X	X		X			Indoor air sampling indicated acceptable indoor air VOC results in the telephone room when sampled with the HVAC system running normally.
323	**Onsemi**	NA	Cleanroom manufacturing	Confirmatory IA Sampling	X	X	X	X			Confirmatory sampling indicated acceptable indoor air VOC results when sampled with the HVAC system running normally and variable dampers fixed in their minimum positions.
323A	**Onsemi**	NA	Cleanroom manufacturing	No Further Assessment		X	X	X			Confirmatory sampling in adjoining B323 indicated acceptable indoor air VOC results when sampled with the HVAC system running normally and variable dampers fixed in their minimum positions.
330L	**iPark EFK II LLC and iPark EFK 84 LLC**	710	Cafeteria, offices, food manufacturing (under construction), dental equipment manufacturing (under construction)	Grouped with B330D in RFI Work Plan (Source Investigation)	X	X	X	X			Confirmatory sampling indicated acceptable indoor air VOC results when sampled with the HVAC system running normally.
334	**iPark EFK I LLC**	745	Mask manufacturing	Confirmatory IA Sampling		X	X	X			Confirmatory sampling indicated acceptable indoor air VOC results when sampled with the HVAC system running normally and variable dampers fixed in their minimum positions.
386	**Onsemi**	NA	Fluoride waste treatment facility, some offices.	Confirmatory IA Sampling	X	X	X	X			Confirmatory sampling indicated acceptable indoor air VOC results when sampled with the HVAC system running normally.

Table 1
Site Buildings and Designations
VI EC Performance Monitoring Plan
Former IBM East Fishkill Facility
Hopewell Junction, New York

Building	Building Owner	iPark Building Designation	Current Use	June 2009 RFI Work Plan Building Designation (Note 1)	PMP Grouping Considerations						Rationale for PMP Grouping
					Overburden GW VOC Presence	Bedrock GW VOC Presence	Routinely Occupied (Current or Proposed)	Building Subject to VI EC	Current Occupational VOC Presence	Outside Central Area of Site	
Building is Not Routinely Occupied											
335	**iPark EFK I LLC**	720	Former PCE recycling plant. Currently used for non-chemical storage.	No Further Assessment	X	X					Building is not routinely occupied.
B330L Freezer Structure (Proposed for Construction)	**iPark EFK II LLC and iPark EFK 84 LLC**	NA	Freezer structure (proposed for construction)	NA (building not yet constructed in 2009)	X	X		X			Building has not yet been constructed. Building will not be routinely occupied.
Potential Occupational VOC Presence											
303	**iPark EFK II LLC and iPark EFK 84 LLC**	303	Bulk chemical storage	No Further Assessment	X				X		Building is a chemical bulk storage facility as normal occupational use. Building is not routinely occupied.
309	**iPark EFK II LLC and iPark EFK 84 LLC**	309	Offices, warehouse for hazardous and special waste storage	Confirmatory IA Sampling	X		X		X		Building is used for storage of hazardous and special waste as normal occupational use. Confirmatory sampling indicated acceptable indoor air VOC results.
384	**iPark EFK II LLC and iPark EFK 84 LLC**	384	Area A groundwater treatment facility	No Further Assessment	X	X			X		Building is used for treatment of chlorinated ethene-contaminated groundwater as normal occupational use. Building is not routinely occupied.
385	**Onsemi**	NA	Recycling, decontamination, former fluoride waste treatment facility	No Further Assessment	X				X		Building is used as a chemical storage, recycling, decontamination, and waste water treatment facility as part of normal occupational use.
PW-2 GW Treatment Facility (GTF)	**IBM**	NA	Groundwater treatment facility	NA (building not yet constructed in 2009)	X	X			X		Building houses a groundwater treatment system where VOC-containing groundwater is treated daily as normal occupational use. Building is not routinely occupied.
No Known Underlying VOC Presence in Groundwater and Located in Central Area of Site											
312	**Onsemi**	NA	Industrial waste treatment	No Further Assessment					X		No known underlying groundwater VOC presence. Building located in central area of site.
315	**Onsemi**	NA	Central utility plant housing industrial boilers and cooling systems. Process water treatment.	No Further Assessment			X		X		No known underlying groundwater VOC presence. Building located in central area of site. Pre-RFI Work Plan indoor air sampling indicated acceptable indoor air VOC results.
320	**iPark EFK I LLC**	200	Lobby, offices	Grouped with B320A in RFI Work Plan (NFA)			X				No known underlying groundwater VOC presence. Building located in central area of site. Pre-RFI Work Plan indoor air sampling indicated acceptable indoor air VOC results.
320A	**iPark EFK I LLC**	210	Warehouse, offices	No Further Assessment			X				No known underlying groundwater VOC presence. Building located in central area of site. Pre-RFI Work Plan indoor air sampling indicated acceptable indoor air VOC results.
328	**Onsemi**	NA	Bulk non-solvent chemical distribution	No Further Assessment							No known underlying groundwater VOC presence. Building located in central area of site.
329	**Onsemi**	NA	Electrical utility building	No Further Assessment							No known underlying groundwater VOC presence. Building located in central area of site.
PW-25 GTF	**IBM**	NA	Groundwater treatment facility	NA (building not yet constructed in 2009)					X		No known underlying groundwater VOC presence. Building located in central area of site.

Table 1
Site Buildings and Designations
VI EC Performance Monitoring Plan
Former IBM East Fishkill Facility
Hopewell Junction, New York

Building	Building Owner	iPark Building Designation	Current Use	June 2009 RFI Work Plan Building Designation (Note 1)	PMP Grouping Considerations						Rationale for PMP Grouping
					Overburden GW VOC Presence	Bedrock GW VOC Presence	Routinely Occupied (Current or Proposed)	Building Subject to VI EC	Current Occupational VOC Presence	Outside Central Area of Site	
No Further Assessment - No Known Underlying VOC Presence in Groundwater and Located Outside Central Area of Site											
304	**iPark EFK II LLC and iPark EFK 84 LLC**	304	Container chemical storage/warehouse, offices	No Further Assessment			X		X	X	No known underlying groundwater VOC presence. Building located outside central area of site. Pre-RFI Work Plan indoor air sampling indicated acceptable indoor air VOC results.
325	**Onsemi**	NA	Offices and laboratories for site water and wastewater treatment. Control instrumentation for WWTF.	No Further Assessment			X			X	No known underlying groundwater VOC presence. Building located outside central area of site.
327	**Onsemi**	NA	Offices and maintenance shop	No Further Assessment			X			X	No known underlying groundwater VOC presence. Building located outside central area of site.
343	**Onsemi**	NA	Demolished	No Further Assessment						X	No known underlying groundwater VOC presence. Building located outside central area of site.
PW-1 GTF	**IBM**	NA	Groundwater treatment facility	NA (building not yet constructed in 2009)							No known underlying groundwater VOC presence. Building located outside central area of site.

Notes:

1. *Work Plan, RCRA Facility Investigation (RFI), VOC Source Assessment, IBM East Fishkill Facility*, prepared by Sanborn Head Engineering P.C. on behalf of IBM, June 2009.

Table 2
Summary of 2024 PMP Monitoring Results
2024 VI EC Annual Report
IBM East Fishkill Facility
Hopewell Junction, NY

Building ID	Building Owner	Occupancy and Use Changes?	If yes, describe	HVAC Operational Settings Different than PMP?	If yes, describe	SSD Systems Operating in Accordance with Design Objectives?	If no, describe
300	OnSemi	N	Second floor space previously occupied by IBM is now occupied by AMAT.	N		Y	
308	iPark EFK 84 LLC	N		N		NA	
310	iPark EFK I LLC	N		Y	Updated settings based on Walden's IAQ O&M Compliance Plan	Y	
308/310 Linkway	iPark EFK 84 LLC/iPark EFK I LLC	N		NA		Y	
316	OnSemi	N		NA		NA	
317	OnSemi	N		N		NA	
320	iPark EFK I LLC	N		NA		NA	
320A	iPark EFK I LLC	N		NA		NA	
320B	OnSemi	N		N		Y	Passive system
321	OnSemi	N	Second floor space previously occupied by Marvel is now occupied by OnSemi.	N		NA	
322	OnSemi	N		N		NA	
323	OnSemi	N		N		NA	
323A	OnSemi	N		N		NA	
330C	iPark EFK 84 LLC	Y	eMagin, More Good, and Sloop expansion areas now occupied. OnSemi vacated building.	Y	Updated HVAC zones and settings based on Walden's IAQ O&M Compliance Plan	Y	
330D	iPark EFK 84 LLC	N	Crepini expansion complete and occupancy began in 2023.	NA		NA	
330L	iPark EFK 84 LLC	N		N		NA	
334	iPark EFK LLC	N		Y	Building is vacant, all HVAC units out of service.	NA	
335	iPark EFK LLC	N		Y	Updated HVAC zones and settings based on Walden's IAQ O&M Compliance Plan	NA	
338	iPark EFK B338 LLC	N		NA		Y	
339	iPark EFK B338 LLC	Y	Building is now vacant and used for storage.	NA		Y	
386	OnSemi	N		Y	Operating schedule of AHU-1 adjusted to reflect occupancy schedule.	NA	

Notes
1. Refer to the VI EC Annual Report text for additional information on the occupancy/use and VI EC changes noted above.
2. Abbreviations:
NA = Not Applicable
SSD = Subslab Depressurization System
HVAC = Heating, Ventilation, and Air Conditioning
PMP = Performance Monitoring Plan

Table 3
Summary of 8-Hour Indoor Air Analytical Results - B316
Former IBM East Fishkill Facility
Hopewell Junction, New York

Analyte	Sample Location	AA0601			IA0600			IA0600 Dup.			IA0601			IA0602			IA0603			IA0604			Field Blank		
	Collection Date	2/28/2024			2/28/2024			2/28/2024			2/28/2024			2/28/2024			2/28/2024			2/28/2024			2/28/2024		
	Units	Result	Qual.	Bias	Result	Qual.	Bias	Result	Qual.	Bias	Result	Qual.	Bias	Result	Qual.	Bias	Result	Qual.	Bias	Result	Qual.	Bias	Result	Qual.	Bias
Acetone	µg/m^3	7.1			19			<67	U		8.2			<60	U		<61	U		<67	U		<6.7	U	
Benzene	µg/m^3	0.36			0.38			<2.3	U		0.35			<2.0	U		<2.1	U		<2.3	U		<0.23	U	
Carbon tetrachloride	µg/m^3	0.45			0.47			<1.8	U		0.48			<1.6	U		<1.6	U		<1.8	U		<0.18	U	
CFC113 (Ethane, 1,1,2-trichloro-1,2,2-trifluoro-)	µg/m^3	<0.95	U		<1.0	U		<11	U		<0.96	U		<9.6	U		<9.9	U		<11	U			U	
Chlorobenzene (Monochlorobenzene)	µg/m^3	<0.57	U		<0.60	U		<6.5	U		<0.58	U		<5.8	U		<5.9	U		<6.5	U		<0.65	U	
Dichlorobenzene (1,2-)	µg/m^3	<0.74	U		<0.79	U		<8.5	U		<0.76	U		<7.6	U		<7.8	U		<8.5	U		<0.85	U	
Dichlorobenzene (1,3-)	µg/m^3	<0.74	U		<0.79	U		<8.5	U		<0.76	U		<7.6	U		<7.8	U		<8.5	U		<0.85	U	
Dichlorobenzene (1,4-)	µg/m^3	<0.74	U		<0.79	U		<8.5	U		<0.76	U		<7.6	U		<7.8	U		<8.5	U		<0.85	U	
Dichlorodifluoromethane (CFC12)	µg/m^3	3.6	J+	H	22	J+	H	23	J+	H	23	J+	H	26	J+	H	24	J+	H	41	J+	H	<0.35	U	
Dichloroethene (1,1-)	µg/m^3	<0.049	U		<0.052	U		<0.56	U		<0.050	U		<0.50	U		<0.51	U		<0.56	U		<0.056	U	
Dichloroethene (cis-1,2-)	µg/m^3	<0.098	U		<0.10	U		<1.1	U		<0.10	U		<1.0	U		<1.0	U		<1.1	U		<0.11	U	
Ethylbenzene	µg/m^3	<0.11	U		0.21			<1.2	U		0.21			<1.1	U		<1.1	U		<1.2	U		<0.12	U	
Methylene Chloride (Dichloromethane)	µg/m^3	<0.86	U		<0.91	U		<9.9	U		<0.88	U		<8.8	U		<9.0	U		<9.9	U		<0.99	U	
Tetrachloroethene (PCE)	µg/m^3	<0.17	U		<0.18	U		<1.9	U		<0.17	U		<1.7	U		<1.8	U		<1.9	U		<0.19	U	
Toluene	µg/m^3	<0.47	U		0.59			<5.4	U		0.65			<4.7	U		<4.9	U		<5.4	U		<0.54	U	
Trichlorobenzene (1,2,4-)	µg/m^3	<4.6	U		<4.9	U		<53	U		<4.7	U		<47	U		<48	U		<53	U		<5.3	U	
Trichloroethane (1,1,1-)	µg/m^3	<0.68	U		<0.71	U		<7.7	U		<0.69	U		<6.9	U		<7.0	U		<7.7	U		<0.77	U	
Trichloroethene (TCE)	µg/m^3	<0.13	U		<0.14	U		<1.5	U		<0.14	U		<1.4	U		<1.4	U		<1.5	U		<0.15	U	
Trichlorofluoromethane (CFC11)	µg/m^3	1.2			6.8			<8.0	U		7.4			8.5			8.0			15			<0.80	U	
Vinyl chloride	µg/m^3	<0.032	U		<0.033	U		<0.36	U		<0.032	U		<0.32	U		<0.33	U		<0.36	U		<0.036	U	
Xylene (m,p-)	µg/m^3	<0.22	U		0.71			<2.5	U		0.73			<2.2	U		<2.2	U		<2.5	U		<0.25	U	
Xylene (o-)	µg/m^3	<0.11	U		0.46			<1.2	U		0.48			<1.1	U		<1.1	U		<1.2	U		<0.12	U	

Notes:

1. Samples were collected by Sanborn, Head Engineering P.C. on behalf of IBM Corporation on the dates indicated over an approximately 8-hour sampling interval using 6-liter, stainless steel, pre-evacuated SUMMA® canisters. The samples were analyzed by Eurofins Air Toxics of Folsom for the project-specific list of volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method TO-15 using a combination of full scan and selective ion monitoring (SIM) mode.

2. The "AA" designation indicates that the sample consists of ambient air collected from outside the building. "Field Blank" represents a field blank sample, where laboratory-supplied nitrogen was transferred from one SUMMA® canister into another.

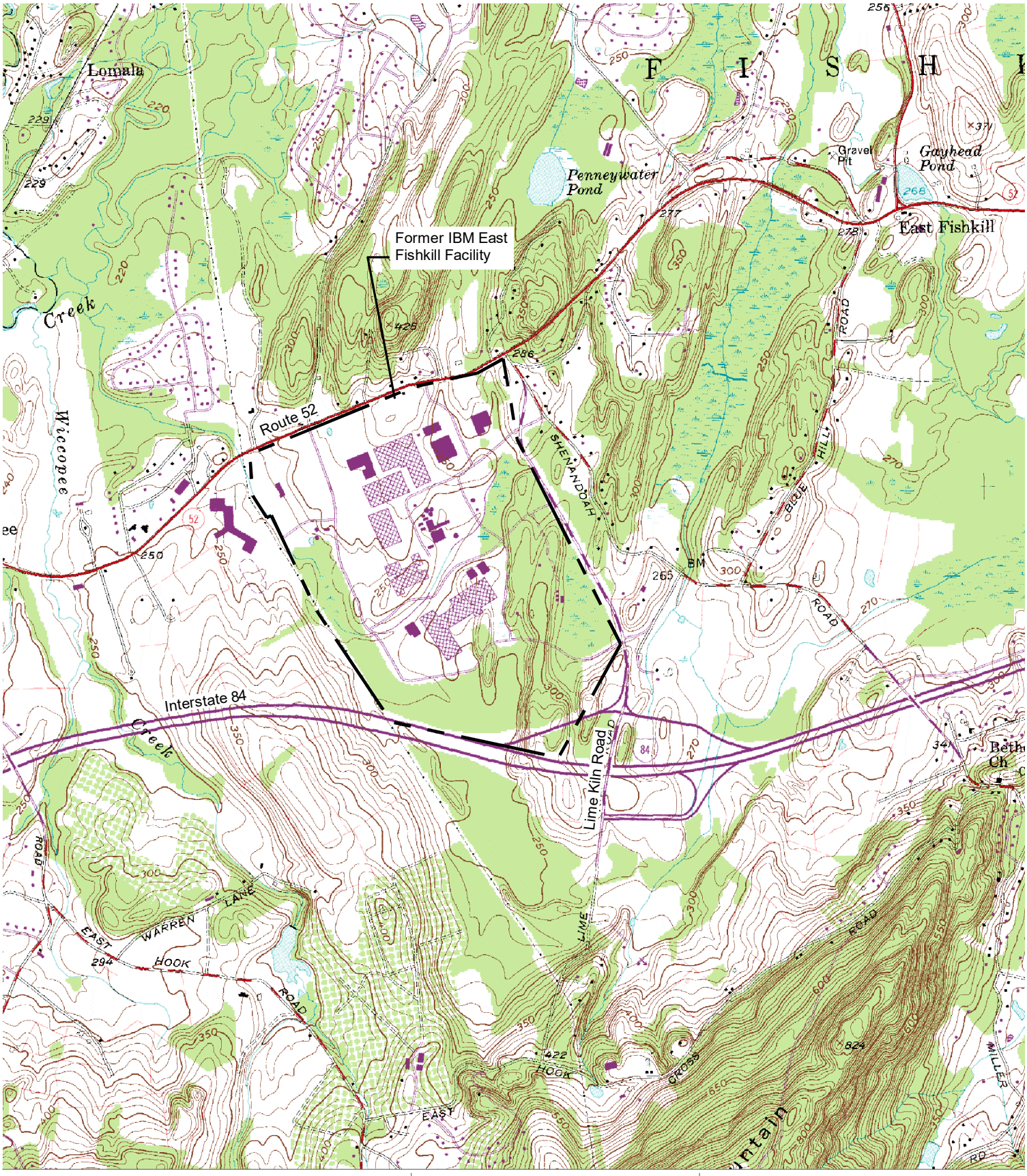
3. Results are displayed with two significant figures.

4. A data usability summary report (DUSR) was produced for the data by Environmental Standards Inc. (ES). ES considered the results acceptable, with the understanding of the potential uncertainty (bias) in the qualified results. In some cases, ES assigned the following qualifiers and biases to the data. Refer to the DUSR report for further details.
"U" indicates the analyte was not detected above the associated reporting limit.
"J+" indicates the result is an estimated quantity and should be considered biased high.
"H" indicates a high bias.

Figures

File:P:\2900s\2999.00\Graphics Files\CAD\2024 Ann Rpt\LocusPlan2024.dwg Plot Date: 4-22-25

©2025 SANBORN, HEAD ENGINEERING, P.C.





Notes:
Base map taken from 7.5 minute USGS Quadrangle Maps: Hopewell Junction, New York, Dated 1957, Photorevised in 1981.

Drawn By: E. Wright
Designed By: C.Kilbourne
Reviewed By: D. Shea
Project No: 2999.22
Date: April 2025

1,000' 0 2,000' Feet

SANBORN HEAD

SANBORN, HEAD ENGINEERING, P.C.

Figure 1

Site Location Plan

2024 Vapor Intrusion Engineering Controls Annual Report

Former IBM East Fishkill Facility
Hopewell Junction, New York

©2025 SANBORN, HEAD ENGINEERING, P.C.

Figure 2

Building Location Plan

2024 Vapor Intrusion Engineering Controls Annual Report

Former IBM East Fishkill Facility
Hopewell Junction, New York

Drawn By: E. Wright
Designed By: G. Bush
Reviewed By: D. Shea
Project No: 2999.22
Date: April 2025

Figure Narrative

This figure shows the buildings at the former IBM East Fishkill facility. Subdivision lot lines are from an AutoCAD figure prepared by Chazen A LaBella Company of Poughkeepsie, NY (Chazen) and provided to Sanborn Head by Groundwater Sciences on April 17, 2018.

Hopewell condominium lines are from two AutoCAD drawings prepared by Chazen on behalf of National Resources, dated May 18, 2017.

The Commercial Use Area boundary is from an AutoCAD drawing prepared by Chazen on behalf of National Resources.

Boundary lines for lots 2A, 3A, and 9 are from an AutoCAD drawing prepared by Chazen on behalf of National Resources, dated April 22, 2022. Ownership information represents status on December 31, 2023.

Legend

- Property Line
- Unlabeled features include wastewater treatment tanks, pump houses, trailers, and other structures and features not intended for human occupancy
- B310 (220) — Indicates building number; Indicates iPark building designation
- 6 — Lot number
- - Subdivision (Rolling Frito-Lay Sales, LP)
- - Subdivision (Semiconductor Components Industries, LLC)
- - Subdivision (i.Park)
- - Hopewell Condominium I and II Unit Lines
- iPark — Lot Owner

iPark Ownership Abbreviations

iPark I = iPark East Fishkill I, LLC
iPark II = iPark East Fishkill II, LLC
iPark III = iPark East Fishkill II, LLC
iPark 84 = iPark East Fishkill 84 LLC
iPark = iPark East Fishkill, LLC
iPark B338 = iPark East Fishkill B338, LLC

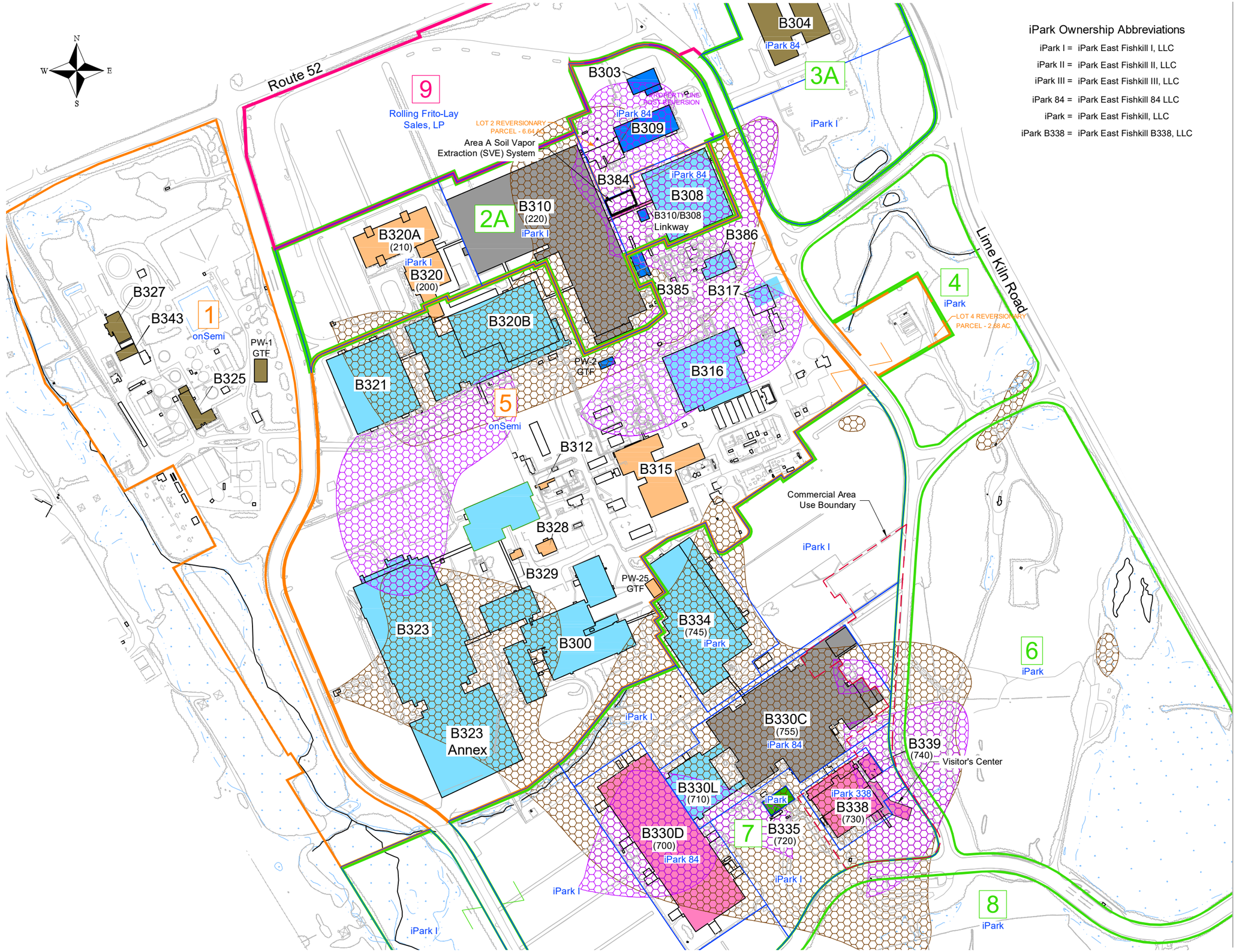
200' 100' 0 200' 400' Feet

SANBORN HEAD

SANBORN, HEAD ENGINEERING, P.C.

File:P:\2900s\2999.00\Graphics Files\CAD\2024 Ann Rpt Location Plan\2024.dwg Plot Date: 4-22-25

©2025 SANBORN, HEAD ENGINEERING, P.C.



iPark Ownership Abbreviations

iPark I = iPark East Fishkill I, LLC
iPark II = iPark East Fishkill II, LLC
iPark III = iPark East Fishkill III, LLC
iPark 84 = iPark East Fishkill 84 LLC
iPark = iPark East Fishkill, LLC
iPark B338 = iPark East Fishkill B338, LLC

Figure 3

Building PMP Category Plan

2024 Vapor Intrusion Engineering Controls Annual Report

Former IBM East Fishkill Facility
Hopewell Junction, New York

Drawn By: E. Wright
Designed By: C. Kilbourne
Reviewed By: D. Shea
Project No: 2999.22
Date: April 2025

Figure Narrative

This figure shows the site buildings and their Performance Monitoring Plan groupings.

Legend

- Unlabeled features include wastewater treatment tanks, pump houses, trailers, and other structures and features not intended for human occupancy
- B310 (220) — Indicates building number; Indicates iPark building designation
- Category 1 - Subslab depressurization (SSD) system for full building footprint
- Category 2 - SSD system for partial building footprint
- Category 4 - Alteration of HVAC system was not necessary for VI mitigation purposes
- Not routinely occupied
- Potential occupational VOC presence
- No known underlying VOC presence in groundwater (located in central area of site)
- No known underlying VOC presence in groundwater (located outside central area of site)
- Inferred extent of VOCs in overburden groundwater
- Inferred extent of VOCs in bedrock groundwater
- 6 — Lot number
- Subdivision (Rolling Frito-Lay Sales, LP)
- Subdivision (Semiconductor Components Industries, LLC)
- Subdivision (i.Park)
- Hopewell Condominium I and II Unit Line
- iPark — Lot owner

200' 100' 0 200' 400' Feet

SANBORN HEAD

SANBORN, HEAD ENGINEERING, P.C.

File: P:\2900s\2999.00\Graphics Files\CAD\2024 Ann Rpt\BuildingStatus.dwg User: ewright Plot Date: 4-22-25 12:40 PM

© 2025 SANBORN, HEAD & ASSOCIATES, INC.

Last Edited By: ewright

Path: P:\2900s\2999.00\Graphics Files\GIS\Figures\2024 Annual Report\B310_DP_Conts.mxd

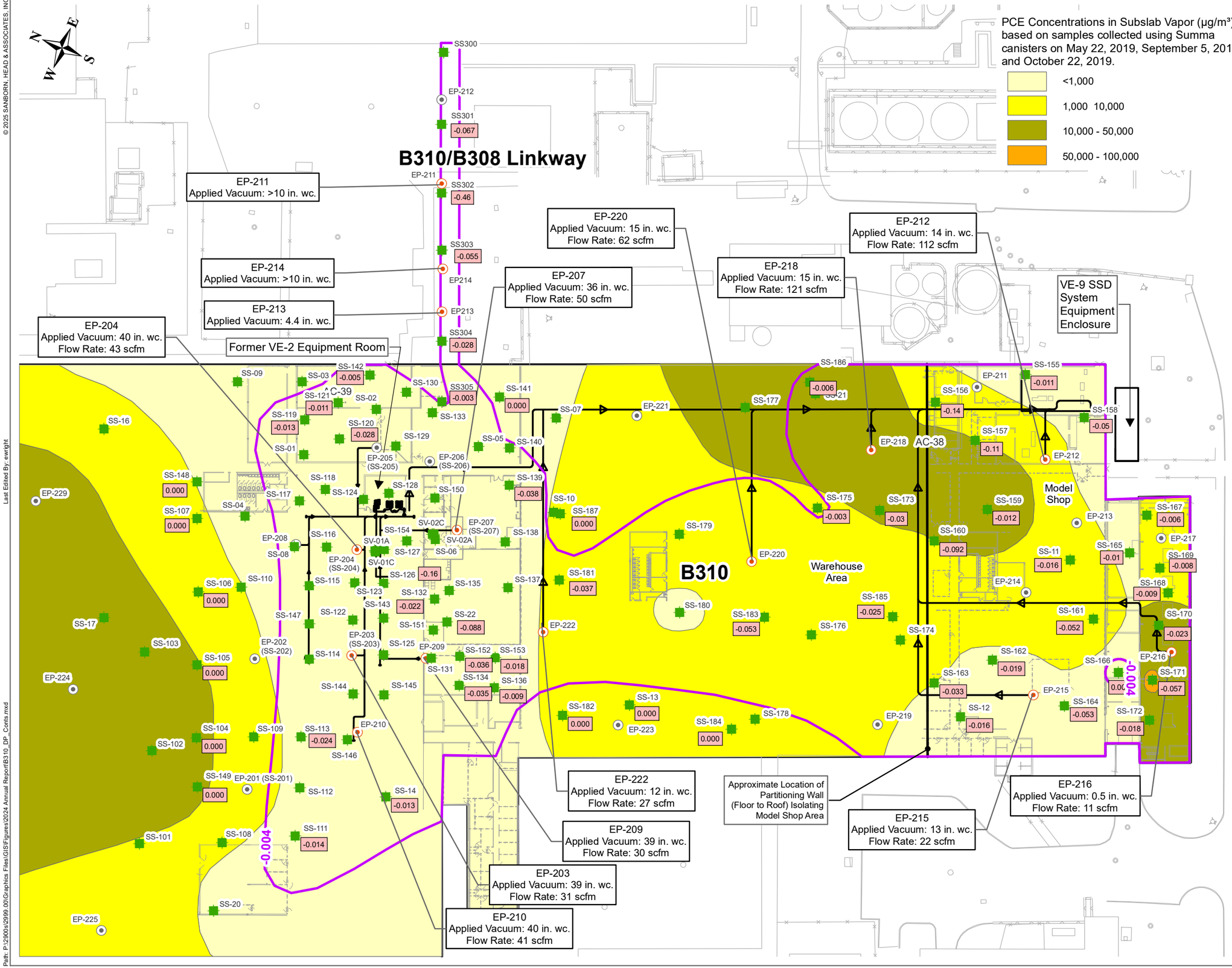


Figure 4A

Subslab Pressure Response to Vapor Extraction

Building 310 and B310/B308 Linkway - December 2024
2024 Vapor Intrusion Engineering Controls Annual Report

Former IBM East Fishkill Facility
Hopewell Junction, New York

Drawn By:	E. Wright
Designed By:	C. Kilbourne
Reviewed By:	D. Shea
Project No:	2999.22
Date:	April 2025

Figure Narrative

This figure shows the inferred subslab pressure response from subslab depressurization (SSD) system VE-9 in B310, and the differential pressure measurements recorded at the subslab vapor monitoring ports on December 11, 2024. The subslab pressure response footprint represents the outer limit of the -0.004 inches of water column differential pressure contour. Other interpretations are possible.

The subslab pressure response footprint overlays the inferred subslab vapor tetrachloroethene (PCE) concentration isopleths based on subslab vapor samples collected on May 22, 2019, September 5, 2019, and October 22, 2019.

Magnehelic gauges on Linkway extraction ports have a range of 0 to 10 inches water column (in. wc.). >10 in. wc. indicates that the vacuum was observed to be greater than the range of the instrument.

Legend

- Subslab Vapor Extraction Port
- Extraction Port not connected to system
- Subslab Vapor Monitoring Port
- Inferred subslab pressure response footprint
- VE-9 SSD system overhead vacuum piping and flow direction
- **EP-209** / in. wc / scfm — Extraction Port; Applied Vacuum (extraction port) inches of water column (in. wc); Flow Rate (std. cu. ft. per min.)
- -0.004 — Observed pressure differential between the subslab and room (in. wc). Negative values indicate subslab pressure is less than indoor air pressure.

30 15 0 30 60 Feet

SANBORN HEAD

SANBORN, HEAD ENGINEERING, P.C.

© 2025 SANBORN, HEAD & ASSOCIATES, INC.

Last Edited By: ewright

Path: P:\2900s\2999.00\Graphics Files\GIS\Figures\2024 Annual Report\B310_DP_Conts_w_202503Data.mxd

Figure 4B

Subslab Pressure Response to Vapor Extraction

Building 310 and B310/B308 Linkway - March 2025
2024 Vapor Intrusion Engineering Controls Annual Report

Former IBM East Fishkill Facility
Hopewell Junction, New York

Drawn By:	E. Wright
Designed By:	C. Kilbourne
Reviewed By:	D. Shea
Project No:	2999.22
Date:	April 2025

Figure Narrative

This figure shows the inferred subslab pressure response from subslab depressurization (SSD) system VE-9 in B310, and the differential pressure measurements recorded at the subslab vapor monitoring ports on March 27, 2025. The subslab pressure response footprint represents the outer limit of the -0.004 inches of water column differential pressure contour. Other interpretations are possible.

The subslab pressure response footprint overlays the inferred subslab vapor tetrachloroethene (PCE) concentration isopleths based on subslab vapor samples collected on May 22, 2019, September 5, 2019, and October 22, 2019.

Magnehelic gauges on Linkway extraction ports have a range of 0 to 10 inches water column (in. wc.). >10 in. wc. indicates that the vacuum was observed to be greater than the range of the instrument.

Legend

PCE Concentrations in Subslab Vapor (µg/m³) based on samples collected using Summa canisters on May 22, 2019, September 5, 2019, and October 22, 2019.

- <1,000
- 1,000 10,000
- 10,000 - 50,000
- 50,000 - 100,000

- Subslab Vapor Extraction Port
- Extraction Port not connected to system
- Subslab Vapor Monitoring Port
- Inferred subslab pressure response footprint
- VE-9 SSD system overhead vacuum piping and flow direction
- **EP-209** / in. wc / scfm — Extraction Port; Applied Vacuum (extraction port) inches of water column (in. wc); Flow Rate (std. cu. ft. per min.)
- -0.004 — Observed pressure differential between the subslab and room (in. wc). Negative values indicate subslab pressure is less than indoor air pressure.

30 15 0 30 60 Feet

SANBORN HEAD

SANBORN, HEAD ENGINEERING, P.C.

© 2025 SANBORN, HEAD ENGINEERING, P.C.

Last Edited By: ewright

Path: P:\2900s\2999.00\Graphics Files\GIS\Figures\2024 Annual Report\B316_IA_Quality.mxd

N
W E
S

3073 IW
589 IW
Overhead Pipes
Tank
Tank
3074 IW
581 IW
582 IW
579 IW
3072 IW
3095 IW
3094 IW
3096 IW
578 IW
555 IW
529 IW
Water Treatment
(on roof at HVAC-2 intake)
AA-0601
PCE= <0.17
TCE= <0.13
IA-0604
PCE= <1.9
TCE= <1.5
HVU-2
Former Central Carbon Treatment
VU-1,2,3,4,5,6 HVU-1,2,5,6
Mechanical Equipment Areas
Boilers
Shop
Cubicle/Office Area
Storage
IA-0603
PCE= <1.8
TCE= <1.4
HVAC-2
Bathrooms/ Locker Rooms
Boilers
IA-0602
PCE= <1.7
TCE= <1.4
Break Room
IA-0601
PCE= <0.17
TCE= <0.14
316 Dock
CW LUL
Conference Room
Control Room
IA-0600
PCE= <0.18 (<0.19)
TCE= <0.14 (<0.15)
Loading Dock

Figure 5

Summary of 8-Hour Indoor Air Sampling Results (PCE and TCE) - B316

2024 Vapor Intrusion Engineering Controls Annual Report

Former IBM East Fishkill Facility

Hopewell Junction, New York

Drawn By:	E. Wright
Designed By:	C. Kilbourne
Reviewed By:	D. Shea
Project No:	2999.22
Date:	April 2025

Figure Narrative

This figure shows the tetrachloroethene (PCE) and trichloroethene (TCE) results for indoor air samples collected on February 28, 2024.

The samples were collected as 8-hour time weighted average samples using 6-L SUMMA canisters. Results are shown in micrograms per cubic meter (µg/m³).

Legend

- Ambient air location and designation
- Indoor air location and designation
- Solid Waste Management Unit
- HVAC Zone
- IA0745 / PCE= <1.4 / TCE= <0.11 — Location designation; PCE concentration µg/m³; TCE concentration µg/m³
- ( ) Indicates field duplicate sample result
- < Indicates compound was not detected above posted laboratory reporting limit

20 10 0 20 40 Feet

SANBORN HEAD

SANBORN, HEAD ENGINEERING, P.C.

© 2025 SANBORN, HEAD ENGINEERING, P.C.

Last Edited By: ewright

Path: P:\2900s\2999.00\Graphics Files\GIS\Figures\2024 Annual Report\B330C_HVAC_Occupancy.mxd

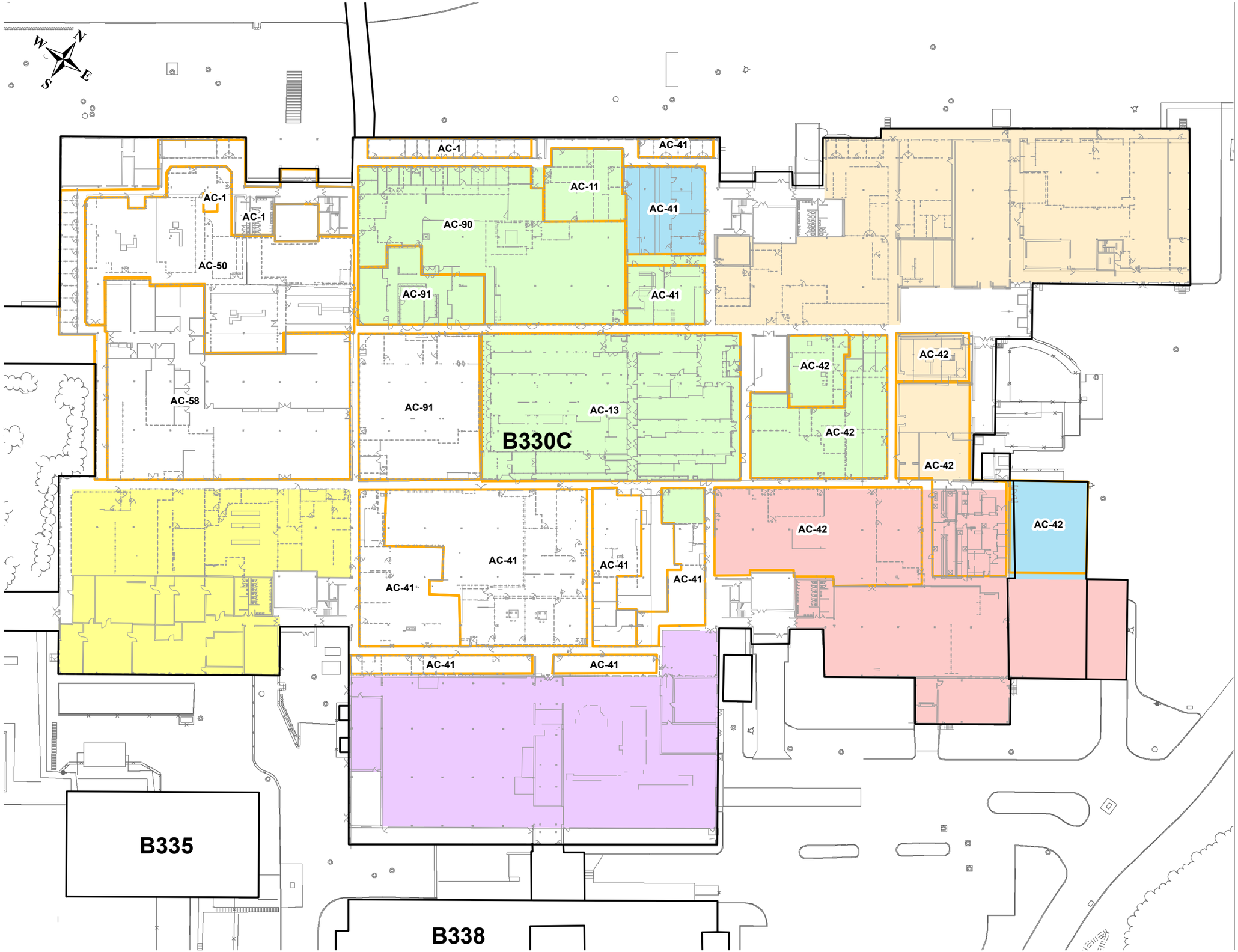


Figure 6

HVAC Zones and Occupancey Map - B330C

Building 330C
2024 Vapor Intrusion Engineering Controls Annual Report

Former IBM East Fishkill Facility
Hopewell Junction, New York

Drawn By:	E. Wright
Designed By:	G. Bush
Reviewed By:	D. Shea
Project No:	2999.22
Date:	April 2025

Figure Narrative

This figure shows the approximate layout of heating, ventilation, and air conditioning (HVAC) zones and units monitored as part of the vapor intrusion engineering controls for the building. Areas without units shown are under the influence of subslab depressurization systems. Building occupancy, based on information provided by Walden, is also depicted.

Notes

1. Occupancy and HVAC zone information based on 'Building 755 (Formerly B330C) HVAC Zones & Occupancy' figure, provided by Walden Environmental Engineering, PLLC, dated February 4, 2025.

Legend

HVAC Zone

Occupants

- IBM
- Sloop
- eMagin
- Country Produce
- More Good
- Cozzini

30 15 0 30 60 Feet

SANBORN HEAD

SANBORN, HEAD ENGINEERING, P.C.

© 2025 SANBORN, HEAD ENGINEERING, P.C.

Last Edited By: ewright

Path: P:\2900s\2999.00\Graphics Files\GIS\Figures\2024 Annual Report\B330C_DP_Conts.mxd

Figure 7A

Subslab Pressure Response to Vapor Extraction

Building 330C - December 2024
2024 Vapor Intrusion Engineering Controls Annual Report

Former IBM East Fishkill Facility
Hopewell Junction, New York

Drawn By:	E. Wright
Designed By:	G. Bush
Reviewed By:	D. Shea
Project No:	2999.22
Date:	April 2025

Figure Narrative

This figure depicts the SSD systems installed by IBM in B330C (VE-7 and VE-8). System components and the inferred subslab pressure response footprint for SSD system VE-32 (installed by iPark) located in the northeast corner of the building are not shown on this figure.

The subslab pressure response footprint represents the outer limit of the -0.004 inches of water column differential pressure contour based on measurements recorded at the subslab monitoring ports on December 12, 2024. Other interpretations are possible.

The subslab pressure response footprint overlays the inferred subslab vapor tetrachloroethene (PCE) concentration isopleths based on subslab vapor screening conducted using a portable gas chromatograph/mass spectrometer (GC/MS) in April and May 2015.

Legend

- Subslab Vapor Monitoring Port
- Subslab Vapor Extraction Port
- Inferred subslab pressure response footprint
- EP-224 — Extraction port
- in. wc — Applied vacuum (extraction port) inches of water column (in. wc)
- scfm — Flow rate (std. cu. ft. per min.)
- -0.006 — Observed pressure differential between the subslab and room (in. wc). Negative values indicate subslab pressure is less than indoor air pressure.
- SSDS overhead piping installed by IBM (Phase I)
- SSDS overhead piping installed by IBM (Phase II)

PCE Concentrations in Subslab Vapor (µg/m^3) based on screening samples collected in April and May 2015

- <1,000
- 1,000 - 10,000
- 10,000 - 50,000
- 50,000 - 100,000
- 100,000 - 500,000
- >500,000

Feet: 30 15 0 30 60

SANBORN HEAD

SANBORN, HEAD ENGINEERING, P.C.

© 2025 SANBORN, HEAD ENGINEERING, P.C.

Last Edited By: ewright

Path: P:\2900s\2999.00\Graphics Files\GIS\Figures\2024 Annual Report\B330C_DP_Conts_w_202503Data.mxd

Figure 7B

Subslab Pressure Response to Vapor Extraction

Building 330C - March 2025
2024 Vapor Intrusion Engineering Controls Annual Report

Former IBM East Fishkill Facility
Hopewell Junction, New York

Drawn By:	E. Wright
Designed By:	G. Bush
Reviewed By:	D. Shea
Project No:	2999.22
Date:	April 2025

Figure Narrative

This figure depicts the SSD systems installed by IBM in B330C (VE-7 and VE-8). System components and the inferred subslab pressure response footprint for SSD system VE-32 (installed by iPark) located in the northeast corner of the building are not shown on this figure.

The subslab pressure response footprint represents the outer limit of the -0.004 inches of water column differential pressure contour based on a limited round of measurements recorded at select subslab monitoring ports on March 27, 2025. Other interpretations are possible.

The subslab pressure response footprint overlays the inferred subslab vapor tetrachloroethene (PCE) concentration isopleths based on subslab vapor screening conducted using a portable gas chromatograph/mass spectrometer (GC/MS) in April and May 2015.

Legend

- Subslab Vapor Monitoring Port
- Subslab Vapor Extraction Port
- Inferred subslab pressure response footprint
- EP-224 / in. wc / scfm — Extraction port; Applied vacuum (extraction port) inches of water column (in. wc); Flow rate (std. cu. ft. per min.)
- -0.006 — Observed pressure differential between the subslab and room (in. wc). Negative values indicate subslab pressure is less than indoor air pressure.
- SSDS overhead piping installed by IBM (Phase I)
- SSDS overhead piping installed by IBM (Phase II)

PCE Concentrations in Subslab Vapor (µg/m³) based on screening samples collected in April and May 2015

- <1,000
- 1,000 - 10,000
- 10,000 - 50,000
- 50,000 - 100,000
- 100,000 - 500,000
- >500,000

30 15 0 30 60 Feet

SANBORN HEAD

SANBORN, HEAD ENGINEERING, P.C.

© 2025 SANBORN, HEAD ENGINEERING, P.C.

Last Edited By: ewright

Path: P:\2900s\2999.00\Graphics Files\GIS\Figures\2024 Annual Report\B330D_DP_Conts.mxd

VE-1
Applied Vacuum:
EP4001 = 48 in. wc.
EP4002 = 51 in. wc.
EP4003 = 53 in. wc.
EP4017 = 63 in. wc.
EP4023 = 44 in. wc.
EP4024 = 57 in. wc.
SP4001 = 39 in. wc.

Flow Rate:
EP4001 = 55 scfm
EP4002 = 37 scfm
EP4003 = 73 scfm
EP4017 = 67 scfm
EP4023 = 81.5 scfm
EP4024 = 4 scfm
SP4001 = 80 scfm

VE-10
Applied Vacuum:
EP4004 = 55 in. wc.
EP4005 = 51 in. wc.
EP4006 = 57 in. wc.
EP4010 = 58 in. wc.
EP4013 = 59 in. wc.
EP4015 = 59 in. wc.
EP4025 = 56 in. wc.
SP4003 = 44 in. wc.

Flow Rate:
EP4004 = 82 scfm
EP4005 = 128 scfm
EP4006 = 21.5 scfm
EP4010 = 106 scfm
EP4013 = 26 scfm
EP4015 = 15 scfm
EP4025 = 57 scfm
SP4003 = 126 scfm

SSD System VE-10

SSD System VE-1

PCE Concentrations in Subslab Vapor (µg/m^3) based on samples collected using Summa canisters in August 2008 (northwest corner) and in February through December 2016

- <1,000
- 1,000 - 10,000
- 10,000 - 50,000
- 50,000 - 100,000
- 100,000 - 500,000
- 500,000 - 5,000,000
- >5,000,000

Figure 8

Subslab Pressure Response to Vapor Extraction

Buildings 330D and 330L
2024 Vapor Intrusion Engineering Controls Annual Report

Former IBM East Fishkill Facility
Hopewell Junction, New York

Drawn By:	E. Wright
Designed By:	G. Bush
Reviewed By:	D. Shea
Project No:	2999.22
Date:	April 2025

Figure Narrative

This figure shows the inferred subslab pressure response from subslab depressurization (SSD) systems VE-1 and VE-10, and the differential pressure measurements recorded at the subslab vapor monitoring ports on December 13, 2024. The subslab pressure response footprint represents the outer limit of the -0.004 inches of water column differential pressure contour. Other interpretations are possible.

The subslab pressure response footprint overlays the inferred subslab vapor tetrachloroethene (PCE) concentration isopleths. Subslab vapor samples were collected in 2008 and 2016.

Legend

- Subslab Vapor Extraction Port connected to an SSD system
- Subslab Vapor Monitoring Port
- Subslab monitoring port destroyed or covered due to recent building renovations
- Subslab Vapor Suction Pit connected to an SSD system
- VE-1 and VE-10 SSD System Overhead Piping
- Inferred subslab pressure response footprint

SP4001 — Extraction Port
in. wc — Applied Vacuum (extraction port) inches of water column (in. wc)
scfm — Flow Rate (std. cu. ft. per min.)

-0.004 — Observed pressure differential between the subslab and room (in. wc). Negative values indicate subslab pressure is less than indoor air pressure.

30 15 0 30 60 Feet

SANBORN HEAD

SANBORN, HEAD ENGINEERING, P.C.

©2025 SANBORN, HEAD ENGINEERING, P.C.

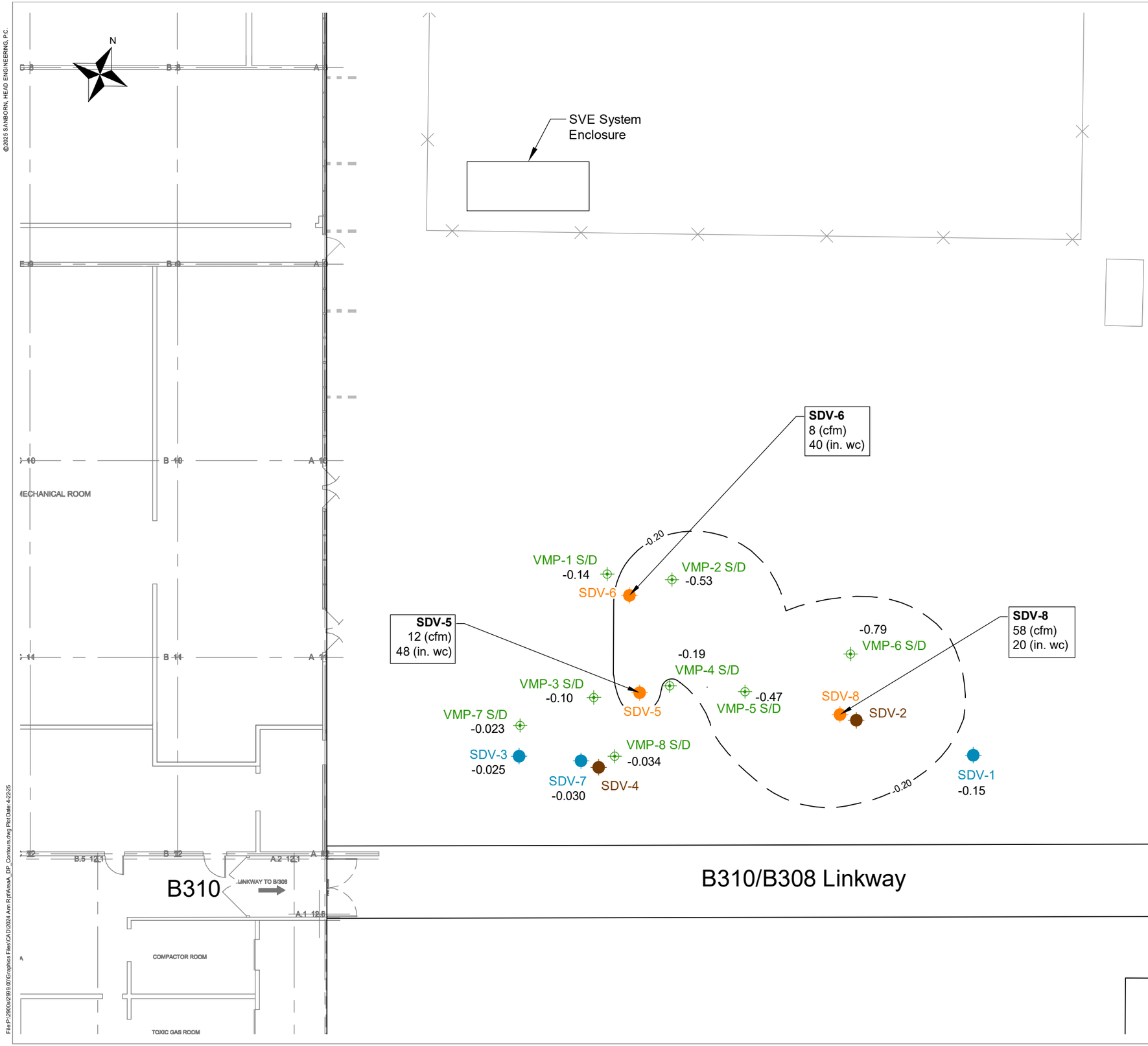


Figure 9

Extent of Subsurface Depressurization (5 Ft Depth) Area A SVE System

2024 Vapor Intrusion Engineering Controls Annual Report

Former IBM East Fishkill Facility
Hopewell Junction, New York

Drawn By: E. Wright
Designed By: G. Bush
Reviewed By: D. Shea
Project No: 2999.22
Date: April 2025

Figure Narrative

This figure shows measurements of differential pressure between ambient air and subsurface soil vapor in units of inches of water column (in. wc), and the measurements recorded at each extraction well. Measurements were collected from a depth of 5 feet bgs prior to system shutdown on October 15, 2024. Negative values indicate subsurface pressures less than ambient air pressure, or under vacuum, at the time of recording.

The contours represent the inferred apparent vacuum conditions observed on October 15, 2024. Actual vacuum conditions are likely more complex than shown. Other interpretations are possible.

Legend

- SDV-2 — Small diameter vapor well (2-in.) not connected to the pilot SVE system
- SDV-5 — Small diameter vapor well connected to the pilot SVE system currently in operation (screened 7.5 to 10 ft bgs)
- SDV-3 — Small diameter vapor well connected to the pilot SVE system currently not in operation (screened 7.5 to 10 ft bgs)
- VMP-1 S/D — Multi-level vapor monitoring point (S = 5 ft bgs, D = 10 ft bgs)
- -0.79 — Differential pressure measurement (in. wc)
- SDV-5 / 12 (cfm) / 48 (in. wc) — Extraction port; Flow rate (cu. ft. per min.); Vacuum (inches of water column)
- -0.2 — Differential pressure contour (inches of water column). Dashed where inferred.

Feet
8' 4' 0 8' 16'

SANBORN HEAD
SANBORN, HEAD ENGINEERING, P.C.

File:P:\2900s\2999.00\Graphics Files\CAD\2024 Ann Rpt\AreaA_DP_Contours.dwg Plot Date: 4-22-25

©2025 SANBORN, HEAD ENGINEERING, P.C.



Figure 10

Extent of Subsurface Depressurization (10 Ft Depth) Area A SVE System

2024 Vapor Intrusion Engineering Controls Annual Report

Former IBM East Fishkill Facility
Hopewell Junction, New York

Drawn By: E. Wright
Designed By: G. Bush
Reviewed By: D. Shea
Project No: 2999.22
Date: April 2025

Figure Narrative

This figure shows measurements of differential pressure between ambient air and subsurface soil vapor in units of inches of water column (in. wc), and the measurements recorded at each extraction well. Measurements were collected from a depth of 10 feet bgs prior to system shutdown on October 15, 2024. Negative values indicate subsurface pressures less than ambient air pressure, or under vacuum, at the time of recording.

The contours represent the inferred apparent vacuum conditions observed on October 15, 2024. Actual vacuum conditions are likely more complex than shown. Other interpretations are possible.

Legend

- SDV-2 — Small diameter vapor well (2-in.) not connected to the pilot SVE system
- SDV-5 — Small diameter vapor well connected to the pilot SVE system currently in operation (screened 7.5 to 10 ft bgs)
- SDV-3 — Small diameter vapor well connected to the pilot SVE system currently not in operation (screened 7.5 to 10 ft bgs)
- VMP-1 S/D — Multi-level vapor monitoring point (S = 5 ft bgs, D = 10 ft bgs)
- -0.76 — Differential pressure measurement (in. wc)
- SDV-5 / 12 (cfm) / 48 (in. wc) — Extraction port; Flow rate (cu. ft. per min.); Vacuum (inches of water column)
- -0.2 — Differential pressure contour (inches of water column). Dashed where inferred.

8' 4' 0 8' 16' Feet

SANBORN HEAD

SANBORN, HEAD ENGINEERING, P.C.

File:P:\2900s\2969.00\Graphics Files\CAD\2024 Ann Rpt\AreaA_DP_Contours.dwg Plot Date: 4-22-25

Appendix A

Limitations

APPENDIX A
LIMITATIONS

1. The findings and conclusions described in this report are based in part on the data obtained from a finite number of samples from widely spaced locations. The figures are intended to depict inferred conditions during a given period of time, consistent with available information. The actual conditions will vary from that shown, both spatially and temporally. Other interpretations are possible. The nature and extent of variations between sampling locations may not become evident until further investigation is initiated. If variations or other latent conditions then appear evident, it may be necessary to re-evaluate the conclusions of this report.

2. In preparing this report, Sanborn Head has relied on certain information provided by other parties referenced herein, and on information contained in the reports submitted by those other parties. We did not independently verify the accuracy or completeness of all information reviewed or received during the course of this project.

3. Quantitative laboratory testing was performed by others as part of the investigation as noted within the report. Where such analyses have been conducted by an outside laboratory, unless otherwise stated in the report, Sanborn Head has relied upon the data provided, and has not conducted an independent evaluation of the reliability of these data. It must be noted that additional compounds not searched for during the current study may be present in vapor and indoor air at the site. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their distribution within the vapor and indoor air may occur due to the passage of time, seasonal water table fluctuations, recharge events, and other factors.

4. This report has been prepared for the exclusive use of the IBM Corporation for specific application to the former IBM East Fishkill facility in accordance with generally accepted hydrogeologic and engineering practices. No warranty, expressed or implied, is made. The contents of this report should not be relied on by any other party without the express written consent of Sanborn Head.

5. In preparing this report, Sanborn Head has endeavored to conform to generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area. Sanborn Head has attempted to observe a degree of care and skill generally exercised by the technical community under similar circumstances and conditions.

Appendix B

Summary of Long-Term VI Management Plan by Building

Appendix B
Summary of Long-Term VI Management Plan by Building
VI EC Performance Monitoring Plan
Former IBM East Fishkill Facility
Hopewell Junction, New York

Building Category	Building	Building Owner	iPark Building Designation	Monitoring Type and Frequency (Note 5)									
				Building Use, Occupancy, and Infrastructure		SSD Operation Manual Checks (Note 1)		SSD Subslab Vacuum Field		HVAC System Manual Checks (Note 2)		Indoor Air Monitoring	
Category 1 - Subslab Depressurization (SSD) for Full Building Footprint	308 - B310 Linkway	iPark EFK I LLC and iPark EFK 84 LLC	NA	√	Annually	√	Annually	√	Annually		None	√	If SSD system is terminated
	330D	iPark EFK 84 LLC	700	√	Annually	√	Annually	√	Annually		None	√	If SSD system is terminated
	338	iPark EFK B338 LLC	730	√	Annually	√	Annually	√	Annually		None	√	If SSD system is terminated
	339	iPark EFK B338 LLC	740	√	Annually	√	Annually	√	Annually		None	√	If SSD system is terminated
Category 2 - SSD for Partial Building Footprint	310	iPark EFK I LLC	220	√	Annually	√	Annually	√	Annually	√	Semi-Annually	√	If changes occurred, or SSD system is terminated
	330C	iPark EFK 84 LLC	755	√	Annually	√	Annually	√	Annually	√	Semi-Annually	√	If changes occurred, or SSD system is terminated
Category 4 - Alteration of HVAC Systems Was Not Necessary for VI Mitigation Purposes	300	OnSemi	NA	√	Annually		Not Applicable		Not Applicable	√	Annually	√	If changes occurred
	308	iPark EFK 84 LLC	308	√	Annually		Not Applicable		Not Applicable	√	Annually	√	If changes occurred
	316	OnSemi	NA	√	Annually		Not Applicable		Not Applicable	√	Annually	√	If changes occurred
	317	OnSemi	NA	√	Annually		Not Applicable		Not Applicable	√	Annually	√	If changes occurred
	320B	OnSemi	NA	√	Annually	√	Annually (Note 6)		Not Applicable	√	Annually	√	If changes occurred
	321	OnSemi	NA	√	Annually		Not Applicable		Not Applicable	√	Annually	√	If changes occurred
	322	OnSemi	NA	√	Annually		Not Applicable		Not Applicable	√	Annually	√	If changes occurred
	323	OnSemi	NA	√	Annually		Not Applicable		Not Applicable	√	Annually	√	If changes occurred
	323A	OnSemi	NA	√	Annually		Not Applicable		Not Applicable	√	Annually	√	If changes occurred
	330L	iPark EFK 84 LLC	710	√	Annually		Not Applicable		Not Applicable	√	Annually	√	If changes occurred
	334	iPark EFK LLC	745	√	Annually		Not Applicable		Not Applicable	√	Annually	√	If changes occurred
	386	OnSemi	NA	√	Annually		Not Applicable		Not Applicable	√	Annually	√	If changes occurred
Area A Soil Vapor Extraction (SVE) System (Note 4)	NA	iPark EFK II LLC and iPark EFK 84 LLC	NA		NA	√	Monthly (Spring - Fall)	√	Annually		NA		NA
Building is Not Routinely Occupied	335	iPark EFK I LLC	720	√	Annually		Not Applicable		Not Applicable		None	√	If changes occurred
Potential Occupational VOC Presence	303	iPark EFK II LLC and iPark EFK 84 LLC	303	√	Annually		Not Applicable		Not Applicable		None	√	If changes occurred
	309	iPark EFK II LLC and iPark EFK 84 LLC	309	√	Annually		Not Applicable		Not Applicable		None	√	If changes occurred
	384	iPark EFK II LLC and iPark EFK 84 LLC	384	√	Annually		Not Applicable		Not Applicable		None	√	If changes occurred
	385	OnSemi	NA	√	Annually		Not Applicable		Not Applicable		None	√	If changes occurred
	PW-2 GTF	IBM	NA	√	Annually		Not Applicable		Not Applicable		None	√	If changes occurred

Appendix B
Summary of Long-Term VI Management Plan by Building
VI EC Performance Monitoring Plan
Former IBM East Fishkill Facility
Hopewell Junction, New York

Building Category	Building	Building Owner	iPark Building Designation	Monitoring Type and Frequency (Note 5)									
				Building Use, Occupancy, and Infrastructure		SSD Operation Manual Checks (Note 1)		SSD Subslab Vacuum Field		HVAC System Manual Checks (Note 2)		Indoor Air Monitoring	
No Known Underlying VOC Presence in Groundwater (Located in Central Area of Site)	312	OnSemi	NA	√	Annually		Not Applicable		Not Applicable		None	√	If changes occurred
	315	OnSemi	NA	√	Annually		Not Applicable		Not Applicable		None	√	If changes occurred
	320	iPark EFK I LLC	200	√	Annually		Not Applicable		Not Applicable		None	√	If changes occurred
	320A	iPark EFK I LLC	210	√	Annually		Not Applicable		Not Applicable		None	√	If changes occurred
	328	OnSemi	NA	√	Annually		Not Applicable		Not Applicable		None	√	If changes occurred
	329	OnSemi	NA	√	Annually		Not Applicable		Not Applicable		None	√	If changes occurred
	PW-25 GTF	IBM	NA	√	Annually		Not Applicable		Not Applicable		None	√	If changes occurred

Notes:

1. SSD system manual checks will be supplemented by continuous, automated monitoring of operations, including alarms that cause system shut-down. In addition, weekly manual checks will be conducted in accordance with the site SMP.
2. For Category 2 buildings, HVAC system operational checks will only be conducted for the area outside the influence of the SSD system.
3. Indoor air monitoring will only be conducted if changes are identified that could impact indoor air quality and/or occupant exposures (e.g., vacant areas becoming re-occupied, long-term changes to HVAC system operating conditions for Category 2 and 4 buildings, infrastructure changes).
4. While the exterior Area A SVE system is not a VI EC, it has been included on this table as an overall site EC.
5. Semi-annual checks will be conducted in the months of June and December, and annual checks will be conducted in the month of December,
6. Checks to include a visual inspection of the above-grade piping for the passive SSD system in B320B to assess system integrity.

Appendix C

April 30, 2025
Building Tracking Table

Table 1
Building Tracking Table
Former IBM East Fishkill Facility
Hopewell Junction, New York

Updated: 4/30/2025

Pre-occupancy or post-SSD start-up indoor air sampling is to be completed in the future. The party responsible for sampling varies, and will be communicated to the Departments in the respective Work Plans.
Represents 60-day change of use notifications that have not yet been submitted.
Represents tenant fit-ups that involve floors cuts.

Note: This table is only intended for tracking first floor tenants and associated indoor air sampling.

Building Designation	iPark Building Designation	Building Owner	Building VI Assessment and Mitigation Status	First Floor Tenant List (Use)	Date of Recent Indoor Air Sampling (Reason) - Performed by	Building Occupancy: Work In Progress / Future Plans	Has 60-Day Change of Use Notification Been Submitted?	Do Future Renovations for Fit-Up Involve Floor Cuts? (Yes / No/ NA)	If Yes to Floor Cuts, Has a Work Plan for Soil Sampling and CAMP Monitoring Been Submitted?	SSD System Installed in Building (Start-Up Date) - Installed by	VI-Related Work in Progress
Buildings with Subslab Depressurization Systems											
310	**220**	**iPark EFK I LLC**	SSD system (combined VE-2 and VE-9) is operating. HVAC system engineering controls have been implemented by iPark in areas outside SSD influence.	NYS Office of General Services (warehousing)	8/24/2020 (Pre-Occupancy) - iPark 12/22/2021 (post-HVAC changes) - iPark 4/26/2023 (post-HVAC changes) - iPark April 2023 IAQ report pending Department review	No work in progress	NYSDEC acknowledged receipt of notification in 9/25/2020 letter	No	NA	VE-2 - Central (Feb 2012) - IBM VE-9 - South (June 2020) - IBM VE-2 and VE-9 piping combined to run off VE-9 only; VE-2 shut down (October 2020) - IBM	<u>iPark</u> HVAC Engineering Control / HVAC Compliance Work Plan submitted by Walden to Departments 9/3/2024; work plan is pending Department review. ***3/2025: Walden is completing biweekly HVAC system checks and re-evaluating HVAC management approach.***
				OnSemi (Model Shop)	8/14/2020 (Post-SSD Start-Up) - IBM	No work in progress	NA	NA	NA		
330C	**755**	**iPark EFK 84 LLC**	SSD systems are operating. HVAC system engineering controls have been implemented by iPark in areas outside SSD influence.	Vacant	8/14/2020 (Post-SSD Start-Up) - IBM	No work in progress	NA	NA	NA	VE-7 - South (April 2019 [Phase 1], July 2020 [Phase 2]) - IBM VE-8 - West (April 2019 [Phase 1], July 2020 [Phase 2]) - IBM VE-32 - Sloop tenant space (April 2021) - iPark	<u>iPark</u> HVAC Engineering Control / HVAC Compliance Work Plan submitted by Walden to Departments 9/3/2024; work plan is pending Department review. ***3/2025: Walden is completing biweekly HVAC system checks and re-evaluating HVAC management approach.***
				IBM (offices, laboratories, cleanroom manufacturing)	8/14/2020 (Post-SSD Start-Up) - IBM	No work in progress	NA	NA	NA		
				eMagin (Cleanroom manufacturing and offices)	8/14/2020 (Post-SSD Start-Up) - IBM 10/14/2023 (pre-occupancy) - iPark 11/30/2023 (Dept requested) - iPark	No work in progress	Yes (11/5/2020)	No	NA		
				More Good (food manufacturing)	8/14/2020 (Post-SSD Start-Up) - IBM Pre-occupancy IAQ samples to be collected prior to occupancy of expansion.	Future expansion planned (Distillery/cold storage; 11,000 SF)	Yes (11/5/2020)	No	NA		
				Country Produce (food manufacturing)	7/25/2019 (Pre-Occupancy) - iPark	No work in progress	NA	NA	Floor cuts complete.		
				Cozzini Bros (knife sharpening)	8/14/2020 (Post-SSD Start-Up) - IBM	No work in progress	NA	NA	Floor cuts complete.		
				Sloop Brewing (brewery, tasting room, and restaurant)	12/19/2018 (Confirmatory) - iPark 6/14/2021 (Post-SSD Start-Up) - iPark Pre-occupancy IAQ samples to be collected prior to occupancy of expansion.	Sloop expansion (storage space; 6,500 SF)	Yes (11/5/2020)	No	Floor cuts complete.		
330D	**700**	**iPark EFK 84 LLC**	SSD systems are operating.	IBM (offices, laboratories, cleanroom manufacturing)	9/29/2020 (Post-SSD Start-Up) - IBM	No work in progress	NA	NA	NA	VE-1 - North and central (October 2010 [Original System], July 2020 [Expanded System]) - IBM VE-10 - Central and South (August 2020) - IBM	No work in progress
				HES (semiconductor parts manufacturing)	7/7/2020 (Pre-Occupancy) - iPark 9/29/2020 (Post-SSD Start-Up) - IBM 12/8/2020 (Dept requested) - iPark	No work in progress	Yes (11/26/2019)	NA	NA		
				Crepini (food manufacturing)	8/26/2019 (Pre-Occupancy) - iPark 12/27/2019 (Dept requested) - iPark	No work in progress	NA	NA	NA		
				Crepini Phase 2 Expansion (food manufacturing)	9/29/2020 (Post-SSD Start-Up) - IBM 3/24/2023 (Pre-Occupancy) - iPark 7/10/2023 (Confirmatory) - iPark Occupancy approved in 1/31/2024 letter from Departments.	No work in progress	Yes (11/5/2020)	No	Floor cuts complete.		
338	**730**	**iPark EFK B338 LLC**	SSD system is operating in occupied space.	Powerhouse gym (gym)	8/11/2020 (Pre-Occupancy) - iPark	No work in progress	Yes (2/5/2020)	NA	NA	VE-30A, VE-30B, VE-30C - (August 2020) - iPark	<u>iPark</u> VE-30D, VE-30E, VE-30F, VE-30G, VE-30H Start-Up Testing Summary Report submitted on 8/23/2021 - under review VE-30 O&M Manual submitted on 4/19/2021 - under review
				Vacant	8/27/2009 (Confirmatory) - IBM	No work in progress	Yes (6/17/2020)	NA	NA		
				Visitor's Center (unoccupied)	8/18/2021 (Pre-Occupancy) - iPark 12/15/2021 (Dept requested) - iPark Occupancy approved in 1/31/2024 letter from Departments.	No work in progress	Yes (6/17/2020)	NA	NA	VE-30D, VE-30E, VE-30F, VE-30G, VE-30H (August 2021) - iPark	
339	**339**	**iPark EFK B339 LLC**	***SSD system is not operating***	***Building vacant***	12/2/2019 (Pre-Occupancy) - iPark	No work in progress	Yes - original renovation (8/22/2019) Yes - expansion (3/1/2022) ***No (vacancy, 2/2025)***	No	NA	VE-31 - Full building (August 2020) - iPark	<u>iPark</u> VE-31 Start-Up Report and O&M Manual submitted on 4/8/2021 and 4/9/2021, respectively - under review. ***Jane Bakes vacated space in Jan/Feb 2025***
Buildings without Subslab Depressurization Systems											
300	**NA**	**OnSemi**	IAQ sampling indicated acceptable indoor air VOC results when sampled with the HVAC system running normally and variable dampers fixed in their minimum positions.	Offices, laboratories, storage, data center	7/30/2009 (Confirmatory) - IBM	No work in progress	NA	NA	NA	NA	No work in progress
308	**308**	**iPark EFK 84 LLC**	IAQ sampling indicated acceptable indoor air VOC results when sampled with the HVAC system running normally and variable dampers fixed in their minimum positions. Changes in HVAC configuration prompted additional IAQ sampling.	Onsemi (offices, shipping/receiving warehouse, emergency control)	11/26/2013 (Confirmatory) - IBM 6/22/2021 (Change in HVAC Conditions) Occupancy approved in 2/14/2022 letter from Departments.	No work in progress	NA	NA	NA	NA	No work in progress
316	**NA**	**OnSemi**	IAQ sampling indicated VOCs present in indoor air at concentrations slightly greater than those observed in outdoor air sample. B316 housed the central carbon treatment plant for VOC-containing groundwater at the time. Removal of groundwater treatment infrastructure prompted indoor air sampling.	OnSemi (storage/office space) Formerly housed six groundwater treatment vessels (SWMUs 504, 509-513), decomissioned in December 2022.	7/8/2009 (Confirmatory) - IBM 2/28/2024 (Confirmatory) - IBM	No work in progress	NA	NA	NA	NA	<u>IBM</u> Departments require IAQ sampling if/when the unoccupied portion of B316 becomes occupied (2/21/2024 letter from Departments).
317	**NA**	**OnSemi**	Pre-occupancy IAQ sampling indicated acceptable indoor air VOC results.	Ammonia treatment	6/22/2021 (Change in Occupancy Status) - IBM Occupancy approved in 2/14/2022 letter from Departments.	No work in progress	NA	NA	NA	NA	No work in progress
320	**200**	**iPark EFK I LLC**	Pre-RFI Work Plan IAQ sampling indicated acceptable indoor air VOC results.	Various (iPark Lobby, offices, blood bank)	12/18/2007 (Pre-RFI Work Plan) - IBM	No work in progress	NA	NA	NA	NA	No work in progress
				NYS Office of General Services (offices)		No work in progress	Yes (8/26/2020)	No	NA	NA	No work in progress
				Alpha-En (Laboratory)	12/14/2022 (Pre-Occupancy) - iPark Occupancy approved in 5/12/2023 letter from Departments.	No work in progress	NA	NA	NA	NA	No work in progress
320A	**210**	**iPark EFK I LLC**	Pre-RFI Work Plan IAQ sampling indicated acceptable indoor air VOC results.	NYS Office of General Services (warehousing)	8/24/2020 (Pre-Occupancy) - iPark	No work in progress	Yes (8/26/2020)	No	NA	NA	No work in progress
320B	**NA**	**OnSemi**	IAQ sampling indicated acceptable indoor air VOC results when sampled with the HVAC system running normally and variable dampers fixed in their minimum positions.	Cleanroom manufacturing, storage, laboratories	2/27/2019 and 6/5/2019 (Confirmatory) - IBM 5/24/2022 (Post-HVAC Mods) - IBM 4/19/2023 (Pre-Occupancy) - IBM Occupancy approved in 8/3/2023 letter from Departments.	No work in progress	NA	NA	NA	Passive SSD system (VE-20) installed in a portion of southern renovation area (Nov 2020) - Global Foundries	No work in progress
321	**NA**	**OnSemi**	Pre-RFI Work Plan IAQ sampling indicated acceptable indoor air VOC results.	Cleanroom manufacturing, office, electrical test laboratories, and data center	12/6/2007 (Pre-RFI Work Plan) - IBM	No work in progress	NA	NA	NA	NA	No work in progress
322	**NA**	**OnSemi**	IAQ sampling indicated acceptable indoor air VOC results in the telephone room when sampled with the HVAC system running normally.	Northern 2/3rds of building was demolished in 2019. Telephone panel room, vacant space, and hallways remain.	10/26/2015 (Confirmatory) - IBM	No work in progress	NA	NA	NA	NA	No work in progress
323	**NA**	**OnSemi**	IAQ sampling indicated acceptable indoor air VOC results when sampled with the HVAC system running normally and variable dampers fixed in their minimum positions.	Cleanroom manufacturing	2/26/2019 (Confirmatory) - IBM	No work in progress	NA	NA	NA	NA	No work in progress
323A	**NA**	**OnSemi**	IAQ sampling in adjoining B323 indicated acceptable indoor air VOC results when sampled with the HVAC system running normally and variable dampers fixed in their minimum positions.	Cleanroom manufacturing	Not completed due to acceptable indoor air results in adjoining building (B323)	No work in progress	NA	NA	NA	NA	No work in progress
330L	**710**	**iPark EFK 84 LLC**	IAQ sampling indicated acceptable indoor air VOC results when sampled with the HVAC system running normally.	Sprout Creek Bakery	5/15/2020 (Pre-Construction) - iPark 5/6/2021 (Pre-Occupancy) - iPark 12/2021 (Dept requested) - iPark Occupancy approved in 1/31/2024 letter from Departments.	No work in progress	Yes (11/26/2019) - La Milpa Yes (10/29/2020) - Sprout Creek	No	Floor cuts complete.	NA	No work in progress
				Dental supply manufacturing (proposed)	5/6/2021 (Pre-Occupancy) - iPark Occupancy approved in 6/9/2021 letter from Departments.	No work in progress	Yes (9/25/2020)	No	NA	NA	No work in progress
334	**745**	**iPark EFK LLC**	IAQ sampling indicated acceptable indoor air VOC results when sampled with the HVAC system running normally and variable dampers fixed in their minimum positions.	Building vacant	8/17/2020 (Pre-Occupancy) - iPark	No work in progress	NA	No	NA	NA	No work in progress
335	**720**	**iPark EFK LLC**	VI assessment conducted in 2018-2019 by IBM indicated PCE presence in SSV and IA.	Unoccupied since about 2002	8-hour IAQ sampling has not been conducted	Building to be demolished pending Public Comment and Permit renewal.	NA	NA	NA	NA	***<u>IBM</u> Departments approved selected Corrective Measure as Interim Corrective Measure on 7/31/23. Final Corrective Measure approval pending public notice and comment on the facility's RCRA permit renewal application.***
386	**NA**	**OnSemi**	IAQ sampling indicated acceptable indoor air VOC results when sampled with the HVAC system running normally.	Fluoride waste treatment facility, some offices.	2/26/2019 (Confirmatory) - IBM	No work in progress	NA	NA	NA	NA	No work in progress

Appendix D

iPark Report Excerpts

WALDEN

Sent via email to emily.barry@dec.ny.gov

October 9, 2024
iPark0118.57

Emily Barry, P.G.
Professional Geologist I
New York State Department of Environmental Conservation
21 South Putt Corners Road
New Paltz, NY 12561

Re: iPark 84, Former IBM East Fishkill Facility
IAQ Operation and Maintenance Compliance Plan
September 2024 HVAC System Inspections

Dear Ms. Barry:

Walden Environmental Engineering, PLLC (Walden) conducts biweekly (every other week) inspections of certain HVAC systems operated in buildings owned by iPark 84. These inspections are conducted in accordance with the revised draft Indoor Air Quality (IAQ) Operation and Maintenance Compliance Plan (O&M Plan) (Walden, August 2024) submitted to the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH) on September 3, 2024. The O&M Plan currently is under review by the Departments.

The September 2024 biweekly inspections were performed on September 13th and 26th. Copies of the log sheets completed during these inspections are attached. The HVAC systems were observed to be operating in accordance with the settings specified in the O&M Plan and no operating issues were noted during the inspections. Please call me at if you have any questions.

Very truly yours,
Walden Environmental Engineering, PLLC

Nora M. Brew, P.E.
VP/Senior Project Manager

cc: J. Kenney, NYSDOH
L. Daubert, IBM
D. Vitija, iPark
V. Tancora, iPark

Z:\iPark0118\+ANNUAL REPORT SUBMITTALS\2024 HVAC system checks\Submittals to DEC\iPark 84 September 2024 HVAC Inspections.docx

INSPECTION FORMS
SEPTEMBER 13, 2024

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 310 (iPARK B220)
(CATEGORY 2 BUILDING)

Date: 9/13/24
System Checked By: SSH

Air Handling Unit	Location	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Thermostat Fan Setting	Thermostat Fan Setting Check (Circle One)	Outside Air Damper Setting (% Open)	Outside Air Damper Check (% Open)	Air Intake Openings Clear? (Circle One)	Notes
Rooftop-1	**Rooftop**	**seasonal***	(On) Off	**On***	(On) Off Auto	**25%***	25%	(Yes) No	*Unit operated for seasonal cooling only; settings only apply when the unit is operating
Rooftop-2	**Rooftop**	**24/7**	(On) Off	**On**	(On) Off Auto	**25%**	25%	(Yes) No	
Rooftop-3	**Rooftop**	**seasonal***	On (Off)	**On***	(On) Off Auto	**25%***	25%	(Yes) No	*Unit operated for seasonal cooling only; settings only apply when the unit is operating
Ground-1	**Ground Level**	**24/7**	(On) Off	**On**	(On) Off Auto	**fixed**	FIXED	(Yes) No	
Ground-2	**Ground Level**	**24/7**	(On) Off	**On**	(On) Off Auto	**fixed**	FIXED	(Yes) No	
Ground-3	**Ground Level**	**24/7**	(On) Off	**On**	(On) Off Auto	**fixed**	FIXED	(Yes) No	

Notes:
AHU = Air Handling Unit (only the AHUs that cover building areas outside the influence of subslab depressurization systems are listed)
NA = Not Applicable
*Unit operated for seasonal cooling only; settings only apply when the unit is operating
Shaded columns to be filled in during system checks.

The pre-populated HVAC settings/positions in this table (shown in bold type) reflect conditions that have been shown to be effective for vapor intrusion engineering control as determined by previous acceptable indoor air quality sampling results.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 330C (iPARK B755)
(CATEGORY 2 BUILDING)

Date: 9/13/2024
System Checked By: SSh

Air Handling Unit	Location	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Economizer Setting	Economizer Status Check	Outside Air Damper Setting (Minimum % Open)	Outside Air Damper Check (% Open)	Notes
AC-11	Rooftop	24/7	(On) Off	Fixed	✓	fed from AC-13	100%	
AC-13	Rooftop	24/7	(On) Off	Auto	✓	75%	100%	Feeds into AC-11 and AC-91
AC-41	Rooftop	Off	NA	NA		NA		Space is vacant - August 2024 ✓
AC-42	Rooftop	24/7	(On) Off	Auto	✓	5%	95%	
AC-58	Rooftop	24/7	(On) Off	Fixed	✓	5%	95%	
AC-90	Rooftop	24/7	(On) Off	Auto	✓	15%	15%	
AC-91	Rooftop	24/7	(On) Off	Auto	✓	fed from AC-13	100%	

Notes:
AHU = Air Handling Unit (only the AHUs that cover building areas outside the influence of subslab depressurization systems are listed)
NA = Not Applicable

Shaded columns to be filled in during system checks.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 330L (iPARK B710)
(CATEGORY 4 BUILDING)

Date: 9/13/24

System Checked By: SSR

Air Handling Unit	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Notes
AC-25	**24/7**	(On) Off	
AC-60	**24/7**	(On) Off	Also covers AC-61 area

Notes:
AHU = Air Handling Unit

Shaded columns to be filled in during system checks.

INSPECTION FORMS
SEPTEMBER 26, 2024

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 310 (iPARK B220)
(CATEGORY 2 BUILDING)

Date: 9/26/24
System Checked By: SSH

Air Handling Unit	Location	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Thermostat Fan Setting	Thermostat Fan Setting Check (Circle One)	Outside Air Damper Setting (% Open)	Outside Air Damper Check (% Open)	Air Intake Openings Clear? (Circle One)	Notes
Rooftop-1	**Rooftop**	**seasonal***	(On) Off	**On***	(On) Off Auto	**25%***	25%	(Yes) No	*Unit operated for seasonal cooling only; settings only apply when the unit is operating
Rooftop-2	**Rooftop**	**24/7**	(On) Off	**On**	(On) Off Auto	**25%**	25%	(Yes) No	
Rooftop-3	**Rooftop**	**seasonal***	On (Off)	**On***	(On) Off Auto	**25%***	25%	(Yes) No	*Unit operated for seasonal cooling only; settings only apply when the unit is operating
Ground-1	**Ground Level**	**24/7**	(On) Off	**On**	(On) Off Auto	**fixed**	FIXED	(Yes) No	
Ground-2	**Ground Level**	**24/7**	(On) Off	**On**	(On) Off Auto	**fixed**	FIXED	(Yes) No	
Ground-3	**Ground Level**	**24/7**	(On) Off	**On**	(On) Off Auto	**fixed**	FIXED	(Yes) No	

Notes:
AHU = Air Handling Unit (only the AHUs that cover building areas outside the influence of subslab depressurization systems are listed)
NA = Not Applicable
*Unit operated for seasonal cooling only; settings only apply when the unit is operating
Shaded columns to be filled in during system checks.

The pre-populated HVAC settings/positions in this table (shown in bold type) reflect conditions that have been shown to be effective for vapor intrusion engineering control as determined by previous acceptable indoor air quality sampling results.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 330C (iPARK B755)
(CATEGORY 2 BUILDING)

Date: 9/26/2024
System Checked By: SSN

Air Handling Unit	Location	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Economizer Setting	Economizer Status Check	Outside Air Damper Setting (Minimum % Open)	Outside Air Damper Check (% Open)	Notes
AC-11	Rooftop	24/7	(On) Off	Fixed	✓	fed from AC-13	100%	
AC-13	Rooftop	24/7	(On) Off	Auto	✓	75%	100%	Feeds into AC-11 and AC-91
AC-41	Rooftop	Off	NA	NA		NA		Space is vacant - August 2024 ✓
AC-42	Rooftop	24/7	(On) Off	Auto	✓	5%	95%	
AC-58	Rooftop	24/7	(On) Off	Fixed	✓	5%	95%	
AC-90	Rooftop	24/7	(On) Off	Auto	✓	15%	15%	
AC-91	Rooftop	24/7	(On) Off	Auto	✓	fed from AC-13	100%	

Notes:
AHU = Air Handling Unit (only the AHUs that cover building areas outside the influence of subslab depressurization systems are listed)
NA = Not Applicable

Shaded columns to be filled in during system checks.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 330L (iPARK B710)
(CATEGORY 4 BUILDING)

Date:	9/26/24
System Checked By:	SSL

Air Handling Unit	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Notes
AC-25	**24/7**	(On) Off	
AC-60	**24/7**	(On) Off	Also covers AC-61 area

Notes:
AHU = Air Handling Unit

Shaded columns to be filled in during system checks.

WALDEN

Sent via email to emily.barry@dec.ny.gov

November 12, 2024
iPark0118.57

Emily Barry, P.G.
Professional Geologist I
New York State Department of Environmental Conservation
21 South Putt Corners Road
New Paltz, NY 12561

Re: iPark 84, Former IBM East Fishkill Facility
IAQ Operation and Maintenance Compliance Plan
October 2024 HVAC System Inspections

Dear Ms. Barry:

Walden Environmental Engineering, PLLC (Walden) conducts biweekly (every other week) inspections of certain HVAC systems operated in buildings owned by iPark 84. These inspections are conducted in accordance with the revised draft Indoor Air Quality (IAQ) Operation and Maintenance Compliance Plan (O&M Plan) (Walden, August 2024) submitted to the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH) on September 3, 2024. The O&M Plan currently is under review by the Departments.

The October 2024 biweekly inspections were performed on October 11th and 24th. The HVAC systems were observed to be operating in accordance with the settings specified in the O&M Plan and no operating issues were noted during the inspections. Copies of the log sheets completed during these inspections are attached. Note that on the Building 310 log sheet, the "AHU Operating Check" column refers to whether the unit was observed to be running ("On") or not running ("Off") during the inspection. Please call me at if you have any questions.

Very truly yours,
Walden Environmental Engineering, PLLC

Nora M. Brew, P.E.
VP/Senior Project Manager

cc: J. Kenney, NYSDOH
L. Daubert, IBM
D. Vitija, iPark
V. Tancora, iPark

Z:\iPark0118\+ANNUAL REPORT SUBMITTALS\2024 HVAC system checks\Submittals to DEC\iPark 84 October 2024 HVAC Inspections.docx

INSPECTION FORMS
OCTOBER 11, 2024

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 310 (iPARK B220)
(CATEGORY 2 BUILDING)

Date: 10/11/24
System Checked By: SSH

Air Handling Unit	Location	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Thermostat Fan Setting	Thermostat Fan Setting Check (Circle One)	Outside Air Damper Setting (% Open)	Outside Air Damper Check (% Open)	Air Intake Openings Clear? (Circle One)	Notes
Rooftop-1	**Rooftop**	**seasonal***	(On) Off	**On***	(On) Off Auto	**25%***	25%	(Yes) No	*Unit operated for seasonal cooling only; settings only apply when the unit is operating UNIT RUNNING
Rooftop-2	**Rooftop**	**24/7**	(On) Off	**On**	(On) Off Auto	**25%**	25%	(Yes) No	UNIT RUNNING
Rooftop-3	**Rooftop**	**seasonal***	On (Off)	**On***	(On) Off Auto	**25%***	25%	(Yes) No	*Unit operated for seasonal cooling only; settings only apply when the unit is operating UNIT NOT RUNNING
Ground-1	**Ground Level**	**24/7**	(On) Off	**On**	(On) Off Auto	**fixed**	FIXED	(Yes) No	UNIT RUNNING
Ground-2	**Ground Level**	**24/7**	(On) Off	**On**	(On) Off Auto	**fixed**	FIXED	(Yes) No	UNIT RUNNING
Ground-3	**Ground Level**	**24/7**	(On) Off	**On**	(On) Off Auto	**fixed**	FIXED	(Yes) No	UNIT RUNNING.

Notes:
AHU = Air Handling Unit (only the AHUs that cover building areas outside the influence of subslab depressurization systems are listed)
NA = Not Applicable
*Unit operated for seasonal cooling only; settings only apply when the unit is operating
Shaded columns to be filled in during system checks.

The pre-populated HVAC settings/positions in this table (shown in bold type) reflect conditions that have been shown to be effective for vapor intrusion engineering control as determined by previous acceptable indoor air quality sampling results.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 330C (iPARK B755)
(CATEGORY 2 BUILDING)

Date: 10/11/24

System Checked By: SSU

Air Handling Unit	Location	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Economizer Setting	Economizer Status Check	Outside Air Damper Setting (Minimum % Open)	Outside Air Damper Check (% Open)	Notes
AC-11	Rooftop	24/7	(On) Off	Fixed	✓	fed from AC-13	100%	
AC-13	Rooftop	24/7	(On) Off	Auto	✓	75%	100%	Feeds into AC-11 and AC-91
AC-41	Rooftop	Off	NA	NA		NA		Space is vacant - August 2024 ✓
AC-42	Rooftop	24/7	(On) Off	Auto	✓	5%	75%	
AC-58	Rooftop	24/7	(On) Off	Fixed	✓	5%	75%	
AC-90	Rooftop	24/7	(On) Off	Auto	✓	15%	15%	
AC-91	Rooftop	24/7	(On) Off	Auto	✓	fed from AC-13	15%	

Notes:
AHU = Air Handling Unit (only the AHUs that cover building areas outside the influence of subslab depressurization systems are listed)
NA = Not Applicable

Shaded columns to be filled in during system checks.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 330L (iPARK B710)
(CATEGORY 4 BUILDING)

Date:	10/11/24
System Checked By:	SSH

Air Handling Unit	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Notes
AC-25	**24/7**	(On) Off	
AC-60	**24/7**	(On) Off	Also covers AC-61 area

Notes:
AHU = Air Handling Unit

Shaded columns to be filled in during system checks.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 334 (iPARK B745)
(CATEGORY 4 BUILDING)

Date: 10/11/2024
System Checked By: SSK

Air Handling Unit	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Notes
HVAC-1	Off	(NA)	Building is vacant - August 2024 ✓ 10/11/2024
HVAC-2	Off	(NA)	Building is vacant - August 2024 ✓ 10/11/2024
HVAC-4	Off	(NA)	Building is vacant - August 2024 ✓ 10/11/2024
HVAC-7	Off	(NA)	Building is vacant - August 2024 ✓ 10/11/2024
HVAC-9	Off	(NA)	Building is vacant - August 2024 ✓ 10/11/2024
HVAC-12	Off	(NA)	Building is vacant - August 2024 ✓ 10/11/2024

Notes:
AHU = Air Handling Unit
NA = Not Applicable

Shaded columns to be filled in during system checks.

INSPECTION FORMS
OCTOBER 24, 2024

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 310 (iPARK B220)
(CATEGORY 2 BUILDING)

Date: 10/24/24
System Checked By: SSL

Air Handling Unit	Location	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Thermostat Fan Setting	Thermostat Fan Setting Check (Circle One)	Outside Air Damper Setting (% Open)	Outside Air Damper Check (% Open)	Air Intake Openings Clear? (Circle One)	Notes
Rooftop-1	**Rooftop**	**seasonal***	(On) Off	**On***	(On) Off Auto	**25%***	25%	(Yes) No	*Unit operated for seasonal cooling only; settings only apply when the unit is operating UNIT RUNNING
Rooftop-2	**Rooftop**	**24/7**	(On) Off	**On**	(On) Off Auto	**25%**	25%	(Yes) No	UNIT RUNNING
Rooftop-3	**Rooftop**	**seasonal***	On (Off)	**On***	(On) Off Auto	**25%***	25%	(Yes) No	*Unit operated for seasonal cooling only; settings only apply when the unit is operating UNIT NOT RUNNING
Ground-1	**Ground Level**	**24/7**	(On) Off	**On**	(On) Off Auto	**fixed**	FIXED	(Yes) No	UNIT RUNNING
Ground-2	**Ground Level**	**24/7**	(On) Off	**On**	(On) Off Auto	**fixed**	FIXED	(Yes) No	UNIT RUNNING
Ground-3	**Ground Level**	**24/7**	(On) Off	**On**	(On) Off Auto	**fixed**	FIXED	(Yes) No	UNIT RUNNING

Notes:
AHU = Air Handling Unit (only the AHUs that cover building areas outside the influence of subslab depressurization systems are listed)
NA = Not Applicable
*Unit operated for seasonal cooling only; settings only apply when the unit is operating
Shaded columns to be filled in during system checks.

The pre-populated HVAC settings/positions in this table (shown in bold type) reflect conditions that have been shown to be effective for vapor intrusion engineering control as determined by previous acceptable indoor air quality sampling results.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 330C (iPARK B755)
(CATEGORY 2 BUILDING)

Date: 10/24/24
System Checked By: SSH

Air Handling Unit	Location	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Economizer Setting	Economizer Status Check	Outside Air Damper Setting (Minimum % Open)	Outside Air Damper Check (% Open)	Notes
AC-11	Rooftop	24/7	(On) Off	Fixed	✓	fed from AC-13	100%	
AC-13	Rooftop	24/7	(On) Off	Auto	✓	75%	100%	Feeds into AC-11 and AC-91
AC-41	Rooftop	Off	NA	NA		NA		Space is vacant - August 2024 ✓
AC-42	Rooftop	24/7	(On) Off	Auto	✓	5%	95%	
AC-58	Rooftop	24/7	(On) Off	Fixed	✓	5%	95%	
AC-90	Rooftop	24/7	(On) Off	Auto	✓	15%	15%	
AC-91	Rooftop	24/7	(On) Off	Auto	✓	fed from AC-13	100%	

Notes:
AHU = Air Handling Unit (only the AHUs that cover building areas outside the influence of subslab depressurization systems are listed)
NA = Not Applicable

Shaded columns to be filled in during system checks.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 330L (iPARK B710)
(CATEGORY 4 BUILDING)

Date:	10/24/24
System Checked By:	SSh

Air Handling Unit	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Notes
AC-25	**24/7**	(On) Off	
AC-60	**24/7**	(On) Off	Also covers AC-61 area

Notes:
AHU = Air Handling Unit

Shaded columns to be filled in during system checks.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 334 (iPARK B745)
(CATEGORY 4 BUILDING)

Date: 10/24/2024
System Checked By: SSK

Air Handling Unit	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Notes	
HVAC-1	Off	(NA)	Building is vacant - August 2024	10/24/2024
HVAC-2	Off	(NA)	Building is vacant - August 2024	10/24/2024
HVAC-4	Off	(NA)	Building is vacant - August 2024	10/24/2024
HVAC-7	Off	(NA)	Building is vacant - August 2024	10/24/2024
HVAC-9	Off	(NA)	Building is vacant - August 2024	10/24/2024
HVAC-12	Off	(NA)	Building is vacant - August 2024	10/24/2024

Notes:
AHU = Air Handling Unit
NA = Not Applicable

Shaded columns to be filled in during system checks.

WALDEN

Sent via email to emily.barry@dec.ny.gov

December 11, 2024
iPark0118.57

Emily Barry, P.G.
Professional Geologist I
New York State Department of Environmental Conservation
21 South Putt Corners Road
New Paltz, NY 12561

Re: iPark 84, Former IBM East Fishkill Facility
IAQ Operation and Maintenance Compliance Plan
November 2024 HVAC System Inspections

Dear Ms. Barry:

Walden Environmental Engineering, PLLC (Walden) conducts biweekly (every other week) inspections of certain HVAC systems operated in buildings owned by iPark 84. These inspections are conducted in accordance with the revised draft Indoor Air Quality (IAQ) Operation and Maintenance Compliance Plan (O&M Plan) (Walden, August 2024) submitted to the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH) on September 3, 2024. The O&M Plan currently is under review by the Departments.

The November 2024 biweekly inspections were performed on November 11th and 27th. The HVAC systems were observed to be operating in accordance with the settings specified in the O&M Plan and no operating issues were noted during the inspections. Copies of the log sheets completed during these inspections are attached. Note that on the Building 310 log sheet, the "AHU Operating Check" column refers to whether the unit was observed to be running ("On") or not running ("Off") during the inspection. Please call me at if you have any questions.

Very truly yours,
Walden Environmental Engineering, PLLC

Nora M. Brew, P.E.
VP/Senior Project Manager

cc: J. Kenney, NYSDOH
L. Daubert, IBM
D. Vitija, iPark
V. Tancora, iPark

Z:\iPark0118\+ANNUAL REPORT SUBMITTALS\iPark SSDS Annual Summary Files 2024\2024 HVAC system checks\Submittals to DEC\November\iPark 84 November 2024 HVAC Inspections.docx

INSPECTION FORMS
NOVEMBER 11, 2024

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 310 (iPARK B220)
(CATEGORY 2 BUILDING)

Date: 11/11/2024
System Checked By: SSK

Air Handling Unit	Location	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Thermostat Fan Setting	Thermostat Fan Setting Check (Circle One)	Outside Air Damper Setting (% Open)	Outside Air Damper Check (% Open)	Air Intake Openings Clear? (Circle One)	Notes
Rooftop-1	Rooftop	seasonal*	(On) Off	On*	(On) Off Auto	25%*	25%	Yes No	*Unit operated for seasonal cooling only; settings only apply when the unit is operating UNIT RUNNING / ON
Rooftop-2	Rooftop	24/7	(On) Off	On	(On) Off Auto	25%	25%	Yes No	UNIT RUNNING / ON
Rooftop-3	Rooftop	seasonal*	On (Off)	On*	(On) Off Auto	25%*	25%	Yes No	*Unit operated for seasonal cooling only; settings only apply when the unit is operating UNIT NOT RUNNING / OFF
Ground-1	Ground Level	24/7	(On) Off	On	(On) Off Auto	fixed	FIXED	Yes No	UNIT RUNNING / ON
Ground-2	Ground Level	24/7	(On) Off	On	(On) Off Auto	fixed	FIXED	Yes No	UNIT RUNNING / ON
Ground-3	Ground Level	24/7	(On) Off	On	(On) Off Auto	fixed	FIXED	Yes No	UNIT RUNNING / ON

Notes:
AHU = Air Handling Unit (only the AHUs that cover building areas outside the influence of subslab depressurization systems are listed)
NA = Not Applicable
*Unit operated for seasonal cooling only; settings only apply when the unit is operating
Shaded columns to be filled in during system checks.

The pre-populated HVAC settings/positions in this table (shown in bold type) reflect conditions that have been shown to be effective for vapor intrusion engineering control as determined by previous acceptable indoor air quality sampling results.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 330C (iPARK B755)
(CATEGORY 2 BUILDING)

Date: 11/11/2024
System Checked By: SSU

Air Handling Unit	Location	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Economizer Setting	Economizer Status Check	Outside Air Damper Setting (Minimum % Open)	Outside Air Damper Check (% Open)	Notes
AC-11	Rooftop	24/7	(On) Off	Fixed	✓	fed from AC-13	100%	
AC-13	Rooftop	24/7	(On) Off	Auto	✓	75%	100%	Feeds into AC-11 and AC-91
AC-41	Rooftop	Off	NA	NA		NA		Space is vacant - August 2024 ✓ 11/11/2024
AC-42	Rooftop	24/7	(On) Off	Auto	✓	5%	95%	
AC-58	Rooftop	24/7	(On) Off	Fixed	✓	5%	95%	
AC-90	Rooftop	24/7	(On) Off	Auto	✓	15%	15%	
AC-91	Rooftop	24/7	(On) Off	Auto	✓	fed from AC-13	100%	

Notes:
AHU = Air Handling Unit (only the AHUs that cover building areas outside the influence of subslab depressurization systems are listed)
NA = Not Applicable

Shaded columns to be filled in during system checks.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 330L (iPARK B710)
(CATEGORY 4 BUILDING)

Date: 11/11/2024

System Checked By: SSH

Air Handling Unit	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Notes
AC-25	24/7	(On) Off	
AC-60	24/7	(On) Off	Also covers AC-61 area

Notes:
AHU = Air Handling Unit

Shaded columns to be filled in during system checks.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 334 (iPARK B745)
(CATEGORY 4 BUILDING)

Date: 11/11/2024
System Checked By: SSU

Air Handling Unit	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Notes
HVAC-1	Off	(NA)	Building is vacant - August 2024 ✓ 11/11/2024
HVAC-2	Off	(NA)	Building is vacant - August 2024 ✓ 11/11/2024
HVAC-4	Off	(NA)	Building is vacant - August 2024 ✓ 11/11/2024
HVAC-7	Off	(NA)	Building is vacant - August 2024 ✓ 11/11/2024
HVAC-9	Off	(NA)	Building is vacant - August 2024 ✓ 11/11/2024
HVAC-12	Off	(NA)	Building is vacant - August 2024 ✓ 11/11/2024

Notes:
AHU = Air Handling Unit
NA = Not Applicable

Shaded columns to be filled in during system checks.

INSPECTION FORMS
NOVEMBER 27, 2024

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 310 (iPARK B220)
(CATEGORY 2 BUILDING)

Date: 11/27/24
System Checked By: SSK

Air Handling Unit	Location	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Thermostat Fan Setting	Thermostat Fan Setting Check (Circle One)	Outside Air Damper Setting (% Open)	Outside Air Damper Check (% Open)	Air Intake Openings Clear? (Circle One)	Notes
Rooftop-1	**Rooftop**	**seasonal***	(On) Off	**On***	(On) Off Auto	**25%***	25%	(Yes) No	*Unit operated for seasonal cooling only; settings only apply when the unit is operating UNIT RUNNING/ON
Rooftop-2	**Rooftop**	**24/7**	(On) Off	**On**	(On) Off Auto	**25%**	25%	(Yes) No	UNIT RUNNING/ON
Rooftop-3	**Rooftop**	**seasonal***	On (Off)	**On***	(On) Off Auto	**25%***	25%	(Yes) No	*Unit operated for seasonal cooling only; settings only apply when the unit is operating UNIT NOT RUNNING/OFF
Ground-1	**Ground Level**	**24/7**	(On) Off	**On**	(On) Off Auto	**fixed**	FIXED	(Yes) No	UNIT RUNNING/ON
Ground-2	**Ground Level**	**24/7**	(On) Off	**On**	(On) Off Auto	**fixed**	FIXED	(Yes) No	UNIT RUNNING/ON
Ground-3	**Ground Level**	**24/7**	(On) Off	**On**	(On) Off Auto	**fixed**	FIXED	(Yes) No	UNIT RUNNING/ON

Notes:
AHU = Air Handling Unit (only the AHUs that cover building areas outside the influence of subslab depressurization systems are listed)
NA = Not Applicable
*Unit operated for seasonal cooling only; settings only apply when the unit is operating
Shaded columns to be filled in during system checks.

The pre-populated HVAC settings/positions in this table (shown in bold type) reflect conditions that have been shown to be effective for vapor intrusion engineering control as determined by previous acceptable indoor air quality sampling results.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 330C (iPARK B755)
(CATEGORY 2 BUILDING)

Date: 11/27/2024
System Checked By: SSH

Air Handling Unit	Location	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Economizer Setting	Economizer Status Check	Outside Air Damper Setting (Minimum % Open)	Outside Air Damper Check (% Open)	Notes
AC-11	Rooftop	24/7	(On) Off	Fixed	✓	fed from AC-13	100%	
AC-13	Rooftop	24/7	(On) Off	Auto	✓	75%	100%	Feeds into AC-11 and AC-91
AC-41	Rooftop	Off	NA	NA		NA		Space is vacant - August 2024 ✓ 11/27/2024
AC-42	Rooftop	24/7	(On) Off	Auto	✓	5%	95%	
AC-58	Rooftop	24/7	(On) Off	Fixed	✓	5%	95%	
AC-90	Rooftop	24/7	(On) Off	Auto	✓	15%	15%	
AC-91	Rooftop	24/7	(On) Off	Auto	✓	fed from AC-13	100%	

Notes:
AHU = Air Handling Unit (only the AHUs that cover building areas outside the influence of subslab depressurization systems are listed)
NA = Not Applicable

Shaded columns to be filled in during system checks.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 330L (iPARK B710)
(CATEGORY 4 BUILDING)

Date: 11/27/2024
System Checked By: SSH

Air Handling Unit	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Notes
AC-25	24/7	(On) Off	
AC-60	24/7	(On) Off	Also covers AC-61 area

Notes:
AHU = Air Handling Unit

Shaded columns to be filled in during system checks.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 334 (iPARK B745)
(CATEGORY 4 BUILDING)

Date: 11/27/2024
System Checked By: SSH

Air Handling Unit	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Notes	
HVAC-1	Off	(NA)	Building is vacant - August 2024	11/27/2024
HVAC-2	Off	(NA)	Building is vacant - August 2024	11/27/2024
HVAC-4	Off	(NA)	Building is vacant - August 2024	11/27/2024
HVAC-7	Off	(NA)	Building is vacant - August 2024	11/27/2024
HVAC-9	Off	(NA)	Building is vacant - August 2024	11/27/2024
HVAC-12	Off	(NA)	Building is vacant - August 2024	11/27/2024

Notes:
AHU = Air Handling Unit
NA = Not Applicable

Shaded columns to be filled in during system checks.

WALDEN

Sent via email to emily.barry@dec.ny.gov

January 20, 2025
iPark0118.57

Emily Barry, P.G.
Professional Geologist I
New York State Department of Environmental Conservation
21 South Putt Corners Road
New Paltz, NY 12561

Re: iPark 84, Former IBM East Fishkill Facility
IAQ Operation and Maintenance Compliance Plan
December 2024 HVAC System Inspections

Dear Ms. Barry:

Walden Environmental Engineering, PLLC (Walden) conducts biweekly (every other week) inspections of certain HVAC systems operated in buildings owned by iPark 84. These inspections are conducted in accordance with the revised draft Indoor Air Quality (IAQ) Operation and Maintenance Compliance Plan (O&M Plan) (Walden, August 2024) submitted to the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH) on September 3, 2024. The O&M Plan currently is under review by the Departments.

The December 2024 biweekly inspections were performed on December 5th and 24th. The HVAC systems were observed to be operating in accordance with the settings specified in the O&M Plan and no operating issues were noted during the inspections. Copies of the log sheets completed during these inspections are attached. Note that on the Building 310 log sheet, the "AHU Operating Check" column refers to whether the unit was observed to be running ("On") or not running ("Off") during the inspection. Please call me at if you have any questions.

Very truly yours,
Walden Environmental Engineering, PLLC

Nora M. Brew, P.E.
VP/Senior Project Manager

cc: J. Kenney, NYSDOH
L. Daubert, IBM
D. Vitija, iPark
V. Tancora, iPark

Z:\iPark0118\+ANNUAL REPORT SUBMITTALS\iPark SSDS Annual Summary Files 2024\2024 HVAC system checks\Submittals to DEC\December

INSPECTION FORMS
DECEMBER 5, 2024

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 310 (iPARK B220)
(CATEGORY 2 BUILDING)

Date: 12/5/2024
System Checked By: SHREYAN

Air Handling Unit	Location	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Thermostat Fan Setting	Thermostat Fan Setting Check (Circle One)	Outside Air Damper Setting (% Open)	Outside Air Damper Check (% Open)	Air Intake Openings Clear? (Circle One)	Notes
Rooftop-1	Rooftop	seasonal*	On (Off)	On*	(On) Off Auto	25%*	25%	(Yes) No	*Unit operated for seasonal cooling only; settings only apply when the unit is operating UNIT NOT RUNNING / OFF
Rooftop-2	Rooftop	24/7	(On) Off	On	(On) Off Auto	25%	25%	(Yes) No	UNIT RUNNING / ON
Rooftop-3	Rooftop	seasonal*	On (Off)	On*	(On) Off Auto	25%*	25%	(Yes) No	*Unit operated for seasonal cooling only; settings only apply when the unit is operating UNIT NOT RUNNING / OFF
Ground-1	Ground Level	24/7	(On) Off	On	(On) Off Auto	fixed	FIXED	(Yes) No	UNIT RUNNING / ON
Ground-2	Ground Level	24/7	(On) Off	On	(On) Off Auto	fixed	FIXED	(Yes) No	UNIT RUNNING / ON
Ground-3	Ground Level	24/7	(On) Off	On	(On) Off Auto	fixed	FIXED	(Yes) No	UNIT RUNNING / ON

Notes:
AHU = Air Handling Unit (only the AHUs that cover building areas outside the influence of subslab depressurization systems are listed)
NA = Not Applicable
*Unit operated for seasonal cooling only; settings only apply when the unit is operating
Shaded columns to be filled in during system checks.

The pre-populated HVAC settings/positions in this table (shown in bold type) reflect conditions that have been shown to be effective for vapor intrusion engineering control as determined by previous acceptable indoor air quality sampling results.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 330C (iPARK B755)
(CATEGORY 2 BUILDING)

Date: 12/5/2024
System Checked By: SHREYAK K.

Air Handling Unit	Location	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Economizer Setting	Economizer Status Check	Outside Air Damper Setting (Minimum % Open)	Outside Air Damper Check (% Open)	Notes
AC-11	Rooftop	24/7	(On) Off	Fixed	✓	fed from AC-13	100%	
AC-13	Rooftop	24/7	(On) Off	Auto	✓	75%	100%	Feeds into AC-11 and AC-91
AC-41	Rooftop	Off	NA	NA		NA		Space is vacant - August 2024 ✓
AC-42	Rooftop	24/7	(On) Off	Auto	✓	5%	95%	12/5/2024
AC-58	Rooftop	24/7	(On) Off	Fixed	✓	5%	95%	
AC-90	Rooftop	24/7	(On) Off	Auto	✓	15%	15%	
AC-91	Rooftop	24/7	(On) Off	Auto	✓	fed from AC-13	100%	

Notes:
AHU = Air Handling Unit (only the AHUs that cover building areas outside the influence of subslab depressurization systems are listed)
NA = Not Applicable

Shaded columns to be filled in during system checks.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 330L (iPARK B710)
(CATEGORY 4 BUILDING)

Date: ~~12/12/2024~~ 12/5/2024
System Checked By: SHREYAK

Air Handling Unit	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Notes
AC-25	**24/7**	(On) Off	
AC-60	**24/7**	(On) Off	Also covers AC-61 area

Notes:
AHU = Air Handling Unit

Shaded columns to be filled in during system checks.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 334 (iPARK B745)
(CATEGORY 4 BUILDING)

Date: 12/5/2024
System Checked By: SHREYAL

Air Handling Unit	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Notes
HVAC-1	Off	NA	Building is vacant - August 2024 ✓ 12/5/2024
HVAC-2	Off	NA	Building is vacant - August 2024 ✓ 12/5/2024
HVAC-4	Off	NA	Building is vacant - August 2024 ✓ 12/5/2024
HVAC-7	Off	NA	Building is vacant - August 2024 ✓ 12/5/2024
HVAC-9	Off	NA	Building is vacant - August 2024 ✓ 12/5/2024
HVAC-12	Off	NA	Building is vacant - August 2024 ✓ 12/5/2024.

Notes:
AHU = Air Handling Unit
NA = Not Applicable

Shaded columns to be filled in during system checks.

INSPECTION FORMS
DECEMBER 24, 2024

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 310 (iPARK B220)
(CATEGORY 2 BUILDING)

Date: 12/24/2024

System Checked By: SHREYAK

Air Handling Unit	Location	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Thermostat Fan Setting	Thermostat Fan Setting Check (Circle One)	Outside Air Damper Setting (% Open)	Outside Air Damper Check (% Open)	Air Intake Openings Clear? (Circle One)	Notes
Rooftop-1	**Rooftop**	**seasonal***	On (Off)	**On***	(On) Off Auto	**25%***	25%	(Yes) No	*Unit operated for seasonal cooling only; settings only apply when the unit is operating UNIT NOT RUNNING/OFF
Rooftop-2	**Rooftop**	**24/7**	(On) Off	**On**	(On) Off Auto	**25%**	25%	(Yes) No	UNIT RUNNING/ON
Rooftop-3	**Rooftop**	**seasonal***	On (Off)	**On***	(On) Off Auto	**25%***	25%	(Yes) No	*Unit operated for seasonal cooling only; settings only apply when the unit is operating UNIT NOT RUNNING/OFF
Ground-1	**Ground Level**	**24/7**	(On) Off	**On**	(On) Off Auto	**fixed**	FIXED	(Yes) No	UNIT RUNNING/ON
Ground-2	**Ground Level**	**24/7**	(On) Off	**On**	(On) Off Auto	**fixed**	FIXED	(Yes) No	UNIT RUNNING/ON
Ground-3	**Ground Level**	**24/7**	(On) Off	**On**	(On) Off Auto	**fixed**	FIXED	(Yes) No	UNIT RUNNING/ON

Notes:
AHU = Air Handling Unit (only the AHUs that cover building areas outside the influence of subslab depressurization systems are listed)
NA = Not Applicable
*Unit operated for seasonal cooling only; settings only apply when the unit is operating
Shaded columns to be filled in during system checks.

The pre-populated HVAC settings/positions in this table (shown in bold type) reflect conditions that have been shown to be effective for vapor intrusion engineering control as determined by previous acceptable indoor air quality sampling results.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 330C (iPARK B755)
(CATEGORY 2 BUILDING)

Date: 12/24/2024

System Checked By: SHREYAK

Air Handling Unit	Location	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Economizer Setting	Economizer Status Check	Outside Air Damper Setting (Minimum % Open)	Outside Air Damper Check (% Open)	Notes
AC-11	Rooftop	24/7	(On) Off	Fixed	✓	fed from AC-13	100%	
AC-13	Rooftop	24/7	(On) Off	Auto	✓	75%	100%	Feeds into AC-11 and AC-91
AC-41	Rooftop	Off	NA	NA		NA		Space is vacant - August 2024 ✓ 12/24/2024
AC-42	Rooftop	24/7	(On) Off	Auto	✓	5%	95%	
AC-58	Rooftop	24/7	(On) Off	Fixed	✓	5%	95%	
AC-90	Rooftop	24/7	(On) Off	Auto	✓	15%	15%	
AC-91	Rooftop	24/7	(On) Off	Auto	✓	fed from AC-13	100%	

Notes:
AHU = Air Handling Unit (only the AHUs that cover building areas outside the influence of subslab depressurization systems are listed)
NA = Not Applicable

Shaded columns to be filled in during system checks.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 330L (iPARK B710)
(CATEGORY 4 BUILDING)

Date: 12/24/2024
System Checked By: SHREYAK

Air Handling Unit	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Notes
AC-25	24/7	(On) Off	
AC-60	24/7	(On) Off	Also covers AC-61 area

Notes:
AHU = Air Handling Unit

Shaded columns to be filled in during system checks.

iPARK 84 HVAC SYSTEM CHECK LOG SHEET
VAPOR INTRUSION ENGINEERING CONTROL

FORMER IBM EAST FISHKILL FACILITY
BUILDING 334 (iPARK B745)
(CATEGORY 4 BUILDING)

Date: 12/24/2024
System Checked By: SHREYAN

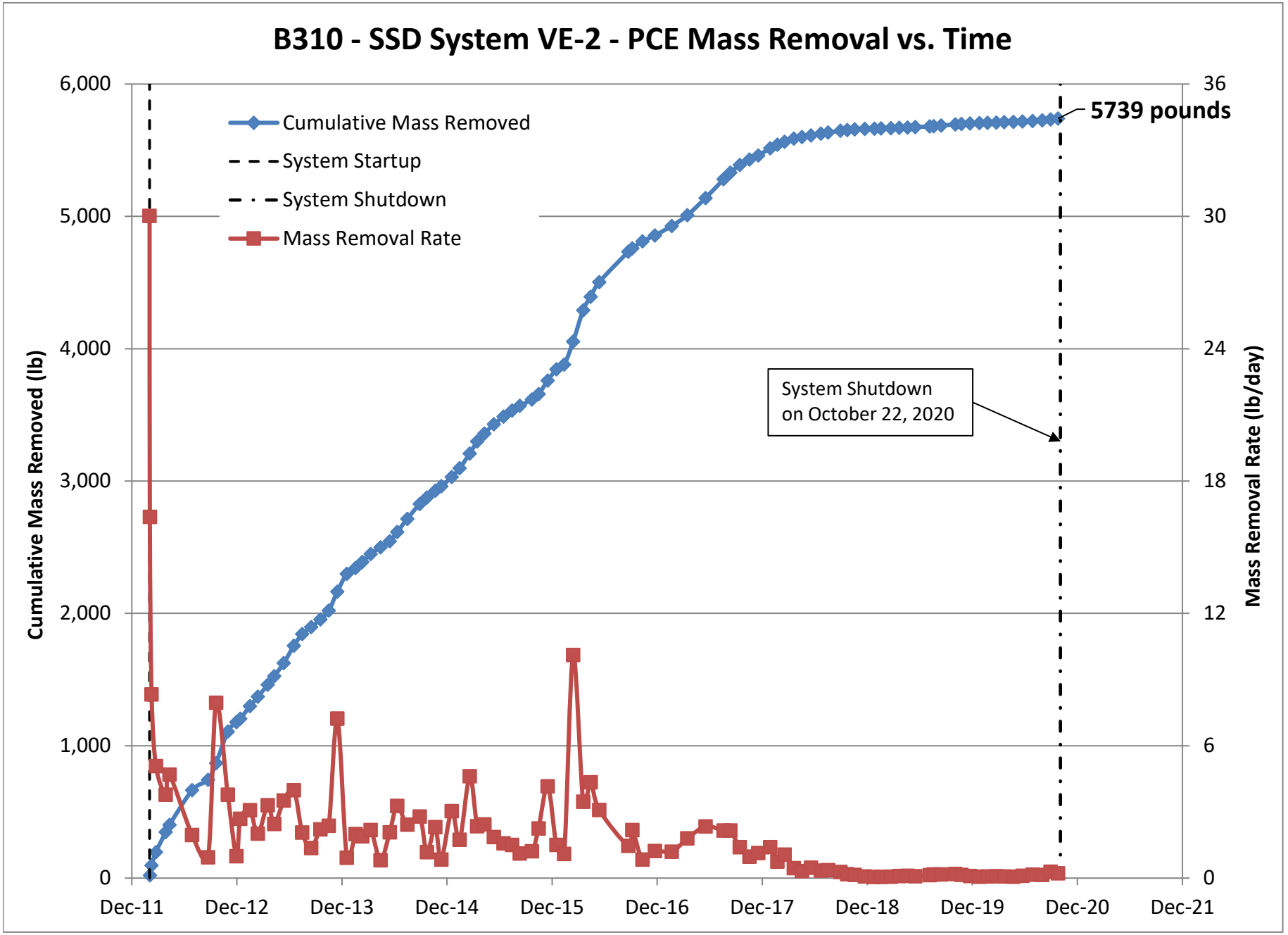
Air Handling Unit	AHU Operating Schedule Setting	AHU Operating Check (Circle One)	Notes
HVAC-1	Off	NA	Building is vacant - August 2024 ✓ 12/24/2024
HVAC-2	Off	NA	Building is vacant - August 2024 ✓ 12/24/2024
HVAC-4	Off	NA	Building is vacant - August 2024 ✓ 12/24/2024
HVAC-7	Off	NA	Building is vacant - August 2024 ✓ 12/24/2024
HVAC-9	Off	NA	Building is vacant - August 2024 ✓ 12/24/2024
HVAC-12	Off	NA	Building is vacant - August 2024 ✓ 12/24/2024.

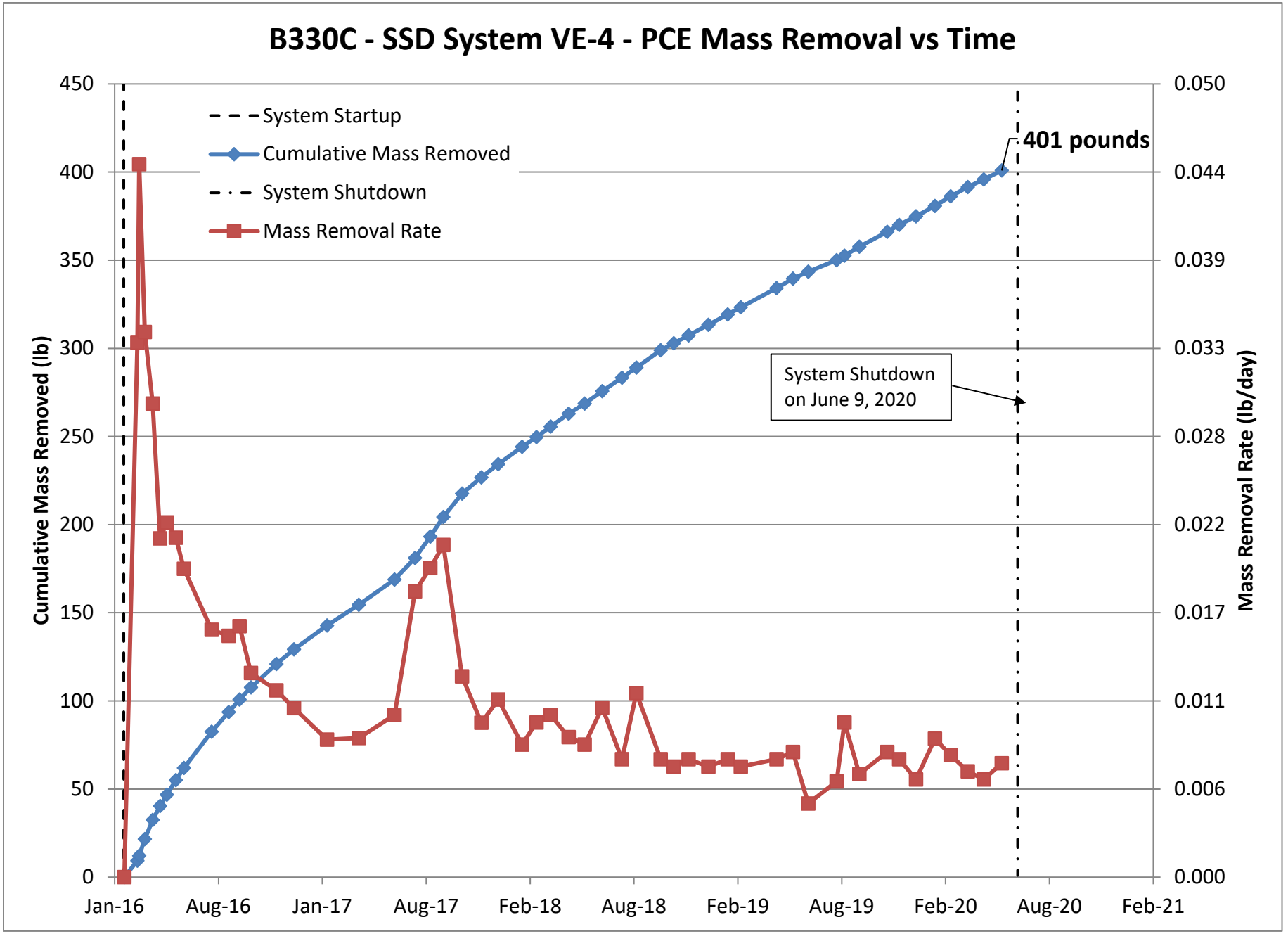
Notes:
AHU = Air Handling Unit
NA = Not Applicable

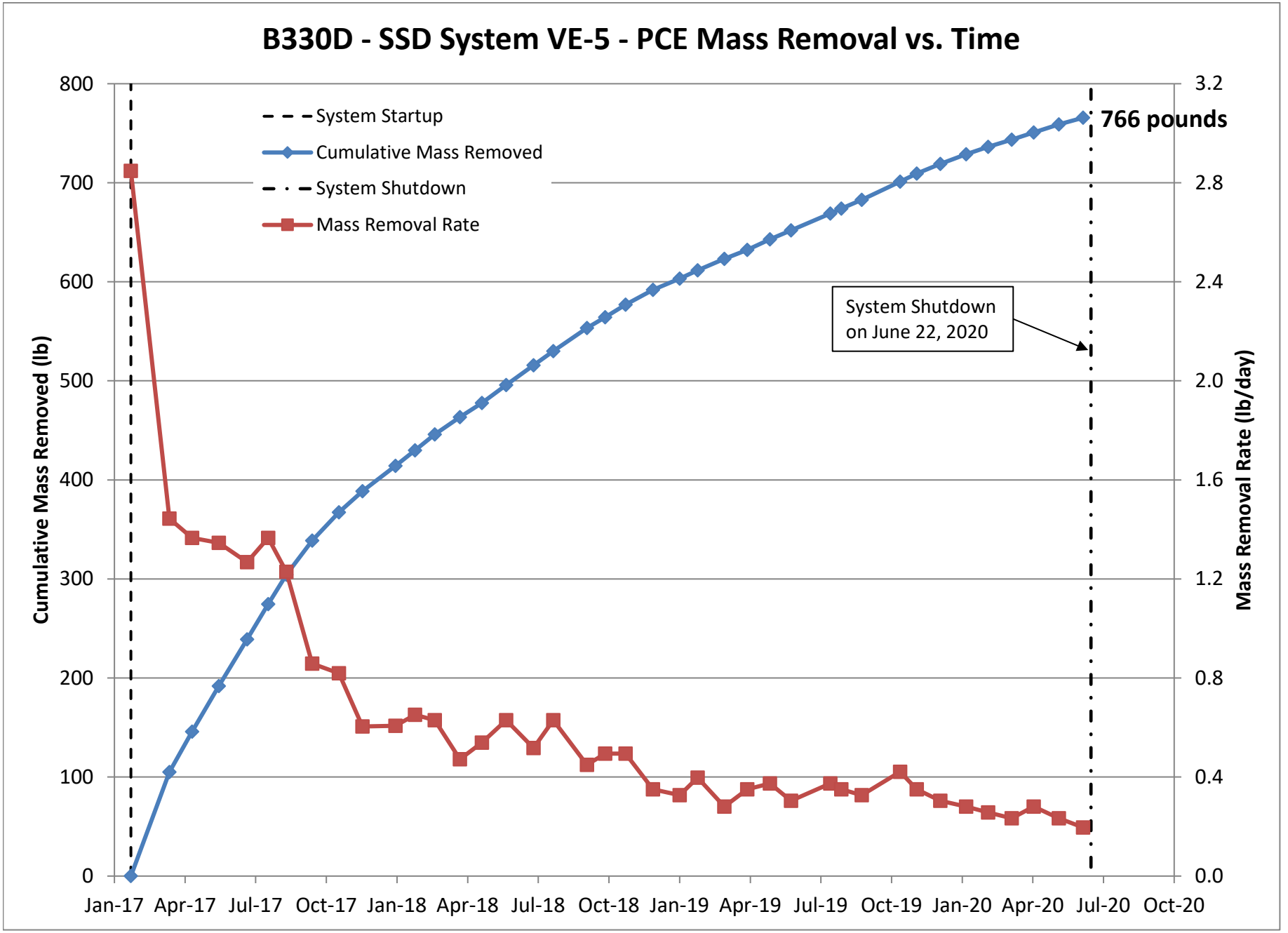
Shaded columns to be filled in during system checks.

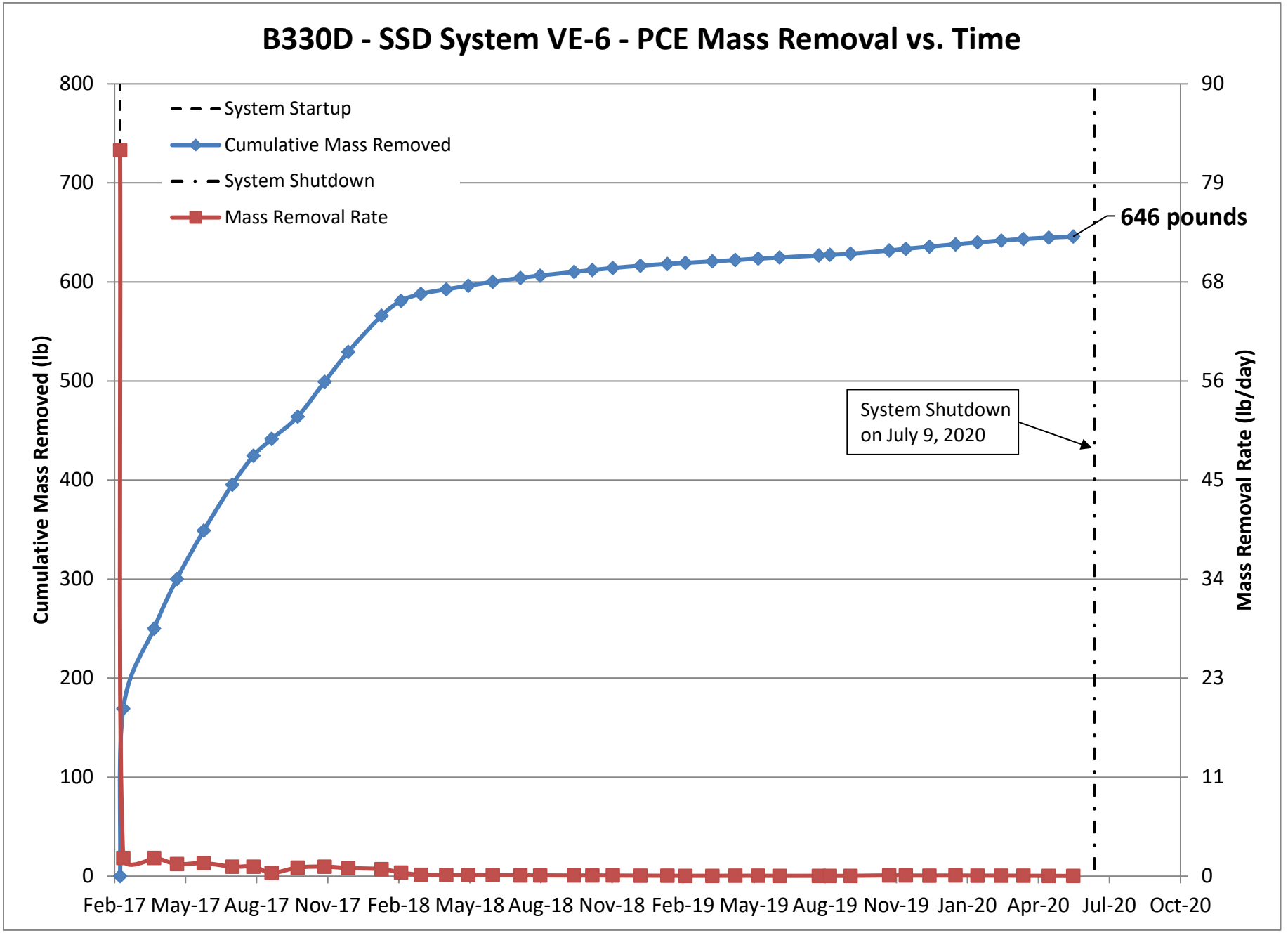
Appendix E

Mass Removal Plots for Former SSD Systems


B310 - SSD System VE-2 - PCE Mass Removal vs. Time
Cumulative Mass Removed
System Startup
System Shutdown
Mass Removal Rate
5739 pounds
System Shutdown
on October 22, 2020
Cumulative Mass Removed (lb)
Mass Removal Rate (lb/day)
6,000
5,000
4,000
3,000
2,000
1,000
0
36
30
24
18
12
6
0
Dec-11
Dec-12
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Dec-19
Dec-20
Dec-21


B330C - SSD System VE-4 - PCE Mass Removal vs Time
System Startup
Cumulative Mass Removed
System Shutdown
Mass Removal Rate
401 pounds
System Shutdown
on June 9, 2020
Cumulative Mass Removed (lb)
Mass Removal Rate (lb/day)
450
400
350
300
250
200
150
100
50
0
0.050
0.044
0.039
0.033
0.028
0.022
0.017
0.011
0.006
0.000
Jan-16
Aug-16
Jan-17
Aug-17
Feb-18
Aug-18
Feb-19
Aug-19
Feb-20
Aug-20
Feb-21


B330D - SSD System VE-5 - PCE Mass Removal vs. Time
System Startup
Cumulative Mass Removed
System Shutdown
Mass Removal Rate
766 pounds
System Shutdown on June 22, 2020
Cumulative Mass Removed (lb)
Mass Removal Rate (lb/day)
0
100
200
300
400
500
600
700
800
0.0
0.4
0.8
1.2
1.6
2.0
2.4
2.8
3.2
Jan-17
Apr-17
Jul-17
Oct-17
Jan-18
Apr-18
Jul-18
Oct-18
Jan-19
Apr-19
Jul-19
Oct-19
Jan-20
Apr-20
Jul-20
Oct-20


B330D - SSD System VE-6 - PCE Mass Removal vs. Time
System Startup
Cumulative Mass Removed
System Shutdown
Mass Removal Rate
646 pounds
System Shutdown on July 9, 2020
Cumulative Mass Removed (lb)
Mass Removal Rate (lb/day)
800
700
600
500
400
300
200
100
0
90
79
68
56
45
34
23
11
0
Feb-17 May-17 Aug-17 Nov-17 Feb-18 May-18 Aug-18 Nov-18 Feb-19 May-19 Aug-19 Nov-19 Jan-20 Apr-20 Jul-20 Oct-20

Appendix F

B316 HVAC Conditions During Sampling

Building 320B
HVAC Monitoring Logsheet
Former IBM East Fishkill Facility

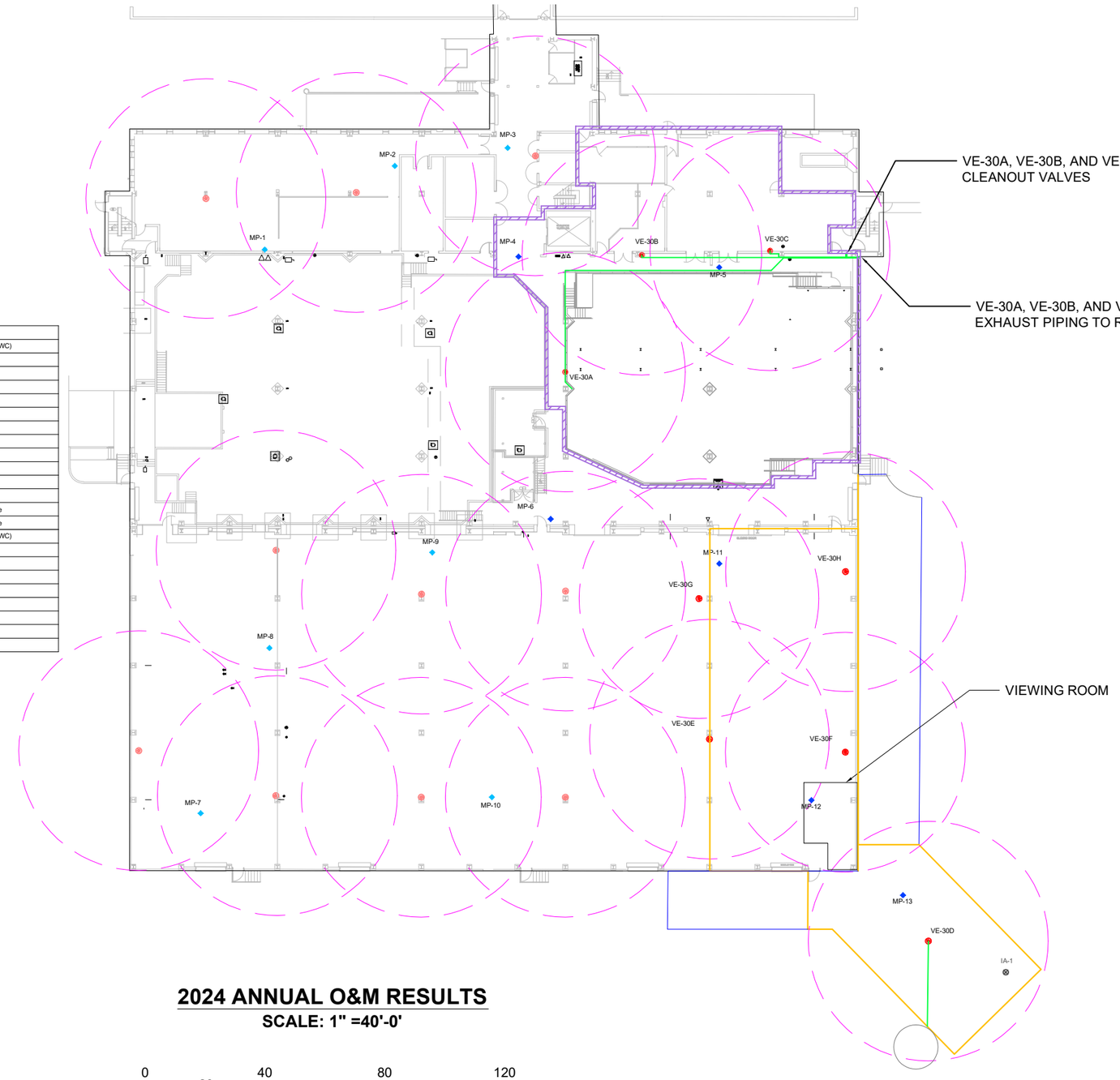
Date: 2/28/2024
Person Performing Check: GWB

HVAC or Heating/Ventilation Unit	Operating Schedule	Operating Schedule Check	Unit On/Off	Notes
HVAC-2	24/7	24/7	X On ☐ Off	Serves first floor office area and control room
HVU-2	24/7	24/7	X On ☐ Off	Serves "Former Central Carbon Treatment Area"

Appendix G

iPark SSD System Layouts for VE-30 (B338), VE-31 (B339), and VE-32 (B330C – Sloop Brewery)

VE-30 ANNUAL INSPECTION RESULTS 12-20-2023	
MICROWELL LOCATION	VACUUM (IN WC)
MP-1	-0.084
MP-2	-0.002
MP-3	-0.011
MP-4	-0.047
MP-5	-0.563
MP-6	-0.014
MP-7	-0.008
MP-8	-0.001
MP-9	-0.015
MP-10	0.002
MP-11	-0.553
MP-12	inaccessible
MP-13	inaccessible
WELL POINT LOCATION	VACUUM (IN WC)
VE-30A	24
VE30-B	28
VE30-C	35
VE30-D	-
VE30E	20
VE-30F	38
VE-30G	37
VE-30H	14



2024 ANNUAL O&M RESULTS

SCALE: 1" =40'-0'

0 20 40 80 120

SCALE: 1"=40'

NOTES:

EACH INACTIVE SOIL VAPOR EXTRACTION POINT COMPRISING OF SYSTEM VE-30 WILL BE LABELED AND MONITORED AS NEW TENANTS OCCUPY THEIR RESPECTIVE SPACES.

LEGEND

- ACTIVE VAPOR EXTRACTION POINT (VE-30D)
- ACTIVE VAPOR MONITORING POINT (MP-1)
- INACTIVE VAPOR EXTRACTION POINT
- INACTIVE VAPOR MONITORING POINT
- 40 FOOT RADIUS OF INFLUENCE
- VISITOR CENTER FOUNDATION
- ACTIVE SYSTEM PIPING
- VISITOR CENTER INDOOR SPACE

Walden Environmental Engineering

WALDEN ENVIRONMENTAL ENGINEERING, PLLC
16 SPRING STREET
OYSTER BAY, NEW YORK 11771
P: (516) 624-7200 F: (516) 624-3219
WWW.WALDENENVIRONMENTALENGINEERING.COM

- UNAUTHORIZED ALTERATION OR ADDITION TO THIS PLAN IS A VIOLATION OF SECTION 7209 OF NEW YORK STATE EDUCATION LAW.
- COPIES OF THIS PLAN NOT BEARING THE PROFESSIONAL ENGINEER'S INKED SEAL OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID TRUE COPY.

REVISIONS		
No.	DATE	COMMENTS
0	12/20/2024	2023 ANNUAL O&M REPORT

FOR: BUILDING 730 (FORMER 338)
iPark 84 Campus
2070 State Route 52
Hopewell Junction, NY 12533

DRAWING TITLE: SYSTEM VE-30 ANNUAL O&M RESULTS DECEMBER 31, 2024

DRAWING NO: 1

ISSUED

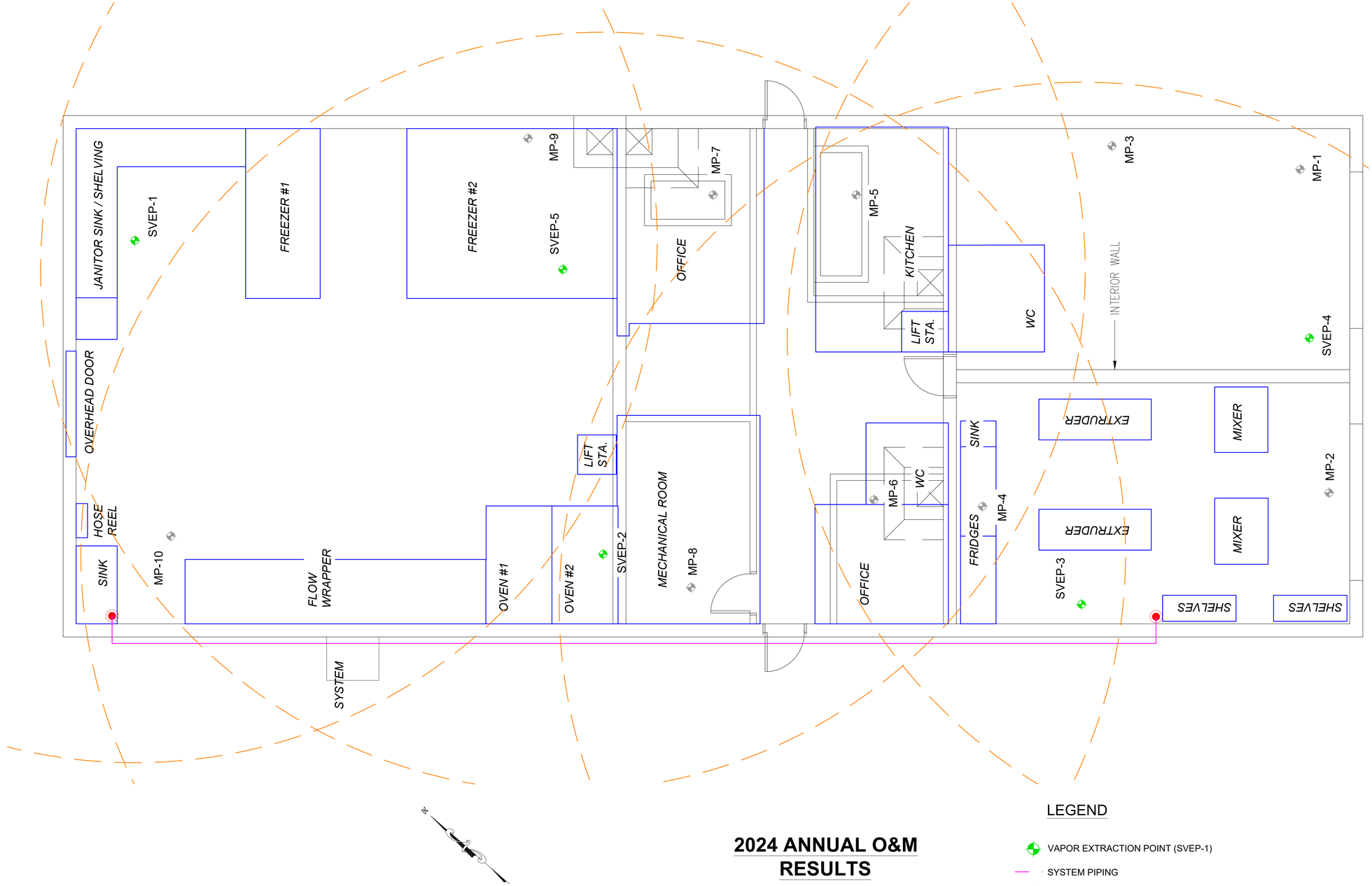
REVISION NO: 0

DESIGNED BY: NB | DRAWN BY: SSK | CHECKED BY: NB

APPROVED BY: NB | SCALE: AS NOTED

JOB NO: iPARK0118.47 | DATE: 1/9/25 | 11x17 | SHEET NO: 1 of 1

CAD FILE NAME: Z:\iPark\0118\+ANNUAL REPORT SUBMITTALS\iPark SSDS Annual Summary Files 2024\2024 iPark\0118.47-B338 System VE-30 - Visitors Center\VE-30 VISITOR CENTER SYSTEM LAYOUT (8.5X11) R2.dwg



VE-31 ANNUAL INSPECTION RESULTS 12-9-2024	
MICROWELL LOCATION	VACUUM (IN OF WC)
MP-1	0.051
MP-2	-0.017
MP-3	INACCESSIBLE/OBSTRUCTED
MP-4	NA
MP-5	-0.020
MP-6	-0.083
MP-7	-0.009
MP-8	-0.117
MP-9	-0.980
MP-10	-0.320
WELL POINT LOCATION	VACUUM (IN OF WC)
SVEP-1	37
SVEP-2	37
SVEP-3	39
SVEP-4	37
SVEP-5	37

2024 ANNUAL O&M RESULTS

NOTES:
1. DRAWING NOT TO SCALE

LEGEND

- VAPOR EXTRACTION POINT (SVEP-1)
- SYSTEM PIPING
- SYSTEM PIPING FLOOR PENETRATION
- MONITORING POINTS (MP-1)
- 40' RADIUS OF INFLUENCE

Walden Environmental Engineering

WALDEN ENVIRONMENTAL ENGINEERING, PLLC
16 SPRING STREET
OYSTER BAY, NEW YORK 11771
P: (516) 624-7200 F: (516) 624-3219
WWW.WALDENENVIRONMENTALENGINEERING.COM

- UNAUTHORIZED ALTERATION OR ADDITION TO THIS PLAN IS A VIOLATION OF SECTION 7209 OF NEW YORK STATE EDUCATION LAW.
- COPIES OF THIS PLAN NOT BEARING THE PROFESSIONAL ENGINEER'S INKED SEAL OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID TRUE COPY.

REVISION		
No.	DATE	COMMENTS
0	12/9/2024	2024 ANNUAL REPORT

FOR:
BUILDING 339 MODIFICATIONS
iPark 84 Campus
2070 State Route 52
Hopewell Junction, NY 12533

DRAWING TITLE:
SYSTEM VE-31 ANNUAL O&M RESULTS
DECEMBER 9, 2024

DRAWING NO: 1

ISSUED: 12/9/2024

REVISION NO: 0

DESIGNED BY: NB | DRAWN BY: EAR | CHECKED BY:
APPROVED BY: NMB | SCALE: NOT TO SCALE
JOB NO: IPARK0118.34 | DATE: 12/9/2024 | 11x17 | SHEET NO: 1 OF 1
CAD FILE NAME: Z:\iPark0118\=ANNUAL REPORT SUBMITTALS\iPark SSDS Annual Summary Files 2024\2024 iPark0118.34-B339 System VE-31\iPARK339_ANNUAL FIGURE (4-9-21) EAR.dwg

HEADER-3

APPROX. LOCATION OF BLOWER ON ROOF.
BLOWER TYPE: GBR89

HEADER-4

APPROX. LOCATION OF BLOWER ON ROOF.
BLOWER TYPE: GBR76-UD

HEADER-1

APPROX. LOCATION OF BLOWER ON ROOF.
BLOWER TYPE: GBR76-UD

HEADER-2

APPROX. LOCATION OF BLOWER ON ROOF.
BLOWER TYPE: GBR89

MONITORING POINT	VP-1	VP-1	VP-1	VP-1
SAMPLING DATE	4/30/2021	5/6/2021	5/13/2021	5/20/2021
SAMPLING TIME	10:36	13:27	13:36	10:42
VACUUM READING (in. WC)	0.10	0.08	0.03	0.04

MONITORING POINT	VP-3	VP-3	VP-3	VP-3
SAMPLING DATE	4/30/2021	5/6/2021	5/13/2021	5/20/2021
SAMPLING TIME	10:28	13:22	13:33	10:35
VACUUM READING (in. WC)	0.04	0.075	0.15	0.02

MONITORING POINT	VP-2	VP-2	VP-2	VP-2
SAMPLING DATE	4/30/2021	5/6/2021	5/13/2021	5/20/2021
SAMPLING TIME	10:32	13:25	13:34	10:48
VACUUM READING (in. WC)	0.20	0.215	0.175	0.19

MONITORING POINT	VP-13	VP-13	VP-13	VP-13
SAMPLING DATE	4/30/2021	5/6/2021	5/13/2021	5/20/2021
SAMPLING TIME	14:02	13:03	13:24	9:53
VACUUM READING (in. WC)	0.24	0.12	0.08	0.095

MONITORING POINT	VP-11	VP-11	VP-11	VP-11
SAMPLING DATE	4/30/2021	5/6/2021	5/13/2021	5/20/2021
SAMPLING TIME	14:21	13:18	13:31	10:29
VACUUM READING (in. WC)	0.11	0.11	0.055	0.09

MONITORING POINT	VP-16	VP-16	VP-16	VP-16
SAMPLING DATE	4/30/2021	5/6/2021	5/13/2021	5/20/2021
SAMPLING TIME	14:52	15:38	13:59	11:40
VACUUM READING (in. WC)	0.13	0.12	0.15	0.11

MONITORING POINT	VP-14	VP-14	VP-14	VP-14
SAMPLING DATE	4/30/2021	5/6/2021	5/13/2021	5/20/2021
SAMPLING TIME	16:53	14:16	15:14	9:37
VACUUM READING (in. WC)	0.075	0.07	0.045	0.05

MONITORING POINT	VP-4	VP-4	VP-4	VP-4
SAMPLING DATE	4/30/2021	5/6/2021	5/13/2021	5/20/2021
SAMPLING TIME	10:39	13:30	13:37	10:52
VACUUM READING (in. WC)	0.20	0.19	0.17	0.18

MONITORING POINT	VP-12	VP-12	VP-12	VP-12
SAMPLING DATE	4/30/2021	5/6/2021	5/13/2021	5/20/2021
SAMPLING TIME	16:44	16:37	15:08	13:40
VACUUM READING (in. WC)	0.085	0.08	0.055	0.06

MONITORING POINT	VP-8	VP-8	VP-8	VP-8
SAMPLING DATE	4/30/2021	5/6/2021	5/13/2021	5/20/2021
SAMPLING TIME	15:15	N/A	14:23	N/A
VACUUM READING (in. WC)	0.03	N/A	0.01	N/A

MONITORING POINT	VP-9	VP-9	VP-9	VP-9
SAMPLING DATE	4/30/2021	5/6/2021	5/13/2021	5/20/2021
SAMPLING TIME	14:28	16:19	13:52	11:08
VACUUM READING (in. WC)	0.08	0.03	0.005	0.005

MONITORING POINT	VP-6	VP-6	VP-6	VP-6
SAMPLING DATE	4/30/2021	5/6/2021	5/13/2021	5/20/2021
SAMPLING TIME	16:21	14:57	14:43	13:05
VACUUM READING (in. WC)	0.035	0.07	0.01	0.02

MONITORING POINT	VP-7	VP-7	VP-7	VP-7
SAMPLING DATE	4/30/2021	5/6/2021	5/13/2021	5/20/2021
SAMPLING TIME	N/A	15:02	14:57	13:12
VACUUM READING (in. WC)	N/A	0.09	0.05	0.05

MONITORING POINT	VP-15	VP-15	VP-15	VP-15
SAMPLING DATE	4/30/2021	5/6/2021	5/13/2021	5/20/2021
SAMPLING TIME	14:57	15:48	14:30	12:07
VACUUM READING (in. WC)	0.07	0.11	0.05	0.07

MONITORING POINT	VP-10	VP-10	VP-10	VP-10
SAMPLING DATE	4/30/2021	5/6/2021	5/13/2021	5/20/2021
SAMPLING TIME	15:40	15:08	14:17	12:45
VACUUM READING (in. WC)	0.04	0.06	0.02	0.03

MONITORING POINT	VP-5	VP-5	VP-5	VP-5
SAMPLING DATE	4/30/2021	5/6/2021	5/13/2021	5/20/2021
SAMPLING TIME	N/A	15:00	N/A	N/A
VACUUM READING (in. WC)	N/A	0.07	N/A	N/A

LEGEND

- SP-1 — LOCATION OF EXTRACTION POINTS
- PG-1 — LOCATION OF DIFFERENTIAL PRESSURE GAUGE AND ALARM
- VP-1 — SOIL VAPOR ASSESSMENT POINT
- 4" TO 6" DIAMETER PVC PIPE
- N/A — NOT ACCESSIBLE

NOTES:
1) BASEMAP OBTAINED FROM "SOIL VAPOR INTRUSION INVESTIGATION SAMPLING LOCATIONS" BY WALDEN ENVIRONMENTAL ENGINEERING, DATED 11/29/2018

0 7.5' 15' 30' 45'
SCALE IN FEET 1" = 15'

NO.	ISSUE/DESCRIPTION	BY	DATE

UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

FULL SCALE SSD SYSTEM OPERATIONS AND MAINTENANCE MANUAL - SLOOP BREWERY

FULL SCALE SSD SYSTEM LAYOUT

PREPARED BY:
GZA GeoEnvironmental of NY
Engineers and Scientists
www.gza.com

PREPARED FOR:
I.PARK84, LLC.
GREENWICH, CT

PROJ MGR: MH	REVIEWED BY: DW	CHECKED BY: EH	FIGURE 1
DESIGNED BY: BP	DRAWN BY: CB	SCALE: 1" = 15'	
DATE: SEPTEMBER 2021	PROJECT NO. 12.0076252.10	REVISION NO.	SHEET NO. 1 OF 2

©2021 – GZA GeoEnvironmental, Inc. G:\ZA-\\GZANAM1\JOBS\12007625\12.0076252.00\FIGURES\CAD\12.0076252.20 – SLOOP SSDS 120120.DWG Fig 2–SITE LAYOUT SEPTEMBER 29, 2021 1:05 PM MATTHEW FORSHAW